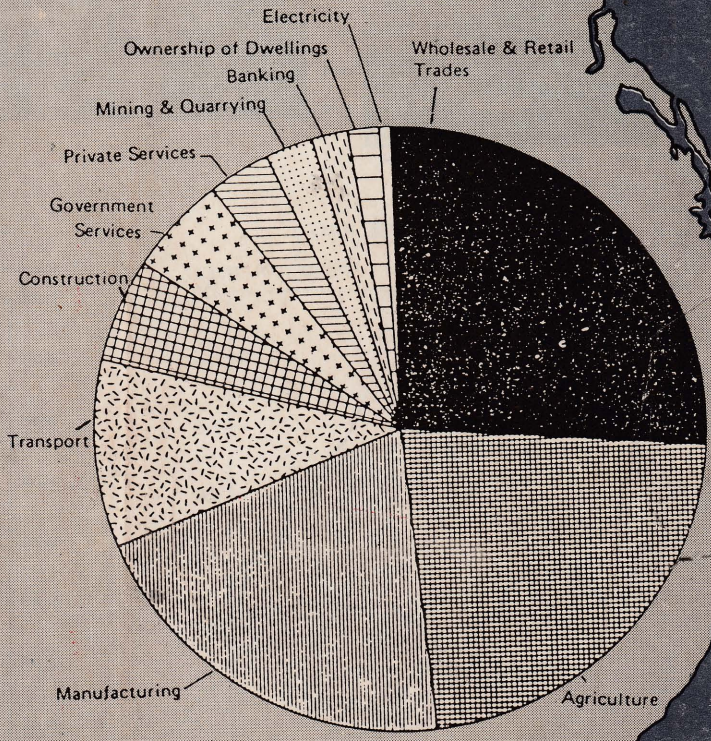
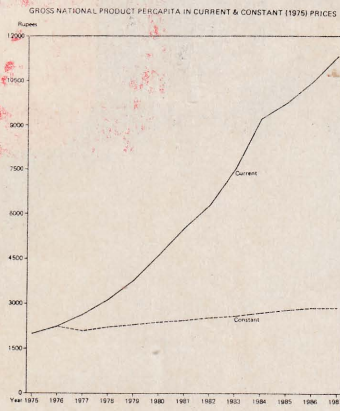
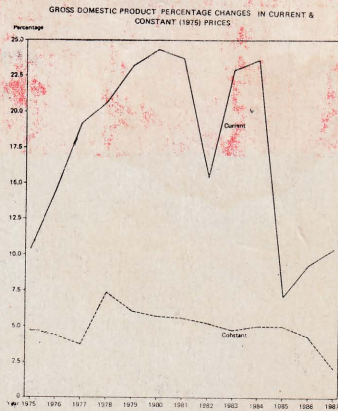


THE ECONOMY

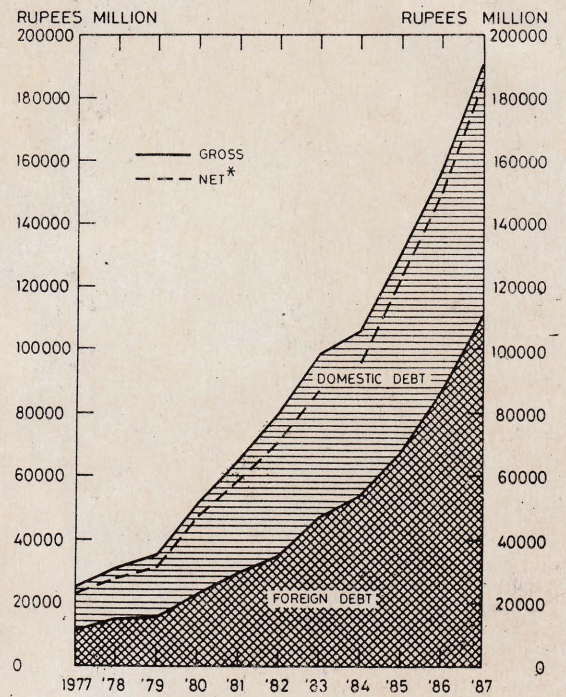
1988



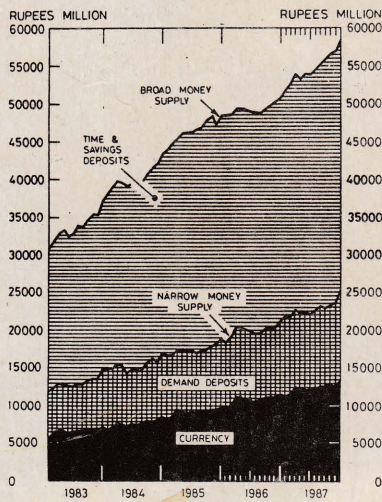
1987



COMPOSITION OF GOVERNMENT DEBT



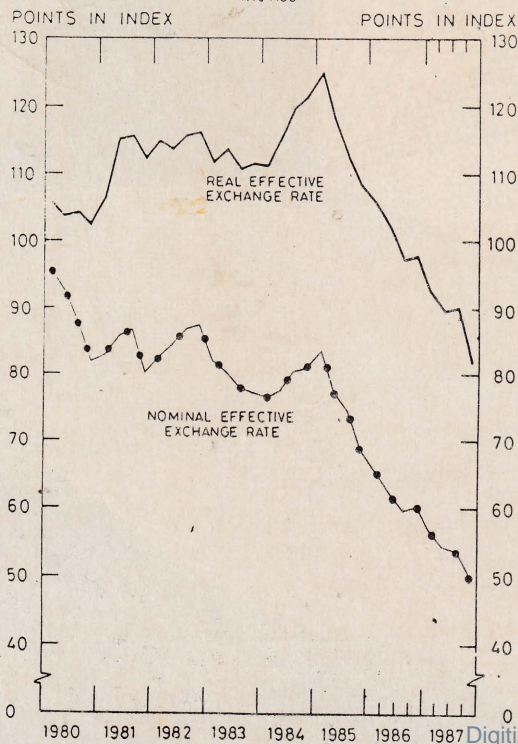
MONEY SUPPLY MONTHLY



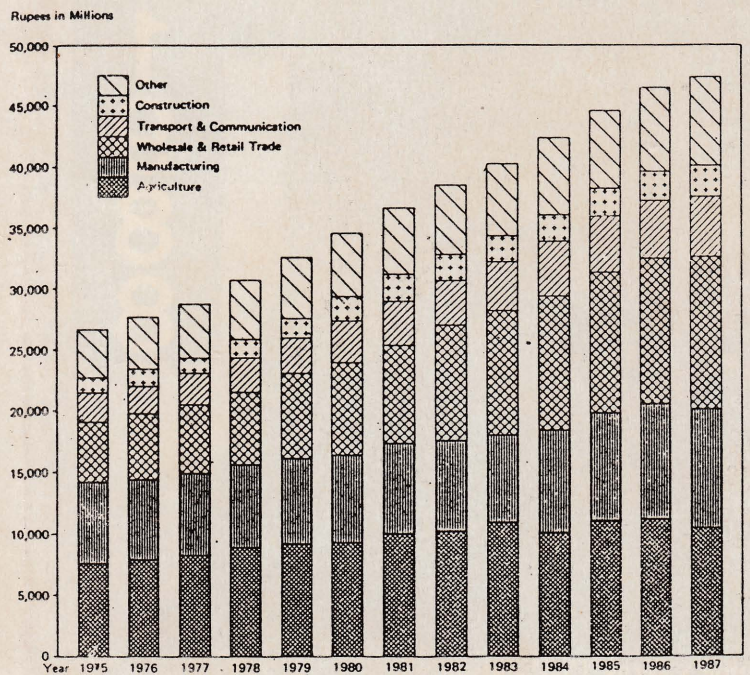
ECONOMIC INDICATORS

Sources: Central Bank of Sri Lanka
Department of Census and Statistics.

EFFECTIVE EXCHANGE RATES*
1978=100



GROSS DOMESTIC PRODUCT BY MAJOR SECTORS AT CONSTANT (1975) PRICES



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THE ECONOMIC REVIEW is intended to promote knowledge of and interest in the economy and economic development process by a many sided presentation of views & reportage, facts and debate. THE ECONOMIC REVIEW is a community service project of the People's Bank. Its contents, however, are the result of editorial considerations only and do not necessarily reflect Bank policies or the official viewpoint. Signed feature articles, also are the personal views of the authors and do not represent the institutions to which they are attached. Similar contributions as well as comments and viewpoints are welcome. THE ECONOMIC REVIEW is published monthly and is available both on subscription and on direct sale.

NEXT ISSUE

- * Housing and construction: progress and issues
- * Movements in banking sector deposits and advances
- * Opportunities in urban food marketing
- * The changing computer landscape

Subscriber's Note
Owing to the importance of the subject of our Special Report the Review comes out as a double issue. Subscribers please note that this Special 64 page issue on Sri Lanka's Economy will be regarded, for subscription purposes, as two separate issues.

COVER

Sarath Wijeratne.

DIARY OF EVENTS

April

1 The Colombo Consumer's Cost of Living Index for April 1988 was 722.3, the Department of Census and Statistics announced. In March 1988 it was 714.7; while in April 1987 it was 638.6. The average rate for the last 12 months was 680.6 as against 619.6 in the previous 12 month period, indicating a 61.0 point increase in the index over the last 12 months.

20 Government approved a proposal by the Minister of Finance for Sri Lanka to enter into a loan agreement with the Overseas Economic Co-operation Fund of Japan, for a loan of Yen 2,950 million to meet the additional costs of the Mahaweli Ganga Development Project's System 'C'. This loan will be used to meet the foreign currency expense of civil works connected with the construction of the Right Bank Main Canal No. 2 and branch canals of irrigation and drainage infrastructure, land clearing, on-farm development and consultancy services.

Government approval a proposal by the Minister of Finance, to formally conclude the convention between the Governments of New Zealand and Sri Lanka for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income.

Government approved a proposal by the Minister of Finance for Sri Lanka to enter into a loan agreement with the ADB for a loan of SDR 26,450,000 (approximately USDollars 36 million) in respect of the Second Technical Education Project. This project is designed to consolidate and build on the achievements of the first project and aims at improving the training and technical manpower needed for the country's economic development through enhancing the quality, efficiency and accessibility of technical education offered by the Ministry of Higher Education.

A proposal for Sri Lanka to enter into a credit agreement with IDA for a sum of SDR 12.9 million (Rs 541.5 million) to finance part of the costs of the Health and Family Planning Project was approved by Government. The objectives of this project are to strengthen the Health Management System, improve health logistics systems and continue to enhance maternal child health and to lower fertility levels. This project will be implemented by the Ministries of Health; Women's Affairs and Teaching Hospitals; and Plan Implementation.

A proposal of the Minister of Fisheries to continue granting a subsidy upto 75% of the total cost of sails for fishing crafts from 1988 onwards

was approved by Government. This proposal is intended to encourage fishermen to use fuel conserving methods such as fuel efficient engines and sails for supplementing the engine power of fishing crafts, in order to arrest the increasing costs of fish production by using kerosene and diesel. In addition to conserving fuel, these sails are also intended to serve fishermen in distress on high seas due to mechanical defects in their crafts' engines.

Government approved a proposal of the Minister of Health for signing of exchange of notes for a Japanese Grant of Yen 455 million (approximately Rs 104 million) to be used for the maintenance; replacement and supplies of vehicles, equipment, drugs etc. required by the Ministry of Health for its Malaria Control Programme. In addition the Japanese Government would nominate a Japanese Consultant to assist the Sri Lankan government in the procurement of the supplies. The items to be obtained from this Japanese aid would be teaching aid, laboratory equipment, vehicles, workshop tools and equipment, anti-malaria drugs, entomological equipment and other miscellaneous items.

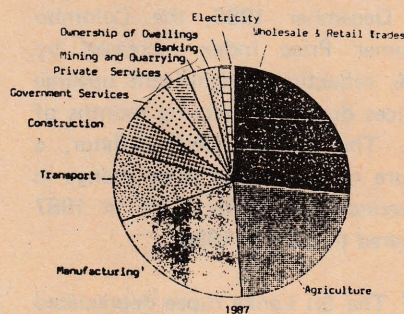
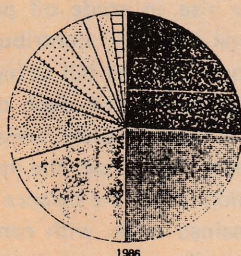
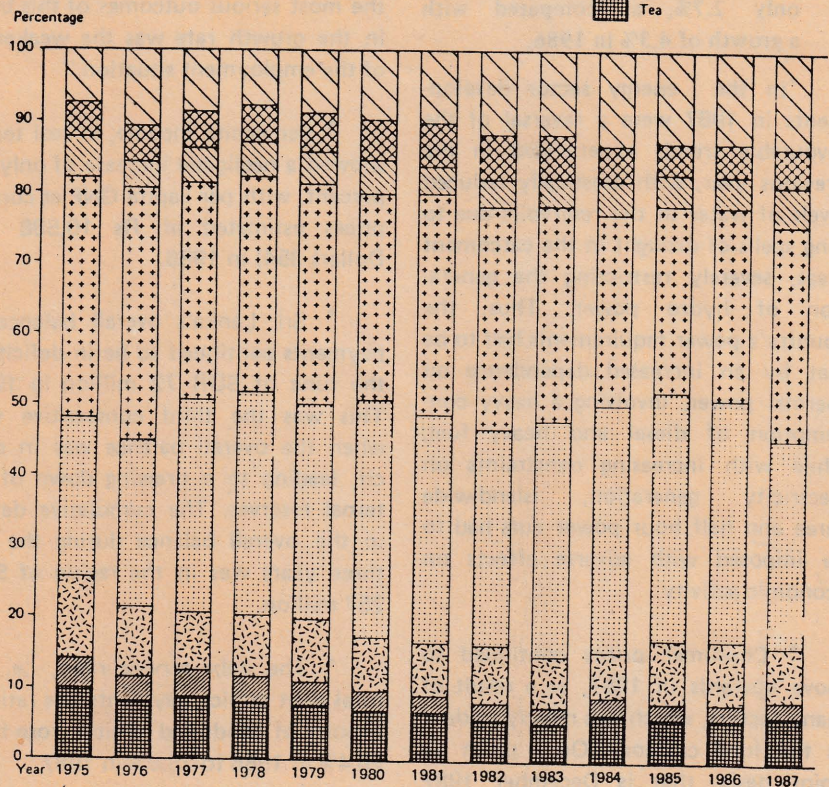
22 An agreement under the Japanese grant aid programme was signed by the Japanese Ambassador to donate educational equipment worth 909 million yen (approximately Rs 200 million) to the Moratuwa University. The departments under the Faculty of Engineering, namely computer science, textile engineering, chemical engineering, materials engineering and mathematics; as well as the library, English language teaching centre and the physical education unit will receive laboratory and research equipment ranging from precision instruments, computer systems and advanced machinery to a audio-visual unit and exercise machines.

28 Government approved a proposal by Minister of Fisheries to formulate an island fisheries project to be located at Pimburaththewa within system 'B' of the Mahaweli Development Scheme. The project will provide for a fish breeding centre with facilities for research, demonstration and extension. The main objectives of this project are to increase inland fish production through stocking and harvesting of major perennial tanks and through aquaculture.

This project was formulated with the assistance of CIDA under the Canadian aid programme.

Government approved a proposal by the Minister of Local Government, Housing and Construction, to rehabilitate the Puttalam and Ruhuna Cement works of the Sri Lanka Cement Corporation. At the request of the Ministry, the Japan Consulting Institute had carried out a feasibility survey to draw up a Master Plan for the rehabilitation of the Puttalam Cement works.

COMPOSITION OF AGRICULTURE
IN GROSS DOMESTIC PRODUCT
IN CONSTANT (1975) PRICES



Sri Lanka's Economy in 1988.

Sri Lanka's economic performance recorded a significant drop in growth during 1987. The country's Gross Domestic Product (GDP) in real terms increased by 1.5 percent - the lowest since the introduction of the economic reforms in 1977. This contrasts with an average rate of growth of the real GDP of 5.5 percent during the 10 year period

1977-1986, according to the Central Bank's annual report on the economy.

The Central Bank also reported that the Gross National Product (GNP) in 1987 at constant (1982) prices, which is derived by allowing for the flow of net factor income from abroad, recorded a growth rate of 1.6 percent. This com-

pared with a real GNP growth rate of 4.5 percent in 1986.

The setbacks in economic performance last year were the outcome of a combination of factors; with adverse weather conditions and the ethnic disturbances most affecting economic growth and also possible structural restraints. The most pronounced impact was felt in the agricultural sector, where value added in this sector as a whole declined by 8% in 1987. Production in all sub-sections, with the exception of tea, were seriously affected.

The agricultural sector has always played a vital role in Sri Lanka's economy contributing nearly over one quarter of the GDP, and also having a significant impact on the development activities of other sectors. A relatively slow growth rate experienced in agriculture was therefore a key factor behind the setbacks in the economy and the lower growth as a whole. At 1975 constant prices the contribution of the agricultural sector to the GDP in 1987 declined by 1.9 percent as against a 0.7 percent marginal increase for 1986. In real terms, according to the Department of Census and Statistics, the total contribution by the agricultural sector to the economy therefore fell to Rs 10,541 million in 1987 from Rs 11,234 million in 1986, showing a marked decrease of 6.2 percent in 1987.

The National Planning Division of the Ministry of Finance and Planning commenting on the situation stated "The poor economic performance in 1987 no doubt emphasised the structural weaknesses of an economy which is still very much dependent on agricultural production. However, the encouraging performance of the economy upto 1982 and the resilience shown thereafter indicate that in spite of these structural weaknesses there would be vigorous growth, if prudent economic policies are maintained and normal conditions are restored."

The Planning Division's Public Investment Programme for 1988/1992,

looking ahead forecasts that economic activity in 1989 is expected to result in a growth rate of 5.5% in real terms. This is not an unrealistic expectation given the low base in 1987, as well as indications of better weather and an abatement of terrorist activity in the North and the East. "Growth rates from 1989 onwards should then reflect a normal utilization of production capacities of the economy. Indeed, the expectation is that GDP growth during the period 1988-1992 will record an average of 5.3% per annum," states the Investment Programme.

The Central Bank reporting on the economy's performance in 1987 adds that on the export front, the country was deprived of the benefits of better prices in respect of major primary commodity exports, due to the production shortfall in the tree crops sector resulting from adverse weather. The tourist industry experienced further deterioration and tourism earnings were the lowest recorded since 1980. The rise in crude oil prices in international markets pushed the country's import bill up still further, while the growing external debt commitments continued to extend more pressure on the payments side. All these factors continued to weaken the country's balance of payments position, and exert greater pressure on the exchange rate and cause further depletion of external assets. These developments further highlighted the structurally retarding features in the economy and also demonstrated the continuing weakness of Sri Lanka's external sector, which in turn involved serious implications for overall economic performance.

Among other significant negative features emerging in Sri Lanka's economic performance in 1987 as reported by the Central Bank were the following:

- * Rubber production declined by 11% and coconut by 25%.
- * Paddy output dropped by 18% and sugar by 15%.

* Important minor food crops - potatoes, chillies and Bombay onions - recorded decreases in production.

* The services sector recorded an increase in value added of only 2.7%, as compared with a growth of 4.3% in 1986.

* In the energy sector developments in 1987 were a reversal of the favourable trends experienced in the previous year, with drastically reduced levels of water in the reservoirs due to long spells of drought in the catchment areas, severely restricting the generation of hydro power. Thus, the country's power requirements had to be met by an increased dependence on thermal power, involving a heavy consumption of diesel and heavy fuel; while with increasing constraints on electricity generation, island-wide three and half hour power cuts had to be imposed with adverse effects on economic activity.

* Consumer prices continued to move upwards in 1987, as a result of many factors, which was mostly evident in the food category. On a point by point basis, that is December 1987 over December 1986, the Colombo Consumer Price Index increased by 10.2%, reflecting a significant upsurge in prices during the closing months of 1987. The implicit GNP deflator, a measure of the overall price change in the economy, rose by 6.8% in 1987 compared to 5.5% in 1986.

* The Sri Lanka rupee depreciated further in nominal terms against the major currencies in 1987. In terms of SDR the value of the Sri Lanka Rupee depreciated from Rs 34.88 per SDR in December 1986 to Rs 43.64 per SDR in December 1987.

* Other negative features referred to in recent studies and government statements are the growing levels of unemployment and income disparities; and increasing signs that the incidence of poverty has become more wide-

spread, income distribution deteriorated and welfare and nutrition levels fallen. The Public Investment Programme of the Ministry of Finance noted that "a deceleration of economic activity appears to have occurred since 1983... Among the most serious outcomes of this trend in the growth rate was the weakening of the employment situation."

* Per capita income, in real terms, showed a negligible increase of only 0.1 percent; with per capita GNP at current prices estimated at Rs 10,598 (US Dollars 354) in 1986.

* Sri Lanka's overall balance of payments continued to be in deficit, to the tune of SDR 72 million in 1987. This was the third consecutive year when the overall balance was in deficit, leading to a drawing down of external reserves. The cumulative deficit in the overall balance during the last three years was in the region of SDR 257 million.

* The debt service ratio, i.e. the total debt service payments as a ratio of exports of goods and services, rose from 26.4% in 1986 to 28.5% in 1987.

* The rise in crude oil prices in international markets contributed to keep the overall import bill at high levels while growing external debt commitments continued to exert pressure on the payments side. Under the impact of these developments, the balance of payments remained weak, with continuing pressure on the exchange rate and a further depletion of the country's external assets.

* The inflow of tourist traffic declined by 20.6% in 1987 and receipts from tourism dropped from Rs 2,326 million (SDR 71 million) in 1986 to Rs 1,813 million (SDR 48 million) in 1987, recording a decrease of 32.0 percent in SDR terms.

* Foreign exchange inflows on account of private remittances showed a

marginal decrease in SDR terms but recorded an increase of 16.0% in rupee terms. The gross inflow of private remittances amounted to Rs 10,255 million (SDR 268 million) as compared with Rs 8,873 million (SDR 269 million) in 1986.

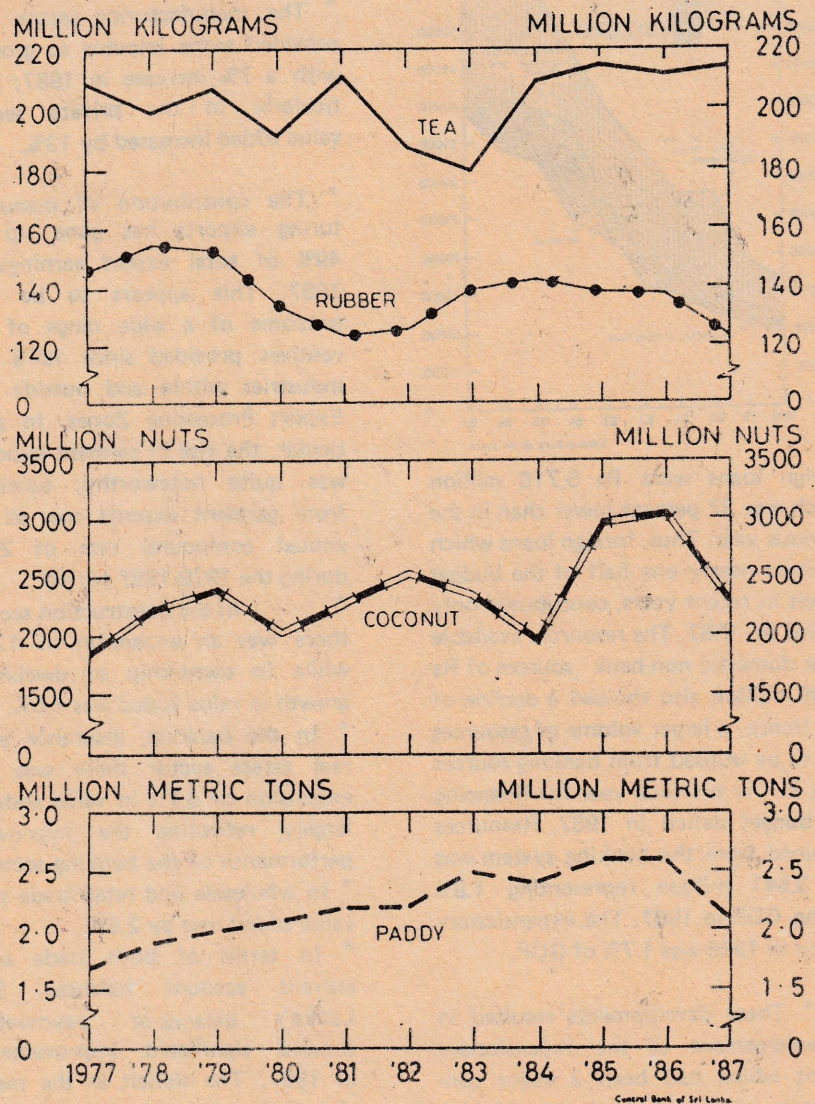
* Official transfers, consisting of project and commodity aid decreased from SDR 153 million (Rs 5,114 million) in 1986 to SDR 139 million (Rs 5,302 million) in 1987. While project grants are estimated at SDR 104 million (Rs 3,940 million), commodity grants accounted for the balance. Total net transfer receipts were lower by 4.1 percent in 1987.

* As net inflows of non-monetary capital were sufficient to finance only 7.0 percent of the current account deficit, there was an overall deficit of Rs 1,801 million (SDR 72 million) which had to be financed through drawing on external assets.

*The gross official reserves, consisting of gross foreign assets of the Government and the Central Bank decreased by 32% and amounted to SDR 203 million (Rs 8,869 million) at the end of the year. While the Government utilized almost the whole of its deposits with the FCBUs, gross assets of the Central Bank declined to SDR 203 million (Rs 8,840 million) in 1987 from SDR 274 million (Rs 9,547 million) in 1986. Decreases were recorded in both liquid balances abroad, as well as in portfolio investments.

* In the case of fiscal operations, although there was seemingly some improvement with a lower overall budget deficit, the continuation of expansionary financing in 1987, due to reduced capital flows inflicted deep rooted structural problems. Owing to production set-backs, supply shortages emerged in some food items, which together with an acceleration in the growth of money supply, led to a sharp increase in prices during the closing months of 1987.

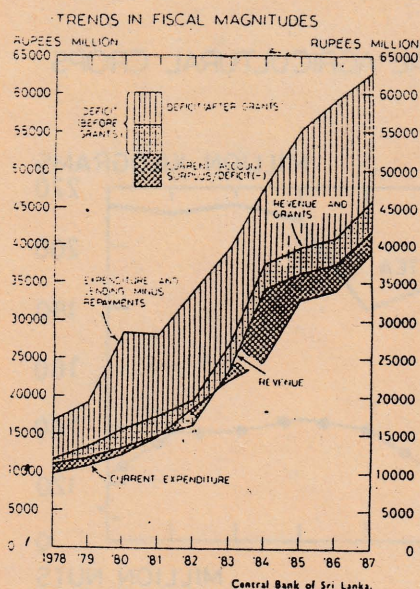
PRODUCTION OF PRINCIPAL AGRICULTURAL CROPS



* In 1987, government financial operations continued to display the stresses under which the fiscal system of Sri Lanka has been operating in recent years. Under the impact of a faster rate of growth in current expenditure than in government revenue, the current account surplus narrowed, declining from 1.8 percent of GDP in 1986 to 1.7 percent in 1987. At the same time, the expansionary deficit, ie that part of the budget deficit which

had to be financed out of bank credit, increased from 1.7 percent of GDP to 1.8 percent. These developments suggest the existence of continuing fiscal pressure, which has been a major source of economic instability for many years.

* Although the budget deficit was a considerable improvement from the previous year, the resources for financing the deficit were less forthcoming in 1987. The resources available from



foreign loans were Rs 5,716 million which was 37 percent lower than in the previous year. Thus, foreign loans which financed nearly one half of the budget deficit in recent years, contributed only a third in 1987. The resources available from domestic non-bank sources of Rs 6,399 million also showed a decline of 5%. Hence, a larger volume of resources had to be utilised from banking sources than in the previous year for financing the budget deficit in 1987. Resources obtained from the banking system was Rs 3,541 million representing 1.8% of the GDP in 1987. The expansionary deficit in 1986 was 1.7% of GDP.

* These developments resulted in an enlargement of the expansionary deficit which had been a major contributory factor for the continuing pressure on the money supply, prices and balance of payments in recent years. The increase in service payments on the government debt continued to put an additional stress on the country's fiscal system. These developments suggested the need for concerted efforts at fiscal discipline so as to strike a closer balance between the availability of resources and the expenditure commitments.

POSITIVE FEATURES

Among the notable positive features in the 1987 economic performance reported by the Central Bank were the following:-

* In the mining and quarrying sector a growth rate of 19% was recorded.

* The manufacturing sector also provided some impetus to growth with a 7% increase in 1987; particularly in the private sector value added increased by 13%.

* The contribution of manufacturing exports has gone up to 49% of total export earnings in 1987. This appears to be the outcome of a wide range of incentives provided since 1978 for industries within and outside the Export Processing Zones. In particular, the rise in garment exports was quite noteworthy; earnings from garment exports rose at an annual compound rate of 25% during the 1979-1987 period.

* In the construction sector there was an expansion of 1.8% while in ownership of dwellings growth in value added was 1.5%.

* In the banking, insurance and real estate sector there was an expansion of 6.1% in value added, largely reflecting the improved performance of the banking sector.

* In wholesale and retail trade the value added rose by 2.8%.

* In terms of both trade and current account balances, Sri Lanka's balance of payments showed significant improvement in 1987. The deficit in the merchandise trade account declined from SDR 649 million in 1986 to SDR 531 million in 1987. Reflecting this improvement, the current account too registered a better out-turn, the deficit decreasing from SDR 363 million to SDR 266 million. The current account deficit GDP ratio which is a basic indicator of the degree of weakness of a country's balance of payments declined from 6.6% in 1986 to 5.2% in 1987. The current account deficit excluding official transfers dropped to SDR 405 million in 1987 from SDR

516 million in the previous year and as a ratio of GDP it declined to 7.9% from 9.5% over the two years; though the overall balance continued to be in deficit and the short-fall in 1987 was SDR 72 million.

The Central Bank has reported on the several negative features that appeared in Sri Lanka's economic performance in 1987 in its annual report. It notes that a fundamental factor behind the structural imbalances was the attempts in recent years to force the pace of development through a heavy expenditure programme, much in excess of the available resources. This has resulted in the emergence of the basic structural imbalances in Sri Lanka's economy. For instance, the total resources available to the Sri Lankan economy in 1987 were Rs 266.9 billion; of which domestic sources contributed Rs 196.7 billion (73.7%). The balance Rs 70.2 billion (26.3%) was accounted for by imports. Of these total resources National Savings has contributed around only 15% in recent years. The total resources available has increased by about 50% (at 1978 prices) over the last decade from Rs 59.5 billion in 1978 to Rs 91.2 billion in 1987. These increases were necessary due to the massive capital expenditures undertaken by the state; but these expenditures continued to be funded by an unprecedented volume of foreign finance due to inadequate national savings. In this context the pace of growth in domestic expenditure has been considered excessive or far more than what the economy could bear.

Basically, the country's balance of payments deficits and price pressures are said to be the inevitable consequences of this excessive growth of domestic expenditure - an expenditure that has grown faster than what the economy could sustain on a non-inflationary basis.

These trends are discussed more fully in the papers and extracts from papers, in the following pages.

AGRICULTURE

The agricultural sector, which includes, fisheries, forestry and livestock, has consistently contributed nearly one-third of the country's Gross Domestic Product and been the dominant sector in Sri Lanka's economy. In both 1986 and 1987 agriculture contributed about 25% of the GDP and accounted for over 40% of total export earnings. It has continued to generate about 15% of government revenue and provided employment for nearly 45% of the labour force and had a significant impact on the development of other sectors of the economy. Over the ten year period 1978-1987 agriculture production has grown at about 3.3 per cent per annum. Within the agricultural sector the main sub categories are: export crops accounting for 24 percent; paddy 20 percent; other crops 40 percent; and fisheries and forestry 16 percent. The domestic agricultural sub sector consisting of paddy, subsidiary food crops, cash crops, animal husbandry and home gardening alone shares about 18 percent of GDP (See table 1).

The average growth rate in the agricultural sub sectors for the period 1978-1987 is given in table 2. A comparison of growth rates by sub categories makes it clear that only forestry performed better in 1987 considering the respective past performances. However, with forestry's share of only about 2 percent in the GDP's composition the rate of growth in this category does not make a major impact. All other sectors have shown a disappointing performance in 1987 relative to the average performance.

Following these trends total production in the plantation sector declined by 14 percent; while production in the paddy sector declined by 18 percent in 1987. These poor performances eventually contributed to a decline in the growth rates of the overall agricultural sector by six percent in 1987.

Looking at the sectoral composition of the GNP and changes in value added (at constant prices) the overall agricultural sector had recorded a growth rate of 8.6 percent in 1985. This growth rate came down to 2.6% in 1986, and in 1987 it recorded a decline of 5.8%. This decline was due mainly to lower production levels of paddy and coconut. The value added in forestry and fisheries increased by 13

There has been no consistency in the contribution to the increase in agriculture, from its sub sector. The contribution had fluctuated from year to year, but in the case of non traditional crops there has been no negative contribution to agricultural GDP growth during the 1978/1987 period. All other sub sectors have recorded a negative contribution at some stages during this ten year period.

TABLE 1
SECTORAL COMPOSITION IN GDP

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1. Agriculture	26.0	25.0	25.8	24.6	24.0	26.4	25.0	25.9	25.5	24.0
2. Plantation	6.4	6.2	5.3	5.4	5.2	6.2	5.8	6.8	6.6	5.6
(a) Tea	2.3	2.2	1.9	2.0	1.7	2.3	2.6	2.5	2.4	2.4
(b) Rubber	1.3	1.2	1.0	0.9	0.8	0.9	0.8	0.8	0.7	0.7
(c) Coconut	2.8	2.8	2.4	2.5	2.6	3.0	2.4	3.5	3.4	2.6
3. Domestic										
(a) Paddy	6.4	6.1	6.5	6.3	5.8	6.4	5.9	6.2	5.8	4.7
(b) Other	11.2	10.6	10.4	9.8	10.8	9.4	9.6	9.4	9.5	9.6
4. Fisheries	1.2	1.2	1.2	1.3	1.3	2.5	1.8	1.8	1.8	1.9
5. Forestry	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8	1.7	1.9

* Sector share as a percent of total GDP

and 4 percent, respectively; but the value added in agriculture declined by 8 percent. While in the plantation sector the output of tea increased by 8 percent, rubber declined by 11 percent, and coconut by 27 percent. In the food crop sector paddy production declined by 18 percent.

PADDY

Paddy has always been a major component of the field crops sector and now accounts for one-fifth of arable land and provides employment for nearly 500,000 persons. In 1987 paddy

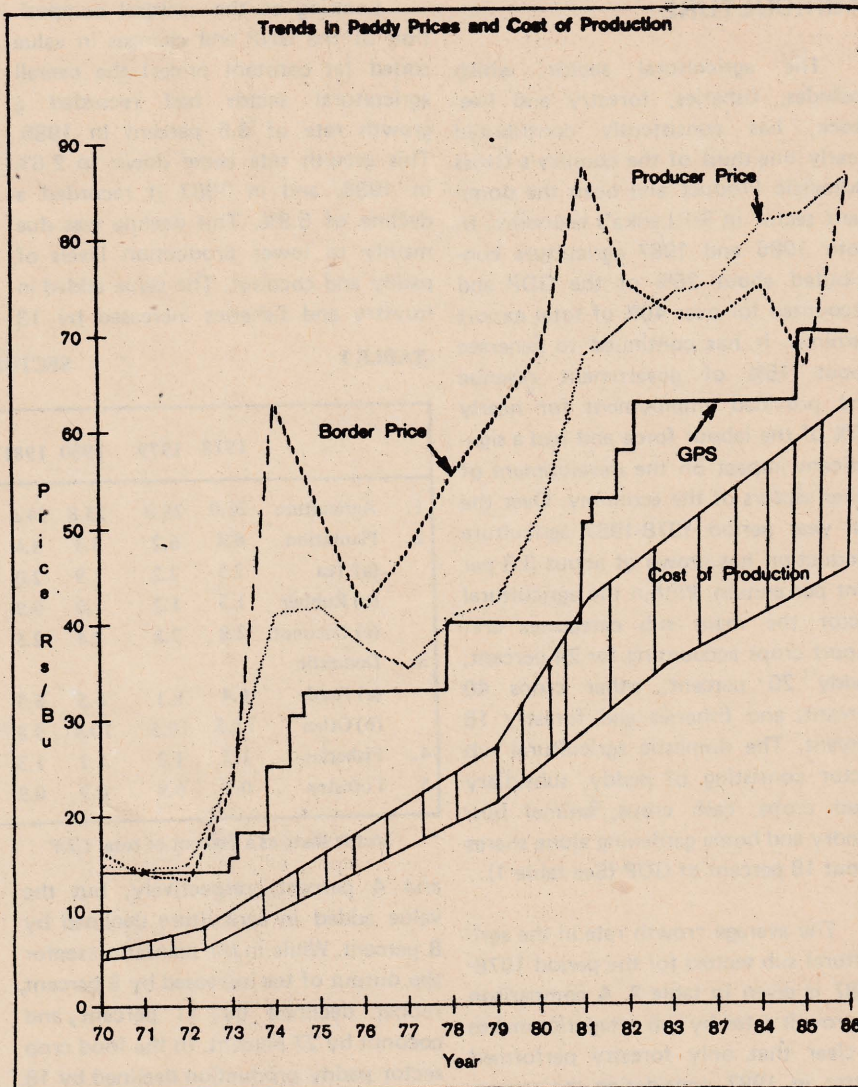
TABLE 2
GROWTH RATES IN THE AGRICULTURAL SECTOR
(1978-1987)

	1978 to 1982	1982 to 1987	1986	1987
1. Agriculture	3.1	0.9	3.6	-5.8
2. Plantation	0.3	1.0	1.0	-13.7
(a) Tea	-1.2	3.8	-1.3	1.0
(b) Rubber	-3.8	-0.1	0.6	-10.6
(c) Coconut	3.5	-0.8	2.8	-24.6
3. Domestic				
(a) Paddy	2.7	-2.8	-2.5	-18.0
(b) Other	4.2	3.7	6.1	1.7
4. Fisheries	8.0	-2.7	8.9	3.8
5. Forestry	5.2	4.4	1.8	13.1

declined by 18% to 2.1 mn metric tons, and this was the second consecutive year that paddy production recorded a drop. Production in 1987 was the lowest since 1979. The main reason for the decline in paddy production in 1987 was the prolonged drought conditions that prevailed in many parts of the country. Water shortages not only delayed the commencement of cultivation and reduced the extent sown, but also led to a reduction in fertilizer application and the extent harvested which in turn resulted in a low production in Maha 1986-1987 and Yala in 1987. The unsettled conditions in the North and East Provinces also effected cultivation. Apart from the decline in sown extent by about 290,000 acres, it is estimated that about 90,000 acres that were sown did not reach maturity due to the drought.

The average yield has shown a steady upward trend over the 1977-1987 period increasing from 48.7 percent bushels per acre in 1977 to 68.2% bushels in 1987. In the 1987 cultivation year, however, the average yield increased marginally by about 2% or about 2 bushels per acre over that of 1986. It has been noted, however, that increases in the average yield were largely confined to most of the major irrigated areas, which used more fertilizer during Maha 1986/1987. Fertilizer usage increased progressively from 123,000 metric tons in 1977 to 232,000 metric tons in 1986. The drop in 1987 is attributed to the drought that prevailed during that year. The sale of certified paddy by the Government also increased from about 100,000 bushels in 1977 to 225,000 bushels in 1985. The reduction in issues in 1986 and 1987 are due to the increased participation of the private sector and the drought in 1987.

Recognising the role of floor prices the Government has increased the purchase price of paddy from time to time over the past several years taking into consideration the increasing cost of



production (see diagram). The Guaranteed Price Scheme (GPS) was raised from Rs 33 to 40 per bushel in November 1977. The floor price was revised again in November, 1980 to Rs 50 per bushel in the face of rising costs of production, mainly that of labour and farm power, in order to maintain producer incentives. Further adjustments in the GPS price of paddy to Rs 57.50 per bushel in 1981, Rs 62.50 in 1982 and to Rs 70.00 in 1986 were made to compensate for fertilizer price and other cost increases.

Further increases in paddy production would depend largely on stepping up levels of production and

raising cropping intensity in both major and minor irrigation schemes, and also from the new lands that will come into production. Official forecasts are that with the current development programme (provided weather conditions remain stable) paddy production would grow at an annual rate of about 4 percent to reach a level of 140 mn bushels by 1992.

It may be observed that the annual growth in the agricultural sector, including those years where performance was relatively better, has been the result of contributions by only a few sectors. There was no single year when all the sectors contributed positively to the

increase in value added. Overall performances in the sector shows no evidence of a positive trend, in value added in agriculture in an overall context.

This situation appears to be the result of a combination of a number of complex factors which include weather, prices, production costs, domestic and foreign demand, availability of inputs and government policies pertaining to fiscal, monetary and foreign exchange variables.

OTHER FIELD CROPS

The total extent under cultivation of field crops, other than paddy has also shown an upward trend over the last decade, particularly among the coarse grain and pulses. Acreage under individual crops has fluctuated from year to year, though acreage under some roots and tubers, and chillies has shown a significant decline between 1976 and 1987 (see table below).

The term other field crops embraces a group of unrelated crops including coarse grains, pulses, oil seeds, roots and tubers and condiments (particularly chillies and onions) which are generally cultivated in cheñas and home gardens in the dry and intermediate zones during the wet maha season. Chillies and onions which are high value crops are also grown under irrigation particularly in the areas benefiting from the Mahaweli Programme. The Government announced a floor price for eight of these crops in advance of the season to help cultivators in making of production decisions.

The collective extent cultivated under this group of crops (excluding roots and tubers which are grown in the wet zone as well) in 1987 was marginally higher than in 1986. The decline in chillie cultivation is mainly due to the drought which affected the extent planted under rainfed conditions. Areas under onions, ground nuts, green gram and cowpea, however, registered an overall increase. Traditionally chillies and onions have been imported to supplement local production but the quantum and value of imports of these commodities have declined.

During the cultivation year 1987 blackgram, greengram, cowpea, maize, gingelly and red onions recorded significant expansion in production mainly as a result of increased extent under those crops. It was partly the drought conditions that adversely affected paddy cultivation during the year that compelled many dry-zone farmers to shift to minor food crop cultivation and increase the extent under such crops to ensure a minimum level of income and food security.

In the category of the higher value minor food crops, only red onions recorded an increase in production while the production of potatoes, chillies and bombay onions declined. The cultivation of chillies was severely affected by the drought conditions, leading to a substantial decline of 39% in production during the year.

Production of red onions, green gram, cowpea, blackgram and maize

increased considerably during Maha, 1986/1987. Most of these crops reported significant increases during Yala, 1987 as well. Cowpea production in Yala, increased by 60% while blackgram production recorded more than a three-fold increase. Production of soya-bean declined in both seasons, by 3 percent in Maha and 24 percent in Yala.

Fertilizer issues to the minor food crops sector increased by six percent to 20,207 metric tons in 1987.

It has been found that although the minor food crop sector has considerable development potential, there appear to be several constraints on the development of the sector. These include relatively low levels of institutional support, limited availability of high yielding varieties suitable for different agro-ecological areas and marketing problems. Partly as a result of these factors, many farmers still appear to show a greater preference for paddy cultivation. The Central Bank has suggested that since the country is moving towards self-sufficiency in paddy production, there is need to change this preference pattern through policy measures to achieve a more balanced growth in the agricultural sector.

Sugar

Another important area of domestic cultivation is sugar, where in 1987 total production declined substantially by 15 percent to 29,304 metric tons, from the peak level of 34,325 metric tons reported in 1986. Sugar production

TABLE 3 PERCENTAGE CONTRIBUTIONS TO INCREASE IN GDP BY MAJOR CATEGORIES IN THE AGRICULTURAL SECTOR

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Agricultural share in GDP	24.0	23.0	22.2	22.3	21.8	22.0	21.4	22.4	21.9	19.8
Contribution to increase in GDP	15.0	5.7	10.1	25.4	11.3	23.3	8.6	42.5	11.4	-122.4
Tea	-9.0	22.2	-28.4	13.2	-37.8	-9.9	86.1	3.4	-6.8	1.3
Rubber	6.0	-3.2	-26.6	-4.5	0.8	8.7	3.0	-1.2	0.9	-4.5
Coconut	32.7	49.2	-52.3	18.4	48.7	-110.9	59.7	13.3	20.1	-48.0
Paddy	63.3	25.4	124.0	16.0	-36.9	76.0	-35.2	28.0	-31.9	-59.0
Other	7.0	6.3	-67.4	56.9	125.2	49.9	157.0	10.0	117.6	9.2

by the Sri Lanka Sugar Corporation (SLSC) declined substantially by about 29 percent to 15,035 metric tons; while that of the private sector rose by 9 percent from 13,116 metric tons in 1986 to 14,269 metric tons in 1987.

The lower output of the SLSC was largely due to reduced production of Kantale and Sevenagala factories. The production of the Kantale factory decreased by 66 percent to 2,288 metric tons in 1987, while that of the Sevenagala dropped by 37 percent to 4,107 metric tons. However, sugar production at the Hingurana factory increased by 9 percent to 8,640 metric tons in 1987. The sharp decline in total sugar production in the factories of the SLSC was mainly due to prolonged drought conditions which reduced supplies of cane for crushing and deteriorated the quality of cane. Civil disturbances also had an adverse effect on production at Kantale and Hingurana. A large extent under sugar cane was left unharvested during the year due to terrorist activities and shortage of labour. Sugar production at the Pelwatte Sugar factory was also severely affected by the drought and the factory was able to produce only 14,269 metric tons in

TABLE 4 REFORESTATION PROGRAMME

Project/Programme	Area Reforested 1977-1987 (ha)	Area likely to be 1988-1992 (ha)
1. Reforestation of neglected tea and rubber lands	5546	80*
2. NADSA	2801	Completed in 1987
3. Reforestation of Upper Mahaweli	8310	750*
4. Fuelwood project	10207	Will be completed in June 1988
5. Sinharaja & Biosphere reserve	871	40*
6. Community forestry	7163	2900**
7. Integral rural development projects	4352	850*
8. FRDP	2014	3000**
9. Cooperation reforestation programme	27500	Completed
10. Reforestation & development	192	192*

* Target for 1988 only ** Target for 1988 and 1989 only

The progress on reforestation till 1987 and the programme for 1988-1989 are given above. The targets for the period 1990-1992 will be available only after the first new project under the master plan is finalised.

TABLE 5 PERFORMANCE INDICATORS OF THE TREE CROPS

	1978	1987
Share of Export Earnings	73%	37%
Share of Government Revenue	41%	4.4%
Production		
Tea (M.Kgs)	199	213.3
Rubber (M.Kgs)	156	121.5
Coconut (M.nuts)	2,209	2,292

1987 as against the targetted production of about 32,000 metric tons.

Fish

Among the sub-sectors of agriculture are fisheries and livestock. Although in 1978 fish production was provisionally estimated at 190,002 metric tons showing an increase of 4 percent when compared with that of the previous year, local production was still far short of demand. There were many problems confronting the sector.

The performance of the fishery sector on the whole has remained much below expectations. A combination of factors such as distribution problems, high fuel cost, high cost of preservation of fish and the inadequate supply of fish led to an increase in the price of fish during the year. While con-

sumer prices continued to rise, the majority of the fishermen in the country remain economically disadvantaged as the benefits of high prices do not trickle down to the level of fishermen. Therefore, while making an effort to increase production greater attention has to be focussed on the distribution of benefits to ensure that the benefits of these efforts reach the producers at large. In this respect, there is urgent need to evaluate the different subsidy schemes which have been in operation for several years with a view to assessing the extent to which they have benefited the fishermen with relatively low socio-economic status. (For a more detailed analysis see box)

Livestock

According to provisional estimates of the Department of Census and Statistics, milk production (including buffalo milk) in 1987 was 275 million litres, an increase of 54 percent compared to 178 million litres produced in the previous year. The Milk Industries of Lanka Co. Ltd. (MILCO) collected 69 million litres of milk in 1987. This was marginally higher than the combined amount of collected by the National Milk Board (January-July 1986) and MILCO (August-September 1986) in 1986.

Forestry

Forestry is another sub sector of agriculture and both production and conservation in this sub sector are gaining much attention. A major reforestation project has been launched by the authorities and its progress till 1987 and the programme upto 1988/89 are given at left. Actual targets for the period 1990-92

will be available only after the first new project under the master plan is finalised.

Export Crops

Sri Lanka's overall economic performance has for several decades been dependent on the performance of the tree crops - tea, rubber and coconut. Prior to 1978, tea, rubber and coconut provided around 85 percent of the total export earnings of the country and 8.4% of the budgetary revenue. In the ten years since liberalisation of the economy, the role of tea, rubber and coconut has diminished substantially. These export earnings declined to 50% about three to four years back and to 37 percent in 1987. Their contribution to revenue has fallen dramatically to 4.4%. This erosion of the contribution of the tree crops to the economy of the country was partly accounted for by the success in generating new areas of growth in response to the liberalised economic policies of the Government and partly because of the stagnant volume of output in all tree crops. Tea production, which peaked to 228 million kilograms in mid-1960, recorded only 213 million in 1987. Similarly, rubber production has declined from 156 million kilograms in 1979 to 121 million kilograms in 1987. The per-

formance of the coconut sub sector was even more disappointing. The production of coconut has exceeded 3,000 million nuts, a figure achieved in the mid 1960s only once since then. The 1987 production of 2,300 million nuts were severely affected by drought.

Some of the reasons for the stagnant or declining output in the tree crops sector are due to external factors such as declining profitably due to low commodity prices, but some are clearly attributed to domestic factors. Table 6 illustrates the performance of tea, rubber and coconut over the last ten years.

The export oriented segment of the agricultural sector comprises tea, rubber, coconut and minor export crops; and these have continued to contribute a major part of the country's foreign exchange earnings till a few years back. The situation had changed by 1987. As illustrated in table 5, approximately 50 percent of the total export income of the country was derived from export crops which also covers about 40 percent of the average land of Sri Lanka. However, the share in exports has declined in the last 10 year period from 79 percent to 43 percent. While, the proportion of tea, rubber and coconut exports have fallen gradually in Sri

Lanka's overall export picture, the new industrial exports and gems have in recent years kept increasing their share of the country's export earnings.

Overall plantation output registered a marginal increase of less than one percent during the last decade. As was observed Sri Lanka's three traditional export crops of Tea, Rubber and Coconut suffered a deterioration in production, and exports over most part of the decade. Adverse weather conditions particularly in 1987, is one basic reason listed for a drop in production. The result was that although the prices of tea, rubber and coconut products increased in real terms, earnings from agricultural exports declined by five percent in SDR terms, owing to reduced export volumes.

This sharp drop in the export volumes of the three major agricultural commodities was a disappointing feature of Sri Lanka's export performance in 1987. The export volume of tea declined by three percent to 201 million kgs in 1987, while the volume of rubber exports fell by 4 percent to 106 million kgs. The overall export volume of coconut kernel products declined from an equivalent of 1,105 million nuts in 1986 to 538 million nuts in 1987. In view of these reduc-

TABLE 6 PERCENTAGE COMPOSITION OF AGRICULTURAL EXPORTS

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Agricultural Exports to total exports	78.9	53.8	61.8	57.8	54.3	58.0	60.4	52.6	46.3	42.7
Tea	48.5	37.4	35.1	30.6	29.6	33.1	42.8	33.2	27.2	27.0
Rubber	15.3	16.4	14.7	13.7	10.8	11.4	8.8	7.1	7.7	7.1
Coconut	9.6	11.1	7.0	6.8	7.0	7.6	5.7	8.5	7.0	6.4
Minor export crops	5.5	5.4	5.1	6.6	6.9	5.9	3.7	3.8	34.4	2.2

Production of Agriculture

Unit	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Tea '000 Mt.	199.0	206.4	191.4	209.9	187.8	179.3	208.1	214.1	211.1	213.3
Rubber '000 Mt.	155.6	153.0	133.1	124.0	125.2	140.0	141.9	137.5	137.8	117.8
Coconut Mn Nuts	2,207	2,393	2,026	2,258	2,521	2,312	1,942	2,958	3,039	2,167
Paddy '000 Mt.	1,891	1,917	2,133	2,230	2,156	2,479	2,420	2,661	2,588	
Fish '000 Mt.	157	168	188	207	217	221	169	175	183	190
Other Food Crops '000 Mt.	750	602	556	745	994	1,142	748	769	729	-

Source: Economic and Social Statistics of Sri Lanka, Central Bank of Sri Lanka, Dec. 1986. National Accounts, Dept. of Census and Statistics

tions, the country failed to reap the full benefits of the increase in the prices of these commodities in international markets. In SDR terms, the earnings from tea decreased marginally, from rubber the decline was four percent

and from coconut it was 23 percent. Overall earnings from agricultural exports decreased by five percent, falling from SDR 479 million in 1986 to SDR 458 million in 1987, despite an improvement in prices.

Tea

Tea production in 1987 increased to 213.3 mn.kgs over a production of 211.3 mn.kgs in 1986, showing a marginal increase of 0.9 percent. The main contribution to this increase came from low grown teas with production in 1987 increasing by 7 percent to reach 86.4 mn.kgs. the highest level on record. Low grown also accounted for 49 percent of tea production. In contrast high grown tea production fell for the third consecutive year declining by 5 percent to 73.4 mn kgs in 1987. The total registered area under tea cultivation has also been on the decrease in recent years and the total area under tea was down to 221,498 hectares in 1987 from 231,000 hectares in 1985. The drop in acreage has been attributed to alienation of marginal tea lands for other uses.

The value of tea exports in 1987 amounted to Rs 10,654 million (SDR 280 million) in compared with Rs 9,253 million (SDR 281 million) in 1986. This represents an increase of 15 percent in Rupee terms, but a marginal decline in SDR terms; entirely due to a reduction in export volume of 3 percent from 208 million kgs. in 1986 to 201 million kgs in 1987. In contrast, the average export price in SDR terms rose by 3 per cent to SDR 1.39 per kg, although the improvement in Rupee terms, was 19 percent to Rs 52.97 per kg. The average price of Sri Lanka teas at the London Auction dropped by 9 percent, falling from 115.67 pence per kg. to 105.21 pence per kg.

Rubber

The volume of rubber exports declined more sharply, reaching a 4 percent decrease to 106 mn kgs in 1987. However, the average export price (f.o.b.) rose marginally by 1 percent (16 percent in Rupee terms), to SDR 0.73 per kg. (Rs 27.63 per kg.) As a result, there was a decline of 4 percent in export earnings in SDR terms, but an increase of 12

PLANTATION CROP SECTOR

Employment, Output and Absorptive Capacity Shrink

The tree crop sector in Sri Lanka which grew rapidly during the 1950s and 1960s still occupies a predominant place in the economy and it will continue to be the backbone of the economy for the next decade or so. Hence the performance of the tree crop sector will be closely linked with the development efforts of the country.

A noteworthy feature of the tree crop sector in the recent past has been its substantially poor productive performance which in turn contributed largely to severe balance of payments problems, growing budget deficits and to deterioration of absorptive or retentive capacity of labour. On the whole, the failure to sustain the growth momentum in the tree crop sector in the recent past reflects largely the failure to provide adequate incentives to producers and the lack of a clearly defined set of policies aimed at resuscitating the sector in addition to adverse foreign trade trends.

The decline in the tree crop sector is even more striking because it was taking place in a context where the paddy sector was growing rapidly and where the major competitors of Sri Lanka's tree crop sector were reporting marked improvements in their production and productivity.

Though the land reform programmes of 1972 and 1975 affected mostly the tree crop sector and the major objectives of the programmes were to raise productive employment and production on these lands, the performance during the last decade casts serious doubts on the extent of achievements of these two objectives.

More recently the government has recognized the importance of resuscitating and rehabilitating the tree crop sector with heavy reliance on producer incentives, more state subsidies and improvement of institutional structures. Yet the need for employment creation and the implications of rehabilitation for labour absorption has not been adequately recognized.

An important effect of the declining output in the tree crop sector has been the failure to maintain at least the level of employment generated during the 1960s by this sector. The employment level continued to deteriorate along with the output level, where the absorptive capacity shranked. Also this placed the burden of providing productive employment for growing rural labour force on the food crop sector in general and the paddy sector in particular.

The declines were more striking and alarming in the tea and rubber sectors which, in general, has contributed to much of the tree crop employment. In the case of coconut, employment level has never been satisfactory and the indications are that the situation has worsened over the past decade or so. In all three crops, both the decline in the extent under cultivation and the drop in yield per unit of land have contributed to the deterioration in employment levels rather than adoption of more capital-intensive technology.

A positive aspect of this situation is that the trend can be reversed unlike in a situation where capital has replaced labour. However, this requires speedy action with an appropriate set of policies to which institutions involved will have to be firmly committed.

Extract from "Labour Absorption in the Plantation Sector of Sri Lanka" by D. Wesamperuma, Wilbert Gooneratne and Nimal Fernando.

TABLE 7 VOLUME OF EXPORTS OF MINOR EXPORT CROPS (MN.KG)

Crop	1976	1980	1982	1984	1985	1986	1987
Pepper	0.10	0.95	1.30	2.77	1.12	1.28	2.02
Cinnamon	6.80	7.94	6.26	8.89	6.85	7.59	7.50
Cardamom	0.16	0.16	0.21	0.18	0.19	0.27	0.19
Coffee	1.71	0.91	2.92	3.65	3.90	2.64	0.85
Cocoa	1.11	0.90	0.14	0.62	0.97	0.68	0.83
Clove	0.48	1.19	0.97	0.97	0.27	0.74	0.49
Arecanuts	2.37	5.48	2.41	2.20	0.39	1.21	1.58

percent in Rupee terms. In SDR terms exports declined from 93mn SDR in 1985 to 77 mn SDR in 1987. FOB export prices were up from Rs 21/34 per kg in 1985 to Rs 27/63 per kg in 1987. The volume of exports were down from 120.2 mn kgs in 1985 to 106.0 mn.kgs in 1987.

Rubber production was provisionally estimated at 123 million kgs. in 1987, showing a 11 percent decline over the previous year. This is the lowest level of production on record during the last two decades. Production which declined during the first quarter of the year due to severe drought conditions, dropped further during the third quarter of the year owing to reduced tapping in major production areas due to heavy rains. The up-rooting of a greater extent for replanting activities too had a negative effect on production during the year.

The trend of converting marginal rubber lands particularly into tea, and clearing of rubber lands for development activities continued in 1987, contributing to a marginal reduction in the total registered area under rubber. Area under cultivation has declined marginally, from 205,500 hectares in 1985 to 205,100 hectares in 1987.

In 1987, the total area under tapping decreased by one percent to 165,565 hectares, which is the lowest level recorded in the recent past. The declining trend in area

under tapping has been evident since 1980.

Coconut

The sharpest decline however, was recorded from export earnings of coconut products where the decrease amounted to 23 percent and in SDR terms from SDR 73 mn in 1986 to SDR 56 mn in 1987. This was largely due to a significant decline in the value of kernal products exports, of 24 percent (12 percent in Rupee terms), to Rs 1,423 million (SDR 37 million) in 1987. The volume of exports was almost reduced by half, from an equivalent of 1,105 million nuts in 1986 to 538 million nuts in 1987. The reduction in the volume of exports more than off-set the favourable impact of a significant price increase of 57 percent (81 percent in Rupee terms), from Rs 1.46 per nut (SDR 0.044 per nut) in 1986 to Rs 2.64 per nut (SDR 0.069 per nut) in 1987. Earnings from the export of coconut by-products fell by 21 percent (8 percent in Rupee terms), to Rs 717 million (SDR 19 million) in 1987.

The total production of coconut in 1987 was estimated at around 2300 million nuts which represents a 25 percent decline from the output of 3,040 million nuts in 1986. The average domestic consumption of coconut is around 65 percent of the total coconut production, leaving an exportable surplus of 35 percent which was shipped in the form of desiccated coconut, coconut oil and

a small quantity as copra and fresh nuts.

Prices of coconuts moved upwards appreciably during the period 1986-87 while quantities produced dropped substantially. The average producer price of coconuts in 1987 increased by 80 percent. The value added contribution in current price rose to Rs 5,262.3 (Mn) in 1987 from Rs 3,559.7 (Mn) in 1986. In real terms the total value added in the coconut growing industry which was Rs 1,004.4 (Mn) in 1986, had shown an increase of 0.7 percent over the year 1985. Production was 3,039.5 (Mn) nuts in 1986 while the corresponding figure for 1985 was 3,958.0 (Mn) nuts.

Minor Export Crops

The term minor export crops covers a wide range of economically important spice and beverage crops (cinnamon, coffee, pepper, cloves, cardamom, cocoa, nutmeg and arecanuts). These crops are cultivated in the wet and intermediate zones of the country. The bulk of the production is exported accounting for about 6 percent of total export earnings over the last decade. The volume of exports of minor export crops have shown marked fluctuations from year to year. During 1987, pepper, cocoa and arecanut recorded increases in export volumes. Cashewnuts was another such crop gaining importance, with volume of exports doubling during 1987. The volume of exports of nutmeg and maize, cardamom and cloves, however, declined by about 30 percent during this period. Favourable weather conditions in growing areas however influenced production levels to a large extent.

A mid country Perennial Crop Development Project, covering 6,000 acres in those highland districts where there is most potential for these crops, has been launched to improve output and marketability. Fertilizer issues to the minor export crop sector increased by 35% from 2,356 mt. tons in 1986 to 3,191 mt tons in 1987. S.L.T. & C.G.

The Fisheries Sector

Although the territory covering Sri Lanka's aquatic resources is larger than the territory of its land area, the contribution of the fisheries sector to the country's Gross Domestic Product has not come up to even three percent at any stage. The closest it came to three percent was in 1983, and were it not for an intensifying of the disturbed conditions in the Northern and Eastern coastal areas from 1984 it is possible that the contribution from fisheries to the GDP would have exceeded three percent by 1987. Accordingly the contribution from fisheries to the overall agricultural sector (fisheries is considered a sub-sector of agriculture) has also remained considerably low, contributing around ten percent of the value added to this sector over the last decade (See table 1).

tion of the fisheries sector in 1984 and the slow progress thereafter are a direct outcome of the ethnic conflict in the North and East; although the effect of this factor is not visible in the GDP and agricultural sector prior to 1985 from which year there is a significant drop as seen in Table II. The average annual growth rate of the fisheries sector has been slightly above the growth rate of the GDP and the total agriculture sector, over the last ten year period; while in some years the growth or drop in fisheries has reached extremes compared with those of the GDP and the agricultural sector. It may therefore be implied that the fisheries sector is an insignificant component in the national economy in value added terms.

Since fish is a major source of protein, supplying about 65 percent of

percent per annum; a figure which would have been much higher were it not for the disturbed conditions in the North and East after 1983. The growth rate averaged 9.9 percent for the period 1977-1983. This growth in the fisheries sector was heavily influenced by growth of the inland fisheries sub-sector which recorded an annual average growth rate of 29.3 percent over this period. The so-called "coastal" sub sector's growth rate for the period averaged only 7.8 percent per annum during this time. Moreover, the drop of production in 1984 was caused mainly by the fall in the "coastal" sub sector, which dropped as much as 25.71 percent over that of the production of the previous year. The drop in the "inland" sub-sector was only 11.61 percent in that year (Table III).

The shortage of local landings have

TABLE I FISHERIES SECTOR'S CONTRIBUTION TO THE NATIONAL ECONOMY AND AGRICULTURAL SECTOR (BASED ON CURRENT FACTOR COST PRICES)

Year Sector	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
To the GDP	2.03	2.77	2.75	2.73	2.62	2.78	2.06	1.98	2.06	2.08
To the agriculture sector	7.53	12.45	12.06	11.84	11.95	11.67	8.24	8.26	8.92	9.12

In general the fisheries sub-sector has shown growth during the last decade; though these upward trends in the fisheries sector cannot be related to the growth of the Gross Domestic Product and the agricultural sector, (Table II). The sudden drop in produc-

the nation's animal protein, it is a significant item of food and its availability and price has a direct bearing on the cost of living of the majority. Fish production figures (See table III) indicate an increase of landings for the last decade at an average rate of 3.7

always been supplemented by imports which have helped to maintain the required per capita fish consumption level. Fish imports have increased rapidly after 1984. Although, the quantity imported had decreased both in 1981 and 1986; the value of fish

TABLE II GROWTH OF FISHERIES SECTOR IN RELATION TO THE GDP AND AGRICULTURAL SECTOR (BASED ON CURRENT FACTOR COST PRICES)

Year Sector	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	For the Period
G.D.P.	+16.71%	+22.98%	+25.04%	+27.46%	+19.34%	+20.28%	+22.97%	+5.91%	+10.15%	+8.56%	+17.94%
Agriculture	+14.22%	+ 1.11%	+28.33%	+13.44%	+13.44%	+30.52%	+29.29%	+1.56%	+ 6.43%	+7.10%	+16.09%
Fisheries	+11.07%	+67.56%	+24.29%	+26.49%	+14.53%	+27.39%	- 8.69%	+1.80%	+14.93%	+9.56%	+18.89%

Source: Ministry of Fisheries

TABLE III

FISH PRODUCTION BY SUB-SECTORS (METRIC TONS '000)

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Coastal	136,900	148,851	165,264	175,075	182,532	184,049	136,642	140,266	144,266	149,278
Off-shore and deep- sea	2,949	2,099	2,148	2,178	1,078	689	823	2,400	3,400	4,259
Inland	16,738	17,425	20,266	29,590	33,068	36,068	31,882	32,743	35,390	36,465
Total	156,587	168,375	187,678	206,843	216,933	220,806	169,347	175,409	183,056	190,002

Source: Ministry of Fisheries

imports had not come down due to increased unit values during the period under review; except on one occasion, in 1981 (Table IV).

The exports of fish and fishery products were lower both in quantity and value terms compared to the imports since 1984; while in the period prior to this export incomes were higher than payments on imports. However, the quantities imported were greater than the quantities exported within the time frame analysed (Table IV). However, exports have not shown a steady growth over the period and have experienced fluctuations in terms of quantities and values.

Increased fish production has been

influenced by the import liberalization introduced after 1977. This has helped to make more freely available direct inputs such as fishing boats, marine engines, spare parts, fishing gear, etc. The rapid growth of production in 1979 (Table II) has been largely the result of this sudden change of policy. Also, the steady growth of fish production during the last decade has also resulted from the better infrastructure provided. The expansion of the fishing fleet through the regular process of issuing fishing craft and engines have helped to maintain this progress till 1984. (Table V) The number of fishing units in operation were 22,198 in 1977, which increased to 26,562 by 1986.

The capital expenditure of the Mi-

nistry of Fisheries between 1978-1985 has been five times greater than the previous eight year period. The largest amount was spent in 1980, which amounted to Rs 266.21 million. Foreign aid utilization in the development of the fisheries sector has shown steady growth over the period 1978-1985; and the amount utilised amounted to approximately 28 percent of the total capital expenditure of the Ministry of Fisheries for the period.

The sudden drop of fish production in 1984 and the subsequent slow progress have aggravated the demand for fresh fish in the local market. The shortage in the market has been partly supplemented by various forms of imported fish. However, 1984 has been

TABLE IV

IMPORTS AND EXPORTS OF FISH AND FISH PRODUCTS
(PRICE RS. MN. QUANTITY M.TON)

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Quantity										
M.Tons	5,112	18,495	22,385	9,903	13,595	16,518	28,243	35,974	32,400	38,135
Value										
Mn.Rs.	33.93	139.46	297.94	108.80	317.87	345.38	619.80	756.17	838.99	656.58
Quantity										
M.Tons	3,128	4,071	2,398	2,760	3,248	2,476	3,581	3,241	3,411	2,417
Value										
Mn.Rs.	233.05	207.01	249.92	348.41	437.27	424.24	605.30	453.65	608.48	576.41

Source: Ministry of Fisheries

noted as the year of lowest per capita fish consumption during the decade. There was a steady growth in fish consumption before 1984 (Table VI). There have to be larger quantities of prepared and preserved fish imports, if consumption levels are to be improved and it is on such imports that consumption levels will depend in 1988 as well.

The increased demand for fish since 1983, has been reflected clearly in the market prices. Fish prices in 1987 had risen by more than 100 percent since

1980. However, of the total price increase, more than 75 percent had occurred after 1983.

Upto now fisheries may not have been a significant contributor to the GDP but as a supplier of animal protein it has been a very essential part of the people's diet. Considering this factor it is essential that the fisheries sector be given priority in any development programme. In 1987 the per capita consumption was less than two-thirds the recommended level of 22 kgm per capita per annum; and the target should be to reach at least the recommended

level. Since the normal share of almost 40 percent of national production contributed by catches in the North and East has not been coming in since 1984, the Ministry of Fisheries has to depend more on the other areas, specially on the Inland sector with more emphasis on aquaculture efforts. Therefore, it is imperative to recognise the increasing needs of aquaculture development by which the dependency on capture fishery can be reduced. The decade under review has tried many steps in this direction and the success of these steps are evident in some areas today.

L. de. A.

TABLE V **ISSUE OF CRAFTS, ENGINES AND PRODUCER SUBSIDIES**

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Items										
3½ Tonnes	248	313	565	374	76	8	11	27	55	
17-25' footers	-	503	1,510	676	658	226	308	155	195	
Inboard Engines	41	150	270	12	2	4	8	4	9	
Outboard Motors	2,124	3,262	1,637	850	1,343	631	684	340	540	
Orus	-	-	-	-	-	100	157	153	100	
15' rhodies	-	-	186	300	126	-	-	-	-	
Producer Subsidy (Rs./Mn)	12.56	38.80	55.93	33.64	23.37	13.54	13.81	11.04	17.00	26.96
										Upto Sept.

Source: Ministry of Fisheries

TABLE VI **PER CAPITA FISH CONSUMPTION LEVELS, LOCAL PRODUCTION AND FISH IMPORTS**

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Local Production	156,587	168,375	187,678	206,843	216,933	220,806	169,347	175,409	183,056	190,002
Imports (M. Tons)	5,112	18,495	22,385	9,903	13,595	16,518	28,243	35,974	32,400	38,135
Consumption (Kgs)	11.36	12.63	14.08	14.27	14.97	15.23	12.44	13.14	13.15	13.76

INDUSTRY

The contribution of the manufacturing sector to economic growth and structural change has remained virtually unaltered during the last five years. While the manufacturing sector has grown about 6.2 percent during 1982-1987, its share of GDP during this period has remained around 15 percent. As in the case of the other main sectors of economic activity industry too has maintained its same share of GDP, indicating how little structural change has occurred in the economy as a whole. The Finance Ministry's National Planning Division expressing concern over this situation states "The present performance of the manufacturing sector is grossly inadequate to establish a firm industrial base for future economic growth and employment creation in the country.

The experience of developing countries which have reached a higher level of economic development demonstrates that the rate of growth of industry has to be much faster than that of GDP. The industrial sector must perform the role of a lead sector providing the necessary dynamism through linkage effects to the other sectors of the economy. The need for such a role is even more acute in Sri Lanka in view of the crucial contribution manufacturing could make to alleviate the balance of payments problem".

In real terms the value of industrial output increased by 8 percent in 1987 compared with 12 percent growth in the previous year. The value of output of private sector industry rose by 15 percent while that of public sector industry declined by 1 percent. The moderation in the rate of growth of industrial output in 1987 was mainly due to a decrease in public sector output. The decrease is the result of a fall in production in the National Textile Corporation and of the very near static petroleum output. Civil disturbances continued to affect adversely the production and distribution of a number of public sector industrial corporations.

Among the industrial sub-sectors that recorded increases in output in 1987, were textiles, wearing apparel

Percentage Share of Current Total Industrial Production

Industry Category	1972	1977	1979	1981	1983	1984	1985	1986	1987
1. Food, Beverage & Tobacco	33	33	27	20	25	24	27	29	27
2. Textile, Wearing apparel & leather products	16	10	11	13	18	21	25	29	32
3. Wood & Wood products	1	2	2	1	2	2	2	2	1
4. Paper & Paper products	3	4	4	3	3	3	3	3	3
5. Chemical, Petroleum, Coal & Plastic products	23	35	41	52	42	40	34	27	28
6. Non-Metallic Mineral products	7	6	7	6	5	5	5	5	4
7. Basic Metal products	3	2	3	2	1	1	-	-	1
8. Fabricated Metal products	13	8	5	3	4	4	4	4	4
Overall Industries	100	100	100	100	100	100	100	100	100

Source: Central Bank of Sri Lanka. * Provisional

and leather products (23 percent), non-metallic mineral products (11 percent), basic metal products (11 percent), fabricated metal products (9 percent), wood and wood products (4 percent), chemical products and food, beverages and tobacco products (3 per cent each) and paper and paper products (1 percent).

The three main product groups: food, beverages and tobacco; textile wearing apparel and leather; and chemicals, petroleum, coal, rubber and plastics account for and add up to 87 percent of industrial output. The share of engineering based industries reflected in the sub sectors basic metals (1%) and fabricated metal products (5%) remains relatively very small.

The heavy concentration of industrial output within the three main categories, points to the significance of these sectors in the economy in general and in the industrial sector in particular. These industries do make a significant contribution to import substitution and export oriented industrial development. However, their relative roles become less significant if the share of value added shown in Table 1, is taken into account. It is evident that the subsectors wood and wood products, non-metallic minerals and fabricated metal products contribute a larger share of value added. The changes in the composition of value added over time varies from that of output in the various sub sectors. The causal factors underlying variations in

value added over time cannot be explained without more detailed information. Nevertheless, the data suggest the nature of relative changes and enable one to assess the significance of the different sub sectors, in terms of value added.

Heavy dependence on imported raw materials is one of the striking features of the manufacturing sector. Approximately 90 percent of the inputs for the manufacturing sector had been imported in 1985. The details of the sub sectoral dependence on imported raw materials is shown in Table 2. The table indicates that the wood products and food, beverages and tobacco sub-sectors were the last dependent on imported raw materials. On the other hand the basic metals, chemicals, rubber and plastics and textiles and garments sub sectors relied almost entirely on imported inputs.

Investment

Industrial development in the medium term is expected to depend largely on the ability of government to implement the provisions of the Industrial Policy Statement issued in February 1987. Investment approvals, however, have continued to mount. Between 1978 and 1987 the GCEC had approved 253 manufacturing ventures, of which 138 had contracted for investments amounting to about Rs 87 million. Between 1978 and 1987 the FIAC approved 528 projects and the LIAC 7,496 projects. Despite the continuing civil disturbances in

Value Added as a Percentage of Industrial Production

Industry Category	1972	1977	1979	1981	1983	1984	1985	1986
1. Food, Beverages & Tobacco	46	42	50	42	46	49	59	56
2. Textile, Wearing apparel & leather products	55	39	20	17	15	18	24	26
3. Wood & Wood products	58	61	49	54	54	56	59	62
4. Paper & Paper products	35	44	49	42	43	44	47	49
5. Chemical, Petroleum, Coal & Plastic products	55	31	15	17	14	15	11	24
6. Non-Metallic Mineral products	56	61	62	47	59	52	57	54
7. Basic Metal products	20	22	24	19	27	11	53	13
8. Fabricated Metal products	36	36	48	52	60	65	66	64
Overall Industries	38	38	32	27	26	31	34	39

Source: Central Bank of Sri Lanka; and the Ministry of Finance and Planning.

some parts of the country, the investment momentum in the industrial sector continued in 1987, if approvals are taken as an indicator. The Local Investment Advisory Committees (LIACs) approved 364 projects in 1987, with a total envisaged investment of Rs 530 million and an employment potential of approximately 14,500 persons. Similarly, the Foreign Investment Advisory Committee (FIAC) approved 41 industrial projects during the year, with an envisaged capital investment of Rs 672 million and estimated employment of around 5,000 persons. The number of projects approved by the LIAC and FIAC in 1986 were 321 and 41 respectively. The Greater Colombo Economic Commission (GCEC) too approved 31 projects in 1987, compared with 10 projects in 1986. The total investment in these projects is estimated at Rs 812 million, with an employment potential of 8,970 persons, according to the Central Bank.

Economic Overheads And Social Infrastructure

Three major infrastructure facilities: transport; telecommunications; and power and energy are covered by economic overheads. All these facilities, with the exception of road passenger and goods transport, are public sector responsibilities. Public capital expenditure on these infrastructure facilities has increased sharply after 1977, from Rs 681 million in 1978

to Rs 7,837 million in 1988. Unlike economic infrastructure, which gained considerably from foreign assistance, investment in social infrastructure such as education, health and social welfare has depended largely on scarce domestic resources, over which there are a multiplicity of claims. These social infrastructure facilities have therefore suffered from an inadequacy of financial resources for expanding health, education and welfare services to meet the requirements of a growing population. For instance, total budgetary expenditure on education as a percentage of GDP in 1978-86 averaged about 2.4 percent compared to 3.4 percent in 1970-77.

The period after 1977 witnessed an upsurge in local and foreign investments in the manufacturing sector. The amount of local and foreign investment that the industrial sector attracted after 1977 was unparalleled in the history of Sri Lankan industrialisation. The highest number of approvals was recorded in the initial two years. This was because soon after the introduction of the liberalisation policies entrepreneurs rushed to invest in the manufacturing sector to cater to a starved market. The substantial reductions in investment proposals since 1980 and the low level of implementation of the local industrial projects suggests that the relative prices in the economy have not been in their favour. A which covered 3,548 new in-

dustrial projects by the Ministry of Industries during January, 1978 August, 1985 reveals that only 30 percent were in production and 10 percent were to commence production shortly. Projects that were abandoned (or not started production) amounted to 60 percent.

A Central Bank economist commenting on the pattern of local industrialisation states that the Sri Lankan experience demonstrates that increased reliance on market forces as well as "over protection" have obstructed the development of the Sri Lankan industrial sector. The South Korean experience also proves that a proper blend of market and non-market forces would lead to a sound industrial development. Korea's pragmatism is combined with a considerable degree of flexibility between market forces and state intervention. A package of policy incentives is therefore required to reduce or eliminate the effects of exposing export oriented industries to excessive international competition and over protecting import substituting industries in a pragmatic manner. Such a policy package can generate dynamic benefits which exceed its static costs with a minimum level of conflict.

C.G.

Dependence on Imported Raw Materials in the Manufacturing Sector, 1985

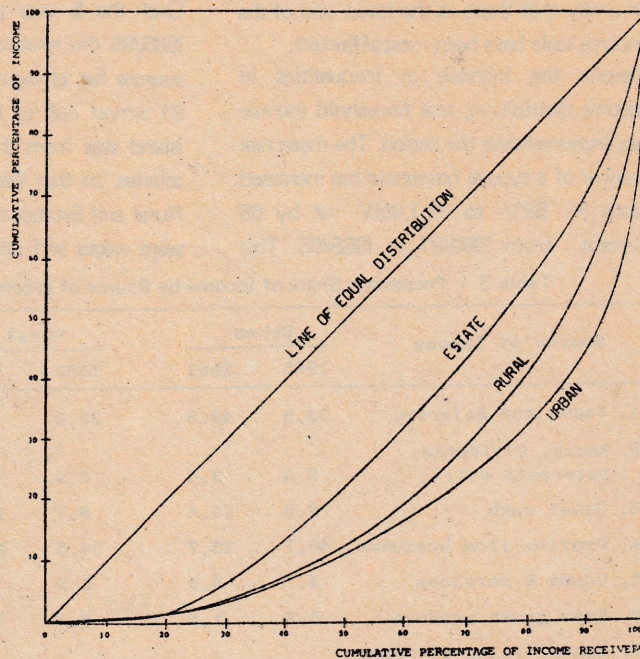
Category	Proportion of Total Raw Materials Sourced from Abroad, 1985
	(%)
1. Food, Beverages & Tobacco	20
2. Textiles and garments	97
3. Wood products	10
4. Paper products	60
5. Chemicals, Rubber and Plastics	98
6. Non-Metallic Minerals	53
7. Basic Metals	100
8. Metal products	59
9. Others	n.a.
Total	89

INCOME DISTRIBUTION

Sri Lanka stands out among developing countries for its achievements in social and human developments. This performance, however, has not been equalled by its achievements in the economic sphere. Lack of adequate revenue sources, foreign exchange constraints, increasing necessity for welfare services and a growing population continued to put pressure on the government budget. Although social policies in Sri Lanka have contributed to human capital development, the corresponding growth in the physical capital formation necessary for enhancing the productive and labour capacities of the country has been lacking. Despite the fact that in recent years growth rates had shown general increases (with the exception of 1987) still the living standards among poorer sections of the population and vulnerable groups have not moved up proportionately. Increases in prices and living costs, caused by the depreciation of the currency and exchange rate and changes

As the diagram indicates the growing disparities between poor and rich widened most in the urban sector, where the curve has dipped most; while in the estate sector the changes were comparatively negligible.

CHART 2 - LORENZ CURVE FOR INCOME RECEIVERS BY SECTORS - 1985/86



income inequalities has continued upto 1985/86.

During the five year period between 1981/85 the Gini Coefficient value has increased

increased by 38 percent. The share of the total household income received by the richest income decile has increased by 42 percent over the 5 year period while the shares of the total household income received by the other groups has shown a corresponding decline. The lowest three per capita income deciles have been affected by the highest declines ranging from 31 percent to 23 percent. The next highest decline, ranging from 22 percent to 20 percent, was recorded in the 4th, 5th and 6th income deciles; while lowest declines ranging from 11 percent to 2 percent was recorded in the next three per capita income deciles. This pattern shows that over

Table 1 - Percentage Distribution of Total Household Income by Per Capita Income Deciles - 1981 & 1985 - All Island

Year	Decile									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1985	2.4	3.8	4.5	5.3	6.2	6.9	8.3	10.0	13.5	38.8
1981	3.5	5.3	5.9	6.7	8.0	8.6	9.4	10.9	13.8	27.4

in the food subsidy scheme, had their effects on income levels and prices of essential commodities particularly food items.

Over the last 5 year period overall production and the Gross National Production have been increasing though at varying rates. Together with this situation, however, inequalities in income have also been increasing over this period. For instance, according to the consumer Finance and Socio Economic Surveys conducted by the Central Bank of Sri Lanka, an increase in income inequalities can be observed from 1973 to 1981/82. According to the Labour Force and Socio Economic Surveys conducted by the Department of Census and Statistics, this trend of increasing

from 0.42 to 0.58 In otherwords, during this period income inequalities has

Table 2 - Per Capita Income by Per Capita Income Deciles - 1981 & 1985 - All Island (Rs. per month)

Year	Deciles									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1985 (At current prices)	84.7	140.9	179.1	216.1	258.1	308.5	376.2	479.8	606.7	1999.7
1985 (At 1981 constant prices)	56.6	94.3	119.8	144.6	172.7	206.4	251.7	321.0	442.0	1337.8
1981 (At current prices)	54.9	82.2	99.5	118.3	139.4	162.9	191.9	234.8	338.2	646.4
Percentage increase in real per capita income (From 81 to 85)	3.1	14.7	20.4	22.2	23.9	26.7	31.2	36.7	43.0	107.0

the period income disparities have increased in a way that those at the lower end of the income scale have been most affected.

Despite the increase in inequalities in income distribution, real household income has increased over the period. The mean real income of a typical household has increased from Rs. 881/- to Rs.1,450/- or by 65 percent from 1980/81 to 1985/86. This

10 percent in the country.

Over the 5 year period from 1980/81 to 1985/86 the relative importance of income sources has changed considerably. In 1980/81 almost half of the earned income in the island was from the sources of wages and salaries. In that year in each sector (Urban, Rural and Estate), the major income sources were wages and salaries. In 1985/86 impor-

since a large majority of income earners in this sector are wage and salary earners. Inequalities within major income sources has increased over the 5 year period and this has contributed to increases in inequalities in overall income distribution. Inequalities increased particularly within two major income sources, namely profits from business and wages and salaries which contributed a large share of total earned income in both years (74 percent in 1980 and 62 percent in 1985). This has become a major influence in deterioration in overall income distribution.

The mean value of real per capita income in the island had increased by 53 percent from 1980/81 to 1985/86. In addition, overall increases were apparent in each sector too, but at varying rates. The highest rates of increases in per capita income have been recorded in the urban sector while the next such increase has been in the estate sector. The lowest increases in per capita income have been in the rural sector. Real per capita income increased at the highest rate in the urban sector mainly due to the expanding business and trading activities.

Disparities between poor and rich (as indicated by the mean as a proportion of median) are highest in the urban sector,* followed by the rural sector; while the lowest disparities are in the estate sector.

Table 3 - Percentage Share of Income by Source of Income - Sectors.

Source of Income	Urban		Rural		Estate	
	1985	1981	1985	1981	1985	1981
1. Wages and Salaries	33.3	49.8	35.2	41.5	78.6	84.9
2. Rents, Dividends, Interests etc.	2.8	3.4	0.9	0.7	0.4	1.0
3. Other cash	9.8	11.4	8.7	11.4	1.9	4.2
4. Profits from business	40.7	23.7	34.5	29.0	4.2	4.0
5. Goods & services	4.7	2.0	5.2	1.4	10.1	4.2
6. Home grown produce	0.9	1.5	8.1	11.5	3.6	3.3
7. Rental value of owner occupied house	6.7	8.0	4.5	4.4	0.2	0.2
8. Food stamps	1.0	n.a	3.4	n.a	1.0	n.a

increase was mainly due to two reasons; increase in the number of income receivers in a household (by 31 percent) and increase in the real income of income receivers (by 25 percent) over the corresponding period.

As far as the per capita income deciles is concerned it can be seen that real per capita income has increased in each level of income group (income deciles) over the period. However, as a result of increased income inequalities the increase of income received by the richest decile has been considerably high. For instance, the increasing rate of real income over the period was 3.1 percent in the lowest income decile and 43.0 percent in 9th income decile while it was 107.0 percent in the richest income decile. This analysis concludes that although there was an overall increase in earned income over the period, due to the increased inequalities a very large share of increased income has concentrated more among the richer income groups, particularly in the hands of richest

*Real income has been estimated deflating current income by Colombo Consumer Price Index.

tance of wages and salaries had decreased, while the importance of profits from business had increased. In 1985/86 the contribution from profits and wages and salaries to the total income has become more or less equal (35 and 37 percent respectively). In 1985/86 in the urban sector profits from business was the major income source; while in the rural sector it

Table 4 - Gini Ratio (G) and Percentage Share of Income (%) for the Major Sources of Household Income - All Island.

Source	1985		1981	
	G	%	G	%
1. Wages and Salaries	0.31	36.7	0.25	49.8
2. Other Cash	0.55	8.7	0.19	11.5
3. Profits from Business	0.62	35.2	0.47	23.7
4. Rental value of Owner Occupied House	0.42	5.1	0.39	8.0

was equal to income from wages and salaries; and in the estate sector wages and salaries still remained a major income source. These changes are mainly, a result of increasing business activities in the country particularly in the Urban sector. However, the estate sector wages and salaries remained the major income source,

This disparity has increased over the 5 year period in all three sectors.

The main reason for the lowest disparity and lowest increase of disparity in the estate sector is that a very large majority of income earners in this sector are estate labourers who have earned wages and salaries at a very similar rate over the period.

H.L.

CAPITAL FORMATION

It is apparent that a deceleration in economic activities occurred after 1983. The average overall growth of the economy between 1983 and 1987 was 4.1 percent, as against a planned growth of 5.5 percent for the period. One of the more serious outcomes of this trend in growth was the weakening of the employment situation. Investment during the period fell far short of the level required in order to create jobs at a rate necessary to make a dent on rapidly worsening unemployment problems. With an estimated 159,000 new entrants into the labour force each year, accelerated job creation was no doubt a key issue in economic growth. The 1987 data shows that over 86 percent of the Gross Domestic Product was used for consumption (private and public). Thus Domestic Savings amounted to about 14 percent in the 5 year period. External inflows amounting to about 11 percent of GDP enabled the country to maintain an average investment/GDP ratio of 25 percent. If the National Savings concept (which includes net private transfers from abroad) is used, financing of investment appears as being 16 percent national resources against 9 percent foreign resources.

Most indicators, however, reveal that investment activities have been passing through a declining phase since 1983. However, there is evidence that a certain amount of slowing down started even before the ethnic crisis erupted in July, 1983, though the continuation of civil strife exacerbated this trend. Private investment, particularly investment in tourism received a serious setback. In this situation the public investment programme, albeit drastic reductions helped to maintain some momentum in economic activity.

Capital Expenditure, net of Repayments, of the Central Government has varied between 13 to 15 percent of GDP in the period 1983 - 1987. The composition of this aggregate itself underwent a significant change in the 5 year period. Allocations for agriculture and irrigation fell sharply

from about 46 percent to about 30 percent, while that for economic and social overheads increased from 41 to 63 percent. Allocations for industries remained at a low level of 1 percent.

The composition of total gross domestic fixed capital formation (GDFCF) by broad sectors and by group of capital assets in the period 1982 - 1986, according to National Income data are shown in the following table.

Average Composition of GDFCF 1982 - 1986

	percentages
1. By broad sector	
Agriculture	16.3
Mining and Manufacturing	14.5
Construction and Services	69.2
2. By group of capital asset	
Construction	46.8
Land	12.0
Machinery and Equipment	41.2
TOTAL	100.0

*Based on Department of Census and Statistics data.

MONETARY DEVELOPMENTS

The introduction of the new economic policies in November 1987 led to much

higher rates of investment and economic growth in subsequent years. There was increasing pressure however, on the resource situation, while the resurgence in economic activities created conditions of excess demand in the economy the domestic savings were inadequate to meet the demand and the new investment had to be financed mainly through foreign savings and drawing down of external resources to a lesser extent. Monetary policies introduced during the post 1977 period had to attempt achieving a balance between growth and stability in the economy. The monetary authorities often resorted to administrative measures to achieve specific monetary targets.

Resources and Utilization

The Planning Division of the Ministry of Finance had noted that considerable uncertainty characterized the resource position of the country at the present time. This is caused not only by the highly variable external factors but also by the unsettled conditions within the country. The major

Total Resources and their Utilization

(Rs. Billion)

	1987	1988	1989	1992	Total 1988-92
1. Total Resources	216.9	244.8	270.7	352	1487.3
(a) GDP at market prices	(110)	(110)	(109)	(106)	(408)
(b) Net Imports of goods and non factor services	20.2	21.8	21.3	21	107.2
2. Total Utilization	216.9	244.8	270.7	352	1487.3
(a) Consumption	171.5	193.9	214	276	1174.2
of which	(87)	(87)	(86)	(83)	(85)
- Private	151.8	173.7	192.5	247.6	1054.6
of which	(77)	(78)	(77)	(75)	(76)
- Public	19.7	20.2	21.5	28.4	119.6
of which	(10)	(9)	(9)	(9)	(9)
(b) Investment	45.4	50.9	56.7	76	313.1
of which	(23)	(23)	(23)	(23)	(23)
- Private	20	22.6	23.7	39.6	148.1
of which	(10)	(10)	(10)	(12)	(11)
- Public	25.4	28.3	33	36.4	165
of which	(13)	(13)	(13)	(11)	(12)
3. Financing of Investment					
(a) National savings	30	33.9	39.8	58.8	227
of which	(15)	(15)	(16)	(18)	(16)
(b) Foreign Savings	15.4	17	16.9	17.2	86.1
of which	(8)	(8)	(7)	(5)	(6)

Note 1: Figures in brackets indicate percentages of GDP

long term problem appears to be one of inadequate domestic savings. The attempt to maintain a reasonable rate of growth of incomes and employment in the past decade brought positive and encouraging results. Yet, it has not moved the country much closer to the goal of self sustained growth.

Employment opportunities have not been growing at rates adequate to absorb the growing labour force and the dependence of domestic investment on foreign savings has not diminished.

The Public Investment Programme 1988-1992 has taken note of this problem and suggested remedies on the following lines: "in short term, there has been the ever present tendency to slide back to a high inflation and acute external imbalance situation. Since there appears to be a trade off between accelerated growth and economic stability, the most important need now is to find a workable reconciliation of the long term with the short term development objectives. Of particular importance is the need to maintain an overall growth rate high enough to make an appreciable reduction in the rate of unemployment. The programme presented below is indicative of such an approach". The first three years 1988 - 1990 follow closely the targets set for the Policy Framework.

The more important features of the macro-economic framework 1988 - 1992 have been summarised as follows:

1. The Gross Domestic Products (GDP) grows at an average rate of 5.3 percent per annum. This implies a per capita income growth of about 3.6 percent.
2. The Gross Domestic Capital Formation (GDCF) remains at 22.6 percent of GDP (average) and the National savings ratio improves to about 17.8 percent by 1992. This implies a certain reduction in the dependence on foreign savings.
3. The share of private investment in the GDCG increases to about 52 percent

from the present (1988) level of 44 percent.

4. Public Consumption as a percentage of GDP declines to about 9 and remains at that level throughout the period. A positive marginal savings ratio is achieved mainly by a reduction in Private Consumption.
5. As a percentage of GDP, the overall deficit in the Budget declines from 11 to about 8 in 1992. A steady decline in government capital expenditure/GDP ratio is mainly responsible for this decline.

PRICE STABILITY

The price movements (of goods and services) reflect internal stability of the economy. Amongst the principal measures of price movements used in Sri Lanka are (1) the Colombo Consumer Price Index (CCPI), (2) the Wholesale Price Index (WPI), (3) the GNP deflator. The CCPI which is the most cogent of them all (1952 = 100) reflects the cost of living implications of price movements. During the first five years of the decade under reference (1978-1987), the inflationary trends measured in terms of the CCPI showed an increase of 17.16 percent per annum which is regarded as unprecedented in the post independent history of Sri Lanka. However, during the second half of this period, that is 1983-1987, the price levels showed a stabilizing trend and the average increase dropped to a rate of 9.02 per annum. Much of this drop could be attributed to the meagre 1.4 per cent CCPI increase recorded in the year 1985. However, during the last two quarters of 1987 the price levels accelerated showing a new momentum perhaps giving warning signals of the possible trends in the period ahead.

The price increases as depicted by the WPI and the GNP deflator provide slightly different figures, although the general patterns reconcile with that of

the CCPI trends. It should be noted that these three indices measure different facets by inflationary movements and therefore accompany their own limitations.

Some of the macro economic variables affecting the degree of price instability during this period have been the deficit financing, budgetary allocations to sectors that are non-productive (eg. defence) increase in money supply, exchange rate depreciations (discussed) below), production losses due to ethnic disturbances, floods, drought etc. and elimination of consumer subsidies. During the 1978-82 period the increase in money supply, the high interest rates, exchange rate depreciations and investment on long gestation projects have been the main contributory causes for the high rate of inflation. On the other hand during the past five year period (1983-87) the most important factors behind the inflationary trends had been the supply shortages of consumer goods, increasing defence expenditure and related deficit financing, and the increases in money supply. However, it has always been a combination of causes that has affected the price movements of goods and services, and therefore separating specific causes of inflation appears a rather difficult if not misleading exercise.

A sector-wise classification of movements in price levels shows the domestic and consumer sectors to be the most important purveyors of increasing price levels. In short, much of the inflationary pressures seem to have originated from domestic sources which contrasted with the type of inflation experienced in the mid 1970's during which period the inflation was mainly imported or originated outside Sri Lanka. The acceleration of inflationary trends during the latter half of 1987 has been mainly due to the production drops emanating from drought and unsettled political conditions in some parts of the country.

The impact of these price move-

ments have been felt seriously on the purchasing power of currency notes, as reflected by the increased demand for currency notes in the higher denominations of Rs 500 to Rs 1,000. Accordingly, the share of these currency notes in the total currency issue increased by 61 percent in 1987.

Exchange Rate Movements

The exchange rate movements reflect the external stability of the local currency, through which the purchasing power of the local currency as against the currencies of the country's major trading partners is compared. Consequent on the economic reforms introduced in 1977 there was a (i) unification of the exchange rate at an initial level of Rs 16 per 1 US Dollar (ii) liberalization of invisible payments abroad, (iii) abolition of licensing requirements and other exchange control systems, (iv) removal of trade monopolies (the Sri Lankan rupee was officially depreciated by 46% overnight, though this note does not deal with this initial devaluation). During the past decade (1978-1987) the Sri Lanka rupee has depreciated against all the major currencies of Sri Lanka's principal trading partners. The rate of depreciation has been comparably low during the first five years (1978-82) in all currencies and in the case of French Franc the Sri Lanka rupee recorded an appreciation of 18.07 during this period. However, during the second five year period (1983-87) the rate of depreciation seemed to have accelerated indicating a sharp decline of the purchasing power of the rupee against the Deutsche Mark, French Franc and Yen. As a result, the cumulative change of the exchange rates during the 10 year period have shown a sharp depreciation in the rupee against the Yen (67%) Deutsche Mark (55%) and SDR (51.7%). The rate of depreciation of Sri Lankan rupee has been very significant in the year 1987 in which year the rupee depreciated by 26.27% against the Sterling Pound, and 28 percent against the Yen which seemed to be unprecedented during the last ten year period.

The effects of these exchange rate movements on the Sri Lankan external payments and the domestic price movements depend to a greater extent on the nature as well as the intensity of foreign trade using different currencies. The concept of Effective Exchange Rate (EER), deals with this aspect of external payments position together with movements in the cross exchange rates among key currencies of major trading partners. The nominal effective exchange rate (NEER) which is weighted against trade flows as well as the real effective exchange rate which is adjusted according to inflationary trends in the respective countries has shown a sizeable depreciation during the past few years.

As a result of the recent setback in oil prices most of the oil producing middle eastern countries were facing serious constraints in their economies and in implementing some of the larger projects they planned. The construction boom started in late 1970's was clearly tapering off, with substantial cuts being introduced in their budgets. The demand for unskilled migrant workers was therefore rapidly dwindling while prospects for skilled workers are also being threatened in some states by the local labour force. The bulk of the workers who migrated to these Middle East countries from most South Asian States, including Sri Lanka, were unskilled manual workers and many of them were no longer needed and were compelled to return to their own countries. This adverse trend was expected to affect the already vulnerable economies of these Asian countries. In Sri Lanka's case the drop in remittances has not been as drastic as it was expected to be.

Balance of Payments

Despite the apparent drop in private remittances and the drastic fall in receipts from tourism and most exports, and also increasing interest and service charges on foreign loans, a favourable trend is observed in the balance of payments from around 1982.

This trend is the continuous reduction of the current account deficit, as seen in the table below.

The current account deficit as a ratio of GDP reached a peak of 19.8 percent in 1980. This ratio came down to 15.4 percent in 1982 and fell gradually to 7.9 percent by 1987. There was an unusually large drop in 1984 due to the high prices fetched by Sri Lanka's traditional exports. Also, the slowing down in the flow of imports and the upward shift in private transfers contributed to this improvement. On the average, the current account deficit as a ratio of GDP was around 8 percent per annum in 1984-1987, as against 15 percent in 1980-1983.

Export earnings recorded a steady increase during the 1978-1984 period; with export earnings rising (in SDR terms) at an average annual compound rate of 14 percent over these years. But this trend was reversed from 1985 mainly due to the decline in traditional export prices. In 1987 the total value of exports was only SDR 1061 million in comparison with the level of SDR 1432 million in 1984. Meanwhile, import payments which reached a peak in 1985 was kept at a low level in 1986 and 1987. This was partly due to the completion of many development projects, in particular the Mahaweli headworks programme which required a large volume of imported capital goods. The downward trend in foreign prices with respect to some major commodity imports after 1983, also helped to reduce import payments in subsequent years. A metric ton of rice which cost SDR 204 in 1983 was down to SDR 149 in 1987; while a metric ton of sugar was down from SDR 251 in 1983 to SDR 167 in 1987. In this same period wheat prices dropped from SDR 161 per kg to SDR 97 per kg and crude oil from SDR 28.4 per barrel to SDR 14.2 per barrel.

The decline in import payments also contributed substantially to ease

Item	SDR Million		
	1985	1986(a)	1987(b)
1. Merchandise	711	649	531
Exports	1,296	1,029	1,035
Imports	2,037	1,678	1,605
2. Services	133	109	111
Receipts	323	323	297
Payments	456	432	411
3. Goods and Services (1+2)	844	758	615
4. Transfers (Net)	434	395	379
Private (Net)	262	212	210
Official (Net)	172	153	139
5. Current Account Balance (3+4)	410	361	266

the country's balance of payments difficulties. Total imports which amounted to SDR 753 million in 1978 went up to SDR 1811 million by 1983. Payments reached a peak of SDR 1990 million by 1985 and kept coming down thereafter. In 1986 total imports were valued at SDR 1659 million and in 1987 at SDR 1584 million.

Value of consumer intermediate and investment goods imports have all declined progressively after 1985.

A notable weakness was in the services account of the balance of payments which continued to be in deficit throughout the period 1982-1987, as seen in the table. The deficit expanded from SDR 56 million in 1983 to SDR 114 million in 1987. A major factor responsible for this adverse trend was the decline in tourist earnings. These earnings amounted to only SDR 48 million in 1987 as against a peak level of SDR 117 million in 1982. This resulted in making net earnings from travel negative in 1987 for the first time since 1969.

Net outpayments on interest with respect to foreign loans also aggravated the imbalance in the services account, as seen in this table. The increasingly large budgetary capital expenditures of the 1980's continued to be financed through foreign resources. This situation necessitated the raising of foreign borrowings throughout this period, and the country had also to face the inevitable increase in service payments on these loans. A large part of the budgetary funding from foreign sources was obtained on a concessionary basis, but certain public enterprises such as Air Lanka and the Shipping Corporation raised commercial borrowings to

meet their capital requirements. Interest payments on all such commercial loans have accounted for a considerable proportion of the total interest payments in recent years. Meanwhile the inflow of private transfers also declined gradually after reaching a peak in 1984.

FOREIGN DEBT

Foreign funding has been a major source of financing Sri Lanka's Current

economists, however, maintain that although foreign capital has assisted developing countries in many ways many of these countries have run into major debt service problems; although in Sri Lanka's case this problem has not been as severe as in some other developing countries.

The rapid increase in the debt service ratios in recent years suggested a need for specific action in economic

External Debt Service Payments 1983 - 1987

Item	SDR Million				
	1983	1984	1985	1986 (a)	1987 (b)
1. Debt Service Payments	287.1	308.0	340.6	356.7	391.1
1.1 Amortisation	126.5	132.3	165.5	213.4	256.1
(i) To IMF	46.2	22.7	35.8	58.5	69.4
(ii) To Others	80.3	109.6	129.7	154.9	185.7
1.2 Interest Payments	160.6	175.7	175.1	143.3	135.0
(i) To IMF	30.8	31.4	27.1	21.3	18.3
(ii) To Others	129.8	144.3	148.0	122.0	115.7
2. Earnings from Merchandise Exports and Services	1,312.9	1,756.1	1,619.0	1,352.6	1,372.0
3. Receipts from Merchandise Exports, Services and Private Transfers	1,588.0	2,049.6	1,906.6	1,622.4	1,640.0
4. Debt Service Ratios(c)					
4.1 As a percentage of 2 above					
(i) Overall Ratio	21.9	17.5	21.0	26.4	28.5
(ii) Excluding IMF Transactions	16.0	14.5	17.2	20.5	22.1
4.2 As a percentage of 3 above					
(i) Overall Ratio	18.1	15.0	17.9	22.0	23.8
(ii) Excluding IMF Transactions	13.2	12.4	14.6	17.1	18.5

Source: Central Bank of Sri Lanka.

Account deficits over the last decade. The overall foreign debt has increased considerably over this period while total debt service payments have more than doubled over the last decade. The debt service ratio which is defined as the ratio of the service payments to total exports of goods and services had reached about 28 percent in 1987. One interpretation is that the funding from foreign sources has offered strong support for Sri Lanka's development programme and consumer requirements over the last 10 years. Moreover, much of these borrowings have been at considerably lower interest rates and over a long term repayment period. Some

policy and development programmes. The debt service ratio as a percentage of GNP had moved up over the five year period, from 2.0 percent in 1961/1965 to 5.5 percent in 1971/75 and 8.0 percent in 1981/85.

It reached about 28 percent in 1987. This upward trend in the country's Debt Service/GNP ratio has caused fears that its debt servicing could become a severe problem for the government budget and the balance of payments situation, particularly if the overall economy is unable to generate the required resources to meet imports and these debt service commitments.

U.V. & W.S.

SRI LANKA'S ECONOMY AND THE EXTERNAL ENVIRONMENT

A Discussion —
Gamani Corea
with Susantha
Goonetilake

S.G. Dr. Corea, this conversation will range over some issues germane to Sri Lanka as well as to the global environment of Sri Lanka's economy. Your opinions are valuable because you were involved in planning exercises in Sri Lanka, as well as later serving as the executive head of UNCTAD. First a broad question. You were planning for Sri Lanka's economy in the 1950's, now nearly 30 years later, how do you see Sri Lanka's economy in the light of the external environment?

G.C. The first comment I wish to make is that even in the 50's, the impact of the external environment on Sri Lanka's economy and on economic plans was most important. We had, even at that time situations where the prices fetched by our primary products such as tea, rubber and coconut were weak. After the Korean Boom, there was a short fall in prices and ever since then there has been a tremendous sluggishness in the markets for each of those commodities.

There were ups and downs during that period. You will recollect that in the mid 60's we introduced partial liberalisation of the economy, through the FEEC scheme. Shortly after there was a deterioration in our terms of trade and this made it necessary to increase the FEEC rate. This was a set back and was contrary to the original assumptions on which the scheme was designed. So even at that time, there was that basic weakness.

Since then, there have been changes in the external environment but not changes for the better. The adverse trends in the primary commodity market has continued in the recent period. Since the 80's, the prices of commodities as a whole, not just tea, rubber and coconut, dropped to levels comparable in real terms to what were attained in the depression of the 1930s. On top of that, there has been the change in oil prices which further aggravated the deterioration in our terms of trade. In this period some developing countries were able to export manufactured products to the markets of the North. But we were not in a position to take advantage of that; so for us the export of manufactures did not play the role they played in some of the Newly Industrialising Countries (NICS) as a replacement or substitute for primary products.

We have of course had some opportunities. The Middle East labour market proved to be a big outlet for

our labour and a source of good support to our balance of payments. That is one facet of the external environment which is different to what prevailed earlier. There has been also a growing increase in our trade with other developing countries. More and more of our tea, and to some extent of our rubber, has been going to the developing countries.

Other changes have also taken place. The role of the donor groups has increased. The IMF, the World Bank and the other multilateral lending institutions have come to play a much bigger role in providing resources to the economy. The Aid Ceylon Group, now the Aid Sri Lanka Consortium, which was set up in the mid 60's has come to stay and the external resources made available to Sri Lanka by bilateral donors have certainly increased. In those days, we did not have too much recourse to commercial banks. I think that has generally remained the case today although some of our Corporations have been borrowing much more. So overall the external environment is still one which is not conducive to stability and to long term planning in Sri Lanka. It has always been a constraint, it has always been a source of uncertainty and of course, in the recent period, it has been in many ways a drag on development, not only in Sri Lanka, but in most other developing countries as well.

S.G. You mentioned the 'NICS', couldn't we have followed their strategy in the 50's and 60's. In spite of turbulent conditions in the environment some of them have continued to adapt well!

G.C. Well, if we had got into the process of exporting manufactured goods at that time we would have found world market conditions more accommodating than now. But, of course, we did not have the conditions then to make such a performance possible. Our industrial base was very small, our infrastructure was also very limited and we did not have the political regimes that made it possible for countries like Hong Kong and Singapore to adopt absolutely open economic stances. But certainly the prospect for entering into world trade at that time in the field of manufactures was better than it is now because the protectionist trend in the West was then not so strong. Today protectionism is rampant as we see in the area of textiles and so on. Many people are advocating that developing countries follow the path of the NICS. But they have not met the point that if all these countries attempt to do so the markets capable of absorbing their products would not be there.

Somebody said, very rightly, that those who advocate open economies should, like the manufacturers of lifts; say, how many people can go up at the same time. If you overcrowd the lift it will not function. So, in a sense and as a theoretical abstraction, you can say there was a missed opportunity. But on the otherhand, I doubt very much that conditions here were right for us to take advantage of the opportunity in exactly the way that some of the countries with exceptionally favourable circumstances were able to do.

S.G. You used the word "open economy". Now this word has been used in a variety of different usages, often very loosely. In one sense it is used as a contrast to autarchial development like that which happened to some extent in large countries such as the Soviet Union or India. 'Open economy' is also used sometimes loosely to imply private ownership. Forgetting for the moment the question of ownership and given the small size of Sri Lanka, what do you think would have been the best development path we could have taken? Let us take purely economic growth as an indicator.

G.C. As you said that word 'open economy' is being used in many senses. If one tries to envisage a Sri Lanka which is self-sufficient, as you said in a sense autarchical, I don't think that is a practical option. We are too small for that, we simply do not have the capacity to produce within our own territory the vast and varied range of products needed for the development and modernisation of our society.

I do not think that any small country has a choice about that. It has to enter into world trade in order to get the equipment it needs for its own development machinery, raw materials, capital goods and so on. I see that in recent years even big countries are increasingly feeling the impact of world trade on their economies. The United States, for example, is today much more dependent on world trade; I think to the extent of about 12% or 13% of its GDP as against 4% or 5% in the 50s. I think this trend is true also of the Soviet Union and China. So, in a sense the world is getting increasingly integrated and inter-dependent and it is difficult for any country to opt out of that situation.

Now there is another sense in which the word "open economy" is used: that is in the sense of liberalisation as against a controlled regime, particularly in the area of imports. Any country, even if it has to procure its imports from outside, can do so by allowing market forces to decide what imports should come in or by allowing this to be decided within a certain frame of state policy. This is a different issue. I think we can admit

the need for imports, exports, and world trade. But it does not follow from that, that the pattern of imports should be totally unregulated. This is a choice that we have. I think here, as with all developing countries, the state has to play a role in encouraging those imports which are necessary for development and discouraging those that are less necessary. This need nor necessarily be done by permits and controls. It can be done by those that are less necessary. This need not necessarily be done by permits and controls. It can be done by import duties and so on. So I do not think that an open economy necessarily means an absolute free-for-all. The pattern of imports reflected by market forces alone will only reflect the prevailing distribution of incomes. In poor countries the latter has often to be modified by state policy.

S.G. When UNCTAD started in the mid 60's the slogan was "trade not aid". Implicit was certain theorising by Latin Americans which resurfaced a Leninist view of imperialism in the world. This loosely implied that the periphery was being exploited and set out a confrontation model for North-South relations. Today when one is getting into an increasing integration of the world, one gets more and more incorporated into a World system under the present rules. The leverage possible for Third World countries to influence world events seem to be getting less and less. Would you agree?

G.C. Yes, but not about leverage. But I would like to first comment on your observation regarding the so called UNCTAD slogan of "trade not aid". When UNCTAD I was being prepared it addressed itself to the existence of a "trade gap". That is, the import needs of developing countries were growing faster than their exports and there was, therefore, a gap which had to be bridged if their growth objectives were to be achieved. Now UNCTAD said it was better to bridge this gap through trade, by increased export earnings. But to the extent that the developed countries were unwilling to bring about changes so that trade alone could bridge the gap, UNCTAD argued the need for residual aid to do this. Theoretically it did not matter whether the gap was filled by aid or trade, but the preference was to fill it by trade.

At that stage there was an argument the developed countries were making, that measures in the area of trade were too difficult because they involved structural changes, changes in trading mechanisms and so on and that it might be easier to provide aid. That is why they were exhorted to give more aid. Of course, they did not do either. In fact they never accepted the obligation to bridge the trade gap. But, all the same,

although the UNCTAD philosophy was trade and aid, trade was preferred to aid.

Then on the philosophy of integration in the period before Prebisch came to UNCTAD, he was very much identified with the attempt to industrialise Latin American countries through import substitution. And Latin America did lay a certain basis for its industrialisation on the foundation of import substitution. But already by the early 60's it was beginning to feel the constraints of this process. Part of the reason was that import substitution proved to be inefficient, part was that national markets were found to be too limited. To some extent Prebisch sought relief in regional integration to widen markets through co-operation among neighbouring countries. But even that did not proceed very far. By the time he came to UNCTAD, his argument was really to create a better global framework for trade that would meet the needs of the developing countries.

You remember Prebisch's thesis at UNCTAD. The title of his report was "Towards a new trade policy for development" in which he urged changes in the framework of world trade which would contribute to greater resources flowing to the developing countries. These changes were to be in three kinds - mechanisms to strengthen commodity markets through commodity agreements; schemes for preferential access for the newly emerging exports of manufactures from developing countries and increasing resource flows through concessional aid.

So, even at that stage, there was this idea of creating a global environment more conducive to the development process, rather than an alternative in the way of more inward looking policies or even more integration among the developing countries. The idea of integration among developing countries as a group came somewhat later. We should remember that at that time the world economy was growing quite fast. In the 50s and 60s world trade was increasing at historically unprecedented levels and the demand of the developing countries was to get on to that bandwagon of expansion in the world economy. There were appeals to developed countries to help in this by making the trading framework more favourable - by preferential treatment etc. Today of course there is no bandwagon of world economic growth and the situation is drastically different. But, the earlier confrontation was not so much in rejecting the international economy, but in changing its mechanisms and its systems so as to enable the developing countries to play a bigger part in it.

S.G. Part of the UNCTAD agenda and several Latin American initiatives in general were subsumed under the slogan dependencia. I can remember a paper by Prebisch in the mid 70's where he looks back at his experiences and the beginning of the UNCTAD philosophy. He recalled how UNCTAD thinking came out of a feeling that it was necessary for Latin Americans to not only break the shackles imposed by the global economy but also by existing forms of dependent thinking. He had felt that Latin American thinking was a pale imitation of Western thinking, a second hand version of somebody else's thoughts. So the dependency perspective had elements encompassing culture, technology and so on. Even here there was a confrontation dimension.

G.C. Prebisch believed in confrontation in order to face the developed countries with all the mobilised power of the developing countries, but it was confrontation to apply maximum pressure to change the global systems. Prebisch was, of course, a great believer in the centre-periphery relationship.

S.G. There was also the use of the word a "trade union" of the developing nations in the mid 70's based on an industrial relations model, where the periphery could band itself into a trade union of producers. So that in all this there was a strong image of confrontation.

G.C. Prebisch believed, and I think UNCTAD believed, that you are not going to bring about basic changes in the system without some kind of a struggle. This required the application of as much leverage, political and economic, that the Third World could muster. I think one of Prebisch's political contributions was the creation of the Group of 77, where for the first time at UNCTAD I, the developing countries came together as one unit, a kind of trade union to negotiate and rally round common proposals.

Prebisch's main thesis was that because of the centre-periphery relationship the main impulses were basically flowing in one direction from the centre to the periphery - economic, cultural, political, technological impulses and so on.

But the conclusion he drew from this was that the centre periphery relationship would never change by the operation of market forces alone. In fact, if market forces are left to operate unregulated, the centre periphery relationship will be intensified and the centre would become more dominant and the periphery would become more dependent. His whole

thesis was to bring about through intervention, not only nationally but internationally, a global system in which these forces emanating from the centre would be regulated, tempered, moderated and partially replaced by a growing surge of forces from the other direction.

S.G. But looking back it seems, that it was a vain hope because of historical circumstances. One felt that in the mid 70's, and one had the impression that even persons in institutions such as the World Bank, McNamara for example, were changing their tones. Part of the rhetoric also changed for some of the social democratic countries. I believe symptomatic of this new approach was what we found say in the Stockholm conference on environment the 'What Now?' statement from Dag Hammarskjold Foundation, the New Economic Order resolutions and so on. But looking back now in the late 80's, there seems to be a retreat from many of these positions.

G.C. Absolutely. But there have been two phenomena. One is what you have described. There has been a withdrawal of the major developed countries from their earlier commitments on co-operation for development. This has been associated with many things: their own changed economic experience, rising East West tension and the arms race, the oil price increase, stagflation, the need to control inflation and contract demand in their own economies, and the subsequent recession. The impact of all this on the world economy and world trade was reinforced by the advent to power of conservative, market oriented governments in the United States, United Kingdom, West Germany and many other European countries. And as a result of these developments one has seen in the 80's a quite noticeable fact, a very dramatic fact: the weakening of multilateral economic processes. Negotiating processes are becoming increasingly difficult; conference after conference ends up with practically no results.

On the other hand, there has been another phenomenon which is also significant. This is that the role of the developing countries as a group in the world economy has increased, partly because of the rise of OPEC, and partly because of the emergence of the NICS. Today, the share of the developing countries in world trade is much bigger than at the time of UNCTAD I. The contribution of the developing world as a whole to world GDP, to the world economy, is around 20 percent; about the same as that of the United States or of the Eastern European socialist countries or of the EEC taken as a bloc.

The dependence of the developed countries on

exports to developing countries has grown enormously. Something like 40 percent of the exports of the USA and Japan are now going to developing countries, particularly manufactured exports. In the case of Europe, it is about 30 or 35 percent. So the "presence" of the developing countries in the world economy today is far greater than before, and what happens in the developing countries has its impact and its repercussions on the developed countries in a multitude of ways. The centre periphery relationship still holds as a dominant reality. But the centre is somewhat less of a centre than it was before and the periphery somewhat less of a periphery.

S.G. The centre has become more diffused.

G.C. More diffused and more multi-centred with the emergence of Japan and the EEC.

"There has been a withdrawal of the major developed countries from their earlier commitments on co-operation for development...."

Negotiating processes are becoming increasingly difficult conference after conference ends up with practically no results".

S.G. One of the intellectual roots of the centre periphery model is a Leninist view of imperialism. Under a Leninist view, one classically assumed that peripheral countries were exploited and also that in peripheral countries themselves one had an exploitative structure.

Now many of the UNCTAD positions had excluded the economic structures within the developing countries. It is as it were a partial fudge of reality. One mixes under the same category a mixture of countries for example as varied as North Korea and South Korea.

G.C. I think, what you say is true. UNCTAD has been criticised for that, particularly by the North, for closing its eyes to the deficiencies within the developing countries. But there are two reasons for this. One is that UNCTAD is a forum for negotiation between states and UNCTAD puts on its agenda those issues which can be resolved through negotiations among states. It does not

put on the table for negotiation issues which have to be resolved by internal changes of policies within individual developing countries. UNCTAD does not provide aid to individual countries, so it has no leverage on individual country policies.

The second reason is that for international negotiations UNCTAD had to put together a platform which would mobilize the political unity of the South. For that reason it had to pick on those issues, with inevitably a certain degree of generality, around which all the countries of the South can unite irrespective of their own internal policies and regimes. This of course meant a certain loss of comprehensiveness in the UNCTAD platform. But in a sense there was no alternative to that. Otherwise it would not have been possible to mobilise the developing countries to present a common front to the countries of the North.

But all this does not mean that UNCTAD and those who were working at UNCTAD were not aware of the fact that the global environment on which it concentrated so much was only a necessary condition for the progress of developing countries. It was by no means a sufficient condition. We talked about a New International Economic Order, but there is no meaning to a New International Economic Order if it is not paralleled by a New National Economic Order within the developing countries in which the same deficiencies we point to in the world scene also operate on the internal scene.

S.G. The New International Economic Order (NIEO) is now virtually a dead horse. The euphoria that existed in the mid 70's is no longer there. This is partly due to the international system itself, of the UN system itself. Because of the historical circumstances after World War II the major funding of the UN itself was by certain countries in the North. These countries have tremendous leverage, and especially when conservative governments come in, this leverage can be very high. So that the very instruments that you use to change the system, the UN organs, are easily undermined. Why wasn't a more imaginative approach possible within UNCTAD?

During the Cold War the East-West confrontation was viewed imaginatively, sometimes "thinking the unthinkable" to bring in new imaginative bargaining situations. Thinking was done on a very wide spectrum of options and strategies. Some of these options were completely unrealistic, but an imaginative array of options was laid bare. Such an array of strategies need not necessarily be limited only to economic strategies, but could encompass the whole spectrum of economics, politics,

technology, culture etc. So on hindsight of the last twenty years do you feel that some larger areas were left unexplored in the type of frameworks that were evolved?

G.C. Yes. I think one's thinking can always be enlarged in a variety of directions. But I have to observe that the NIEO concept had its heyday in the time of oil power. Shortly after the oil price increase of 1973 the Sixth Special Sessions of the General Assembly convened and the NIEO was proclaimed. Of course the NIEO was not meant to be a one shot affair. It was meant to reflect a process in which the developing countries would progressively have a bigger say in the management of the world economy.

If you look at the details of the NIEO programme, there is nothing new in it, but a putting together of all the old UNCTAD demands and proposals. What was new was its flavour, particularly in two respects. One was the emphasis on systems change as against appeals for aid and marginal changes here and there. The other was the stress on collective self reliance on the part of the developing countries by co-operating to increase trade and other exchanges with each other and also to increase the leverage with the North.

I think the validity of the NIEO concept is still there. Today certain quarters in the North regard the NIEO as not just something obsolete but almost a dirty word. But the fact is that at that time it was adopted unanimously. No Northern country had the courage to vote against it. There was this spectre of oil power and the fear that something similar could happen in other areas. Some countries made reservations but the NIEO was adopted by consensus with everybody, including the United States, going along with the consensus. Now, of course, the situation has changed. But one of the reasons why alternative scenarios such as you mentioned have not proved practical so far has been that, accompanying the change of attitudes of the developed countries, there has been a perceptible weakening in the camp of the developing countries. With the decline in oil prices, the oil countries lost their leverage; with the recession, the developing countries as a whole became more vulnerable; with the balance of payments gaps and deteriorating terms of trade, they became more dependent on the World Bank and IMF; with the increasing debt crisis, they became more sensitive to the responses of the creditors in giving relief. Also there has been the Iran-Iraq war, the divisions within the various agencies and organisations of the developing countries, schisms in the OAU, the Arab League and so on. A host of such things pushed the developing countries against the wall, and many

believed that the only way to survive was through bilateral dealings with the major powers rather than through actions in the multilateral fora. So there was an economic weakening accompanied by political developments and that was one reason why an alternative scenario was not really formulated.

But people were mindful of all this. Today there is an increasing talk about the need for developing countries to see in South South co-operation a kind of substitute for the failure of the North to respond. Recently there has been a negotiation among the developing countries for a Globalised System of Trade Preferences among themselves. Also, the South Commission has been set up to strengthen South South co-operation and so on. I feel, of course, that South South co-operation should be seen by the developing countries as an end in itself and not just a response to the failure of the North to be helpful or to co-operate with them. But the fact is that

we argued that we needed these food subsidies in order to keep social balance, social justice, and look after the poor. At that time we had hardly any expenditure on defence and I used to say that our subsidies were our defence expenditure!

one can strengthen the muscle of the South, both economic and political, and develop points of leverage. Then the ability of the developing countries to come up with alternative scenarios and to implement them would be greater.

For this purpose, as I have always been saying, the more powerful among the developing countries should come out more in front. My experience in UNCTAD was that this did not happen. The OPEC countries and the Newly Industrialising Countries were not in the front rank of UNCTAD negotiations. There is a very democratic process in the Group of 77 and the leadership rotates on various criteria. The stronger developing countries went along in UNCTAD giving support, but they did not come out in front and give leadership or use their influence as more powerful countries to get the North to be more responsive to the platform of the South.

The North uses its bilateral links in furtherance of its multilateral goals. If there is a problem in the UN or the GATT, the Northern countries would certainly go to

the capitals of the developing countries and ask for support. Developing countries hardly ever do that. They do not use their bilateral objectives. Most of these links are used to further their individual dealings in trade and aid and so on. So, I think, that if you want to have these alternative scenarios, you need to mobilise new weapons and new ammunition. The first need in the present situation is the mobilisation and strengthening of the ranks of the South.

S.G. Also, one could add new thinking, I suppose this is the idea behind the South Commission. But isn't it ironical that this very humane person ex-President of Tanzania Nyerere is heading it. The fact is that his total economic strategy for Tanzania is in disarray and has been proved unworkable. The Tanzania villagisation programme was I think on hindsight a major disaster and his whole views of development, Ujamaa included, has now been subverted and his country is now run on IMF medicine. So it seems that he is now an exile from a failed experiment abdicating his country to IMF policies in his country. Isn't it rather ironical that he is now trying to bring about new thinking?

G.C. I do not know enough about the internal history of Tanzania, to make a definite statement. I have of course heard it said many times, particularly in the North, that Tanzania was an example of the failure of socialist and semi socialist attempts at management. I have not talked to Nyerere on this and I hope to do so one day. But I do not know whether this judgement is fair. Whether the real reason for the failure also has been that the policy failed because no support was given to it.

Now it has also been said that Tanzania was a big receiver of per capita aid, mostly from the Scandinavian countries. But, I do not know whether this aid was really directed to the building up of the Tanzanian economy. Nyerere's acceptability comes not so much because of what happened in Tanzania, but because of the fact that he is seen as a man of singular integrity, honesty, selflessness, as one who commands confidence as a disinterested leader. This I have seen in his own personality.

But I have been wanting to put these questions to Nyerere and so see what his assessment is of the Tanzanian experience. Of course, the criterion they use most in giving low marks to Tanzania is the growth rate of GDP. I do not know whether on other fronts like political stability, income distribution and care of the weaker groups, Tanzania's record is still positive. These are things that one should look at. But certainly, I would not say that any of this disqualifies Nyerere from a leadership role

in the South.

S.G. You mentioned also the aid package that came to Tanzania and largely from Scandinavian countries, possibly because the social democratic countries saw a partial mirror image of them there. One also perhaps notices a somewhat similar parallel phenomenon in the case of Sri Lanka. In Sri Lanka by about the late 60's and 70's, its indicators on income distribution, democracy literacy, infant mortality were high. These I believe pleased the social democratic countries such as the Scandinavian countries and agreed also with the new thinking in the Carter Regime. The World Bank also gave Sri Lanka a fairly high ranking on a measure of income distribution with growth. So, I believe one had by about the mid 70's a great predisposition for pumping aid to Sri Lanka. What are your views on the response of the international community to Sri Lanka and the nature of the aid inflows.

G.C. Yes. I think that there was a lot of goodwill for Sri Lanka at various times and amongst the social democratic governments including the Scandinavians. A good impression was created by our social policies.

On the other side, of course, the big Western donors like the US, Britain, Germany and Japan had other criteria as well in wanting to help, apart from general political criteria like retaining influence with the developing countries through aid. They probably welcomed Sri Lanka having a more growth oriented approach with a greater degree of leverage for market forces through liberalisation of the economy. Many of these countries at present have governments that are convinced that developing countries impose constraints on their own growth by too much of state intervention, too much of attempts to spearhead development through state aided mechanisms when the machinery of the state itself is too weak. So, I think the feeling that in Sri Lanka there was a willingness to have a more open approach to these things may have influenced some of the bigger donors, apart from the Scandinavians, to come in more strongly particularly after the 1977 period.

S.G. So you see two thrusts. One is the sort of Scandinavian social democratic oriented thrust and the second would be the thrust of as it were a market oriented private sector thrust converging together. What is your reaction to the aid inflows into Sri Lanka, the quantum?

G.C. Now, I think in the Sri Lanka case, we have done better than some of the other developing countries and some of the more advanced countries among them in that the bulk of our aid has been bilateral, on concessional terms, and also through international insti-

tutions. We have not had too much as yet of a commercial debt, although that was beginning to grow at one stage. So, if one looks at the terms on which aid has been flowing into Sri Lanka, they could of course have been better, but they could also have been worse as in some other countries.

The next point of course, concerns the wider conditions that accompany the involvement of donors in aid. Donors wouldn't want to give aid to countries which have been distant to them or hostile. But when they go further and begin to have a view of what is likely to be effective in terms of national policies, they suffer the disadvantage of not really having enough of a familiarity and of an awareness of all the processes going on in these countries, particularly the social processes. I feel that an understanding of the social dynamics underway in developing countries is very weak amongst the donor agencies and groups. They have a lot of ideas about what is good for the economy and how to allocate resources and how to make the system work more efficiently. But they do not always remember that economic growth does not take place in an economic laboratory. It takes place in a real society in which there are all kinds of conflicting forces at work. And if you ignore these forces and are not sensitive to them and fail to do what you can to moderate them, and temper them, then a good deal of outside advice can prove to be not only harmful but quite dangerous.

S.G. How would you view the relationship of agencies like the World Bank and IMF with Sri Lanka. What is our degree of autonomy, the extent of our bargaining and degree of dependence. Where would you place Sri Lanka's efforts?

G.C. I could speak more authoritatively of the time I was dealing with the subject because the Aid Group was first started when I was in the Ministry of Planning. I used to head the Aid Missions for five to six years and during that period the donors had a certain disposition to help the Government of Sri Lanka. But even at that time they relied very much on the World Bank and the IMF to be more or less a judge, an arbiter, of the soundness of policies. It was necessary to get some kind of endorsement from the IMF and the World Bank that these policies were sound in order to encourage the donors to come in.

I remember having many discussions, many arguments, with the World Bank and the IMF on the question of policies, particularly on the question of the liberalisation of imports, on exchange rate policies and on

the question of food subsidies which they were trying hard to eliminate. We had to resist this and we had to argue with them and tell them there were limits to which we and the country were prepared to go. I remember they applied enormous pressure on us to devalue the currency after India devalued the rupee and the Pound Sterling was devalued. This had been part of their medicine for all the developing countries. But we pointed out to them the social consequences of excessive devaluations in this country. That is why we devised this FEEC scheme, of a dual exchange rate in which we insisted on essentials, food, drugs, fertilizer and such things coming in at the official lower rate whilst leaving other items to come in at a higher rate on a liberalised basis. The IMF was not too happy about this. Ultimately they agreed saying that it was a wrong step in the right direction! They agreed because we said there was no way in which we could have a total devaluation and let living costs go up here. It was the same with food and subsidies. They look at it very mechanically arguing that food subsidies were absorbing resources which should go to development.

But we argued that we needed these food subsidies in order to keep social balance, social justice, and look after the poor. At that time we had hardly any expenditure on defence and I used to say that our subsidies were our defence expenditure!

I am making the point that the World Bank and the Fund have a certain idea, a certain prescription, which they believe developing countries should adopt. I think it is for the developing countries to meet with them and negotiate with them and argue with them as best they could. This requires a certain amount of skill and it also depends on the situation of a country. When a country is totally dependent, then its bargaining power is to that extent diminished. But of course, like any negotiator from a developing country, all our experience in negotiations is of negotiating out of weakness and, therefore of doing an exercise in persuasion trying to achieve our objectives as best we can.

S.G. Leaving aside Sri Lanka as a case, if you look at all the developing countries, what would be in your view the "ideal country, that has the best relationship with the World Bank and the IMF; in the sense of a good and successful negotiating position.

G.C. I do not know of one, I think it depends also on the situation of these countries, and their need for IMF, World Bank and donor support. I do not know enough about the practical position taken by individual coun-

tries. At one time, India was said to have negotiated successfully with the IMF in resisting various devaluations. But I do not know enough about this, whether it is valid and whether it has been sustained.

But today, I must say that almost all developing countries have become vulnerable because of the world recession and the change in the global environment, and perhaps the Bank and the Fund are more insistent on their presumption than before. Certainly no particular country's posture of independence has been publicised. There have been countries which have refused to negotiate with the IMF from time to time, including countries like Brazil and so on. But it is a shifting scene and one doesn't know to what extent this is part of the tactics of negotiations, or whether it is a basic position which they should sustain right through.

S.G. I am going to ask you what I think is a very unfair question. Suppose some sort of Fairy God Mother came here and gave you a blank cheque to restructure Sri Lanka's economy, what would you do?

G.C. Well this is better than being asked what one would do if one were a dictator. You mean if there were no resource constraints?

S.G. Let us put it this way, given the current external restraints on Sri Lanka, how would you tinker with the Sri Lankan internal system.

G.C. What I would try to do without saying how successful I would be or how I would do it, is to follow a policy and a path which would take Sri Lanka resolutely and dynamically on the road of economic and technological progress. I do not think that we can afford, given our demographic situation and the expectations of our youth to lag behind in this area. I would try to do that whilst being very, very, sensitive to the social processes and the possible negative side effects that rapid and unbalanced development can have on a society. I think one has to be always aware of that and deal with it in a conscious manner. If one thinks that most problems can be resolved as a by product of development that is too simple. Even if it is true, it will be true only in the very long run, after development has become a reality. The danger is that if you take the attitude of only emphasising development without looking at the social side you might not get development because the whole process can be undermined by social unrest. So, I would look as much as I can for a responsive and sensitive policy which has balance - all of which is more easily said than done!

SOME ASPECTS OF FISCAL POLICY IN SRI LANKA

P.B. Jayasundera

(From a paper on Fiscal Policy in Sri Lanka since Independence in "Facets of Development in Independent Sri Lanka")'

Deficit Financing

The availability of resources for government spending depends on the degree to which the resource base is or can be mobilised. However, inadequate level of revenue on the one hand and the need for a higher level of government investment on the other, necessitates developing countries to mobilise additional resources through deficit financing. Government investment outlays can be financed in several ways: (i) by government savings, (ii) by selling government securities, (iii) by monetary expansions, and (iv) by foreign borrowings. Each of these methods brings forth different implications on the rest of the economy. While the last three constitute deficit financing methods, recourse to their use can be substantially altered by government savings.

Mobilisation of savings is an important function of the fiscal policy in developing countries. Government can generate savings when its revenue exceeds its consumption expenditure. However, government savings can enhance the overall savings in the economy only if it can ensure that revenue mobilization efforts do not lead to a reduction of an equal proportion of private sector savings. In many developing countries, a higher level of consumption expenditure in the presence of an inadequate level of government revenue has left very little room for using government savings for investment purposes.

The sale of government securities to the public does not lead to monetary expansion and therefore does not put pressure on the price level. This is based on the assumption that the financing of the government deficit through non-bank sources displaces an equivalent amount of private expenditure in the system. However, the limitation of this source of financing in developing countries is small and therefore it is difficult to raise adequate funds from the private sector. It can also argue that under certain circumstances it could also crowd out private investment.

Borrowings from the banking system will create additional money in the system. To the extent that it exceeds the amount of goods and services produced in the economy, it will lead to an increase in prices and consequently affect the balance of payments. Under these circumstances, it would reduce the real balances and would lead to a fall in both investment and consumption.

Foreign financing as a source of financing the deficit would give the government an access to foreign resources. In this context, the question of redistribution of domestic resources between the private and the public sector does not arise and the impact on price level depends upon whether the funds are spent in the recipient country or used for financing imports. Although it could lead to debt service problems under certain circumstances, with foreign finances, the country can take on a rapid growth path. Thus, it is clear that deficit financing arising from the pursuance of growth objective has different implications on economic management.

Analysis of Government Savings

As can be seen from *Table X*, performance of government savings has been disappointing and has not been of any assistance in financing government investments. The government savings which was over 2 percent of the GDP in 1951-1956 almost dis-

TABLE X
DEFICIT FINANCING - 1951-1985

	1951- 1955	1956- 1960	1961- 1965	1966- 1970	1971- 1975	1976- 1980	1981- 1985
1. Overall Budget Deficit (Rs.Mn.)	100.4 (2.2)	282.4 4.5)	497.2 (6.8)	870.8 (8.1)	1,751.6 (9.1)	7,776.2 (15.7)	19,554.0 (16.2)
2. Overall Deficit/Total Government Expenditure (%)	8.3	16.8	23.1	27.9	29.8	40.5	43.2
3. Foreign Finance/Budget Deficit (%)	-	9.0 (0.4)	16.8 (1.1)	32.4 (2.6)	34.3 (3.1)	49.4 (7.6)	53.8 (8.5)
4. Bank Borrowings/Budget Deficit (%)	-	49.1 (2.7)	31.8 (2.2)	22.6 (1.9)	5.8 (0.6)	9.3 (2.4)	10.5 (2.0)
5. Rupee Securit*/Budget (Deficit (%)	-	42.8 (2.3)	51.4 (3.5)	45.0 (3.6)	59.8 (5.4)	41.3 (5.6)	35.7 (5.7)
6. Government Savings/GDP (%)	(2.2)	(0.4)	(-0.1)	(-0.1)	(-0.4)	(-0.9)	(0.8)

* Include all forms of non-bank borrowings. GDP ratios are given in parentheses.

Source of Basic Data: Annual Reports and Review of the Economy, Various, Issues, Central Bank of Sri Lanka.

Table XI Selected Macro-Economic Indicators

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Budget Deficit/GDP	8.4	16.8	16.8	24.5	17.5	19.9	17.7	10.2	15.9
Bank borrowings/GDP	-2.0	0.5	1.2	10.6	4.5	3.0	0.4	-1.4	3.1
Domestic Inflation		8.3	15.3	20.2	21.4	11.0	15.7	18.6	-1.0
Current Account (BOP) Deficit/GDP	3.5	-2.4	-0.8	-16.4	-10.0	-11.7	-9.1	-0.9	-7.2
External Reserves (Equivalent of the number of months' imports)	2.7	4.3	4.0	3.4	2.2	2.7	3.0	3.3	3.4
Domestic Savings/GDP	18.1	15.3	13.8	11.2	11.7	11.6	13.8	19.7	13.8
Domestic Investment/GDP	14.4	20.0	25.8	35.8	27.8	30.2	28.8	25.6	26.0

Source of Basic Data: Annual Report and Review of the Economy, Various Issues, Central Bank of Sri Lanka.

appeared in the 1956-1960 period. Since then, the government ran into deficits in its current account operations. The performance of the government revenue and expenditure shows that although government had been successful in increasing the ratio of tax revenue to GDP, the proportion of government savings to GDP declined substantially due to increased levels of government expenditure during this period. The inverse relationship between government revenue/GDP and government savings/GDP ratio is contrary to the belief of many economists who advocate mobilisation of domestic savings through taxation in developing countries.¹⁹

As discussed earlier, the higher level

- 19 Stanley Plese "Savings through taxation - reality or mirage?" Finance and Development Vol. IV, No. 1, March, 1967 pp.24
20. Defence expenditure and economic growth in developing countries: Some further empirical evidence. Peter C. Fredrikson and Robert E. Lonely. Journal of Economic Development Vol. 7, No. 1 July, 1982.
- 21 Most empirical studies of the relationship between the share of government savings and level of per capita income show no significant relationship. See for example Williamson (1981) Thorn (1967).

of current expenditure in Sri Lanka during this period can be directly attributed to the higher level of welfare

TABLE XII DEBT SERVICE RATIOS

	1951-1955	1956-1960	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985
Debt Service*/GNP	1.1	1.3	2.0	3.1	5.5	6.0	8.0
Foreign Debt Service/GNP	1.2	0.4	0.8	1.9	3.7	4.6	5.6
Foreign Debt Service/Exports	3.0	1.1	2.9	9.9	21.5	15.4	19.4
Debt Service*/Govt. Revenue	5.3	5.6	8.9	14.4	23.2	25.7	37.7
*Includes only Debt Service of Government Debt							

Source of Basic Data: Annual Report and Review of the Economy, Various Issues, Central Bank of Sri Lanka.

expenditure. In many other developing countries, this can be attributed to a higher level of defence expenses. It has been argued that defence expenditure affects savings and growth in developing countries significantly.²⁰ Given the resource constraint, a higher level of welfare expenditure can also have a higher opportunity cost in terms of the alternative use of these resources in developing economies. In this context it can be hypothesised that government savings is inversely related to welfare expenditure, as well.

In testing this hypothesis, an attempt was made to examine the effects of several other variables such

as per capita income, export income, foreign aid and policy changes on government savings. However, the only variables found to be significant were the variable for welfare expenditure and export income.²¹ As can be seen from the following equation welfare expenditure affects government savings negatives.

$$Sg/Y = 0.53 - 0.628(WE/Y)$$

$$(3.7) \quad (3.9)$$

$$R^2 = 0.33 \quad F = 15.20 \quad D.W = 1.7$$

where Sg= government savings, Y=GDP at market prices
WE=Welfare expenditure. (t - Statistics are given in brackets)

Analysis of Deficit Financing Methods

The use of deficit financing methods has been a common feature of

the fiscal policy in post-independent Sri Lanka. With the rapid expansion in the public sector, the proportion of government expenditure financed through deficit financing methods increased substantially during the post-independence period. The gradual increase in the overall budget deficits and the relative importance of using different financing methods are shown in the following table.

Financing Through Credit Expansion

In financing the overall budget deficit, relative importance of using bank borrowings whether in terms of the GDP ratios or in terms of the

overall deficit has declined during 1956 to 1980 period.

In general, governments have been very cautious in using bank borrowings for deficit financing purposes. In fact, it has been largely unintentional and exceptional. In certain cases, this has been a result of the instability of government revenue resulting from commodity price fluctuations, while in certain instances it has happened due to unanticipated expenditure growth. In any case, the general belief was that deficit financing through money creation would create inflationary potentials in the economy and lead to balance of payments problems. This argument can be justified because expansionary policies are inappropriate in economies like Sri Lanka where production of goods and services is largely constrained more by supply factors than by aggregate demand. It may also be argued that, inflationary financing could adversely affect the relative advantages in external trade by making relative prices in favour of imports.

Despite the general conviction that deficit financing through bank borrowings is to be avoided, it was substantial during 1956-1965 period. It gradually declined since then and increased again after 1976. The impact of credit expansions in both periods on macro-economic performance is similar. However, for the sake of simplicity this paper will concentrate only on the latter period.

As can be seen from Table XI inflationary pressure in the economy increased substantially between 1977-1982 during which credit expansion through deficit financing was high. Although the most rapidly increasing expenditure item was capital expenditure, which increased from 16% in 1980 it exceeded the resources available from foreign and domestic non-bank sources. The growing gap in savings and investment and its mirror image in balance of payments clearly show the macro-economic instability during this period. Evidence also suggests that a reduction in the use of bank borrowings for deficit financing purposes has been

TABLE XIII INVESTMENT IN RUPEE SECURITIES

	1961-1965	1966-1970	1971-1975	1976-1980	1981-1985
1. Bank Sector	14.1	5.9	2.0	3.3	2.4
2. Non-Bank Sector	85.9	94.1	98.0	96.7	97.6
2.1 Captive Source	68.9	90.0	90.3	94.3	95.8
2.2 Non-captive Source	17.0	14.1	7.7	2.4	1.8

Source of Basic Data: Annual Report and Review of the Economy, Various Issues, Central Bank of Sri Lanka

of substantial assistance in reducing the inflationary pressure and restoring macro-economic stability in the economy in recent years. The evidence is thus consistent with the belief that deficit financing through heavy reliance on credit creation is counter productive in achieving growth objectives in Sri Lanka.

Use of Foreign Finance

The relative importance of using foreign finance has not been significant until late 1960s in Sri Lanka. As a proportion of the GDP, it has been less than 1 percent during the 1951-1965 period. Its relative importance, whether in terms of the GDP ratios or as a proportion of the overall deficit showed an improvement in 1966-1975 period and increased substantially during the post 1977 period.

As suggested by the two-gap model, foreign finance could affect economic growth effectively by easing foreign exchange problems and become complementary to domestic savings. Regression analysis performed to test this hypothesis in Sri Lanka indicates that contribution of foreign finance to economic growth is statistically significant and higher than the contribution by domestic savings. The estimated growth equation for 1951-1985 data is given below with statistics within parentheses.

$$G = .004 + .208(S/Y) + .285(F/Y)$$

(.24) (1.78) (2.34)

$$R^2 = .25, D.W. = 1.8, F = 5.1$$

Where G = rate of growth of GDP

S = Domestic Savings
F = Foreign Finance
Y = GDP at Market Prices

Although the explanatory power measured by R squared of the regression is bound to be low as the variables are expressed in percentage terms, overall fitness and statistically significant coefficients indicate that the contribution of foreign assistance to economic growth has been higher than that of domestic savings.

Although foreign capital has assisted developing countries in many ways, most of these countries in recent years ran into debt servicing problems. Debt servicing abilities of developing countries as a whole deteriorated rapidly since 1970. The ratio of debt service to GNP increased from 14% in 1970 to nearly 35 in 1984, while debt service ratio to exports increased from 15% in 1970 to nearly 21% in 1984. It has been argued that those countries which ran into debt service difficulties are the ones that have not managed to adjust their spending policies according to the changing environments.²²

Whatever the merits of these arguments, debt servicing problems can be severe and retard the growth if the use of foreign finance does not accompany a rapid economic growth.

Although Sri Lanka's debt servicing problems is not as severe as in many developing countries, its rapid increase in recent years suggests some urgent need for macro-economic adjustments to sustain rapid economic growth.

The following table presents several indicators to illustrate the debt service burden in the country. The ratio of debt service to GNP indicate the debt service burden on the economy's production

²² World Development Report, 1985. The World Bank, Oxford University Press.

capacity, while ratio of debt service to exports indicate the proportion of export earnings spent on debt servicing. The debt service burden on the government budget is shown in debt service/revenue ratio.

Although the gravity of the problem cannot be seen from these ratios, since some countries had little difficulties in managing with higher ratios while some have had problems with very low debt services, the debt service can become a severe problem on the government budget and on the balance of payments, if the overall economy fails to generate adequate resources to meet imports and debt service commitments in the country.

Non-Bank Resources and Rupee Securities

As mentioned earlier, the advantage of using non-bank resources for deficit financing purposes is that it does not lead to a monetary expansion and therefore does not create inflationary potentials or balance of payments difficulties. To this extent, use of these resources for deficit financing purposes would reduce the available resources for private sector and increase it for the public sector. The transfer of the available resources in this manner is still acceptable, provided that the use of public sector resources is more efficient and productive than it is under private sector use. It can also be justified when investment and production activities are entirely done by the public sector as in centrally planned economies.

In mixed economies where private sector is expected to play a vital role in investment and production activities, the reduction in available resources for private sector by using them for deficit financing purposes raises a number of questions. Under a competitive market framework, government would have to offer a higher rate of interest in order to encourage private sector to invest in government securities. Alternatively, government can introduce monetary

restrictions in such a way that private sector would invest on government securities. In both cases, private sector investment activities get affected adversely.

In economies like Sri Lanka, the use of non-bank resources for deficit financing is limited as these economies do not have organised capital markets. As such, the use of resources from these sources has been limited to captive sources.

In financing budget deficits, Sri Lanka has been using rupee securities for resource mobilization. Investment in rupee securities by various sources are shown in Table X111.

As can be seen from the data, investment in rupee securities by the banking system as well as by non-captive sources has declined substantially between 1961-1985 period. The rupee security operations is almost entirely limited to captive sources such as the Employees' Provident Fund and the National Savings Bank. To the extent the banking system invests in these securities, it could have the same repercussions as in the case of inflationary financing.

The use of resources from captive sources though does not create problems for the Balance of Payments or the price stability, it could certainly take away a substantial proportion of available resources from the private sector investment activities. For instance, had there been no excessive increase in budget deficits and use of non-bank resources during this period, resources in the non-bank sources could have been made available to the private sector for investment activity. In other words, freeing captive sources and encouraging them to invest in alternative activities would have created a completely different interest rate structure and thereby a significant change in the resource allocation.

Budget Deficit and Public Debt

It is a common practice that fiscal

deficits are judged on the basis of their alleged impact on the rate of inflation and on the balance of payments. The implicit assumption in the analysis is that the impact of the deficits is temporary. In other words, it is considered that deficits affect current economic performance and have no impact for future performance. Thus, the chain effect of fiscal deficit has been often ignored. However, fiscal deficit of a given year while affecting that year's economic performance will also affect the future quite differently when it leads to excessive increase in the public debt.

The link between the budget deficit and the amount of public debt can be ignored in the long run analysis under the following circumstances. First, if the deficit is a temporary phenomenon, the public debt would not accumulate over time, as deficit in one year can be offset by a surplus in another year. Second, if the rate of economic growth is rapid and high and at the same time the deficit is small, then the share of public debt in GDP would not increase.

However, when the deficit is a permanent phenomenon and not a result of cyclical fluctuations, but a structural problem and at the same time is growing faster than that of GNP, then the deficit becomes cumulative leading to increases in the share of public debt in GNP. Empirical studies in fact suggest that the countries that are experiencing the increases in debt/GNP ratio are those with the largest fiscal imbalances.

The Debt/GNP ratios in Sri Lanka are presented in the following Table.

Increases in debt/GNP ratio raise a number of questions for fiscal policy analysis. The immediate question is that as the relative size of the debt increases, committed interest expenditure also continues to grow. As shown in Table XIV the interest payments on public debt in Sri Lanka though negligible in 1950s, has increased rapidly since 1960s on account of the heavy reliance on deficit financing. In 1980-1985, interest payments on government debt accounts for nearly one-fourth of current expenditure of the government. In these circumstances, if government revenue and other expenditure remained at the same level, fiscal deficit and

Table XIV Chain Effect of Budget Deficits on Public Debt

	1950	1955	1960	1965	1970	1975	1980	1985
Total Public Debt/GNP	20.5	20.3	33.3	52.2	61.8	61.7	76.8	81.4
Foreign Debt/GNP	3.9	3.8	4.4	6.1	12.4	15.7	33.1	42.1

Source of Basic Data: Annual Report and Review of the Economy, Various Issues, Central Bank of Sri Lanka.

(contd. on page 37).

THE POST – 77 ECONOMIC REFORMS: AN ASSESSMENT

S. Tilakaratna

This assessment of the achievement of the post 1977 economic reforms is by Dr. S. Tilakaratna Professor of Economic, Sri Jayawardenapura University. In this short paper an attempt is made (a) to outline in brief the central elements of the economic model that followed from the 1977 reforms and the achievements attributed to the working of this model in the ensuing ten year period, and (b) to assess these achievements on their own terms and to highlight some of the strengths and weaknesses of the model as it operated in practice.

1. The Main Elements of the Economic Model.

The main elements of the economic policy and practice in the ten years since late 1977 may be summarised as follows:

(i) **Economic Liberalisation:** Liberalisation of imports and exchange payments coupled with a Rupee devaluation of 45 per cent initially and a series of depreciations thereafter; removal of other state controls on economic activity and the adoption of a policy of privatisation - leading to the creation of an 'open market economy'.

(ii) **Incentive Package:** Provision of liberal fiscal and other incentives to local and foreign private investors.

(iii) **Public investment** was concentrated mainly in the development of infrastructures, in particular irrigation, electricity, roads and communications. With the improvement of the basic infrastructure, the role of public investment was expected to decline overtime.

(iv) **Export-led Employment oriented Growth:** Private enterprise was expected to respond to the improved infrastructural facilities and the incentive package by investing in activities which promote employment and earn foreign exchange through export-oriented production. S. Korea and Singapore have often been cited as the appropriate models in this regard.

(v) **Heavy reliance on foreign loans** to finance the bulk of public investment and to meet the expanded level of imports. Such dependence was considered a transitional measure, which would progressively diminish with the unfolding of an export-led growth process.

(vi) **Equity and direct provision of social welfare** as redistributive measures did not figure as explicit goals. Rather, the emphasis was increased allocation of resources for investment on the expectation that the benefits of the resulting economic growth would trickle down to the masses in the form of employment opportunities and reduction in poverty.

Finally, it may be noted that 'political stability' was considered a pre-requisite for the successful implementation of the above policy package. In particular, it was considered necessary to have a strong executive as well as a continuity of the ruling political regime for a period long enough to see through the above reforms to their logical conclusion; namely an acceleration of economic growth with a trickle down effect.

financing requirements would continue to grow leading to a debt explosion. In this context, it is inevitable to raise government revenue or to reduce non-interest expenditure in the government budget in order to achieve a fiscal balance. This suggests that heavy reliance on deficit financing can be harmful unless it is used for rapid economic growth.

2. The Achievements

Let us now outline the main achievements attributed to the operation of this model.

(i) **The rate of growth of the economy** rose considerably above the historical levels. The growth of the Gross Domestic Product (GDP) in real terms averaged 5.5 per cent per year during

1978-86 compared with about 3 per cent during 1970-77 and about 4 per cent in the 1960's. In fact in the early part of the period (1978-82) the GDP growth averaged 6.2 per cent. Even in the later period (1983-86) when there was a general slow down in economic activity (attributed largely to ethnic disturbances) the growth rate averaged nearly 5 per cent per annum. It was only in 1987 that the growth momentum slackened (recording a sharp decline to a mere 1.5 per cent), a major cause of which was the decline in agricultural production (by as much as 6 per cent) under the impact of the severe drought conditions that affected all major crops, in particular rubber, coconut and paddy.

(ii) **The rate of investment in the economy** rose to levels much above its historical levels. Gross Domestic Capital Formation which was no more than about 15-16 per cent of the GDP in the 60's and 70's (upto 1977), rose dramatically to an average of 26 per cent during the 1978-86 period, quite a high level for a developing economy.

(iii) **The greater part of this increased investment** went into physical infrastructural improvements; for example, irrigation, power, roads, transport, communications, commercial and public buildings of various sorts and urban renewal. There can be no doubt about the considerable record of achievements in the modernisation, improvement and rehabilitation of the infrastructure in the post-77 era.

(iv) **It is often claimed** that the structure of exports underwent a fundamental change following the sharp increase in industrial exports. Industrial exports which accounted for only about 15 per cent of the total export value in 1976 has risen over the years to reach nearly 49 per cent of the total by 1987. There was a corresponding decline in the relative share of plantation crop exports from 71 per cent to 38 per cent during the same period. Garments have in fact overtaken tea as a foreign exchange earner. This development is sometimes highlighted to indicate that the country has at long

last broken away from the colonial export pattern (with its heavy concentration on plantation exports) and has succeeded in achieving a breakthrough into a new export-led growth path.

(v) There was a sustained expansion in employment opportunities upto at least 1983. It is claimed that unemployment which stood at well over one million persons (over 20 per cent of the labour force) in the mid-70's had fallen to around 600,000 or 12 per cent of the labour force by 1982. The Free Trade Zone alone had created direct employment totalling over 47,000 by 1987. However, it is now conceded that since about late 1983, following the economic slowdown (attributed to ethnic disturbances) employment generation has slackened and that by 1987 unemployment had risen to over one million, constituting some 18 per cent of the labour force.

(vi) Finally, it has been speculated that if not for the direct and indirect economic damage caused by the ethnic problem (resulting in a diversion of resources for defence upto as much as Rs 12-15 billion in some years) the economy would have continued to show a good growth performance and perhaps broken the back of underdevelopment to make the transition to sustained growth.

3. Assessment

We shall now critically assess the above claims and contentions on the achievements of the post-77 economic reforms.

3.1 Service-biased Growth Pattern: We have seen that the average GDP growth rate during 1978-86 was significantly higher than the histo-

rical rates. The important question is whether the Sri Lankan economy succeeded in creating a viable and a sustainable base for continued growth under the post-77 reforms. In the case of S.Korea, Taiwan and Singapore (the models that fascinated the Sri Lankan policy makers) it was the steady growth in manufacturing that propelled the overall growth process in the first decade that followed their economic reforms. In S.Korea and Taiwan, manufacturing output grew at an average annual rate of 17-18 per cent during 1960-70 and in Singapore the corresponding rate was 19 per cent during 1962-72. In the case of Sri Lanka, however, there was no consistent and clearly discernible commodity producing activity which propelled economic growth. (See Table 1 below).

—During 1978-80, it was the construction sector which recorded the highest growth rate (an average of about 20 per cent per annum) and led the way, but thereafter this sector has virtually stagnated. This growth momentum was short-lived.

—The growth rate in the agricultural sector was highly volatile, fluctuating with the weather conditions, and ranged from negative levels in some years to a high of nearly 9 per cent, averaging about 3 per cent for the period 1978-86.

—The growth in manufacturing was equally volatile ranging from less than one per cent to a high of 12 per cent - an average of about 5 per cent for the period as a whole.

The major source of economic growth was thereafter **not** the commodity

producing sectors (agriculture, manufacturing and construction). It was rather the **service sector** which proved to be the engine of growth under the post-77 reforms. The service sector (comprising trade, transport, utilities, financial services, real estate, housing, public administration, defence and other services) recorded an uninterrupted growth of 7-8 per cent per annum over the period 1978-84. In fact nearly two-thirds of the increase in the GDP during this period originated in this sector. It was only after about 1985 that growth slackened in service activities reflecting the overall slow down in the economy.

The post-77 growth pattern was therefore heavily biased towards **non-tradables** (as against exportables or import substitutes originating in industry or agriculture). It may be noted that the high growth in the service sector reflects on the one hand a clearing of a backlog of demand for various economic services or inadequate infrastructures inherited from the past. It also reflects an attempt to facilitate future increases in output under private enterprise. Moreover, expansion of services is not undesirable in itself since it meets a demand just as for any commodity. However, a growth pattern that is heavily skewed towards services is likely to be unsustainable in the long-term in a liberalised economy. The viability of a liberalised regime ultimately depends on its ability to achieve rapid and sustained growth in tradables (exports and import substitutes). A liberalised economy would otherwise face external payments problems and could sustain only as long as adequate foreign resources flow through aid and loans. Hence the crucial importance of sustained growth in commodity producing sectors, that is, agriculture and industry.

3.2 Reality of Export-led Growth:

There was no positive growth trend in the traditional export (plantation crop) sector. The output growth was sluggish, less than 3 per cent per annum during 1978-86. Except in 1984-85 when tea prices recorded boom conditions (because

TABLE 1. SECTORAL GROWTH RATES (%)

	Agriculture	Manufacturing	Construction	Services
1978	5.4	7.8	28.2	7.5
1979	2.0	4.6	20.9	7.8
1980	3.1	1.0	11.0	8.0
1981	6.9	5.2	- 3.0	6.4
1982	2.6	4.8	- 2.0	7.0
1983	5.0	0.8	1.0	6.7
1984	-0.4	12.3	- 0.1	7.0
1985	8.6	5.2	0.5	3.9
1986	2.6	8.4	1.5	4.3
1978-86	3.1	4.9	6.3	6.5

of external factors), the export earnings from plantation crops had stagnated within a range of SDR 450-500 million during most years. There was no positive growth trend in the minor agricultural exports either.

With agricultural exports at near stagnation levels, it was the industrial exports that accounted for the bulk of the export expansion. But much of the industrial export expansion has been concentrated in **two commodities** that incorporate a large proportion of imported inputs - textile garments and petroleum products. Hence although there was an almost six-fold increase in the value of industrial exports during 1977-87 (accounting for nearly half the total export earnings) the **net** foreign exchange earnings (when allowance is made for imported inputs) are estimated to be considerably low. It cannot therefore be argued that the export structure has undergone a fundamental change. Agricultural exports continue to be the major source of foreign exchange, accounting for at least two-thirds of the net foreign exchange earnings. But earnings from agricultural exports have virtually remained stagnant in the post-77 period (except in the two boom years for tea, 1984-85).

It may also be noted that what matters for the viability of a liberalised economy is not export expansion *per se*; it is rather the creation of export industries which could stimulate growth in the rest of the economy through linkage effects. Recent research on the S. Korean economy has clearly shown that there were two growth poles namely (a) the labour intensive export-oriented industries and (b) the capital-intensive import substituting industries which produced inputs for the export sector. In short, it was a dual-industrial growth process where export promotion and import substitution (often considered mutually exclusive alternatives) in fact co-existed.

Hence one should be careful in conceptualising a dichotomy between export expansion and import substitution.

The failure of the export-led growth strategy carried with it a number of consequences which tend to threaten the continuity of the liberalised policy. For one thing, the trade gap (excess of imports over exports) continued to remain sizeable. During 1977-86 while imports grew at an average rate of about 11 per cent per year (in SDR terms) exports grew at an average rate of only about 5 per cent. On an average exports were able to finance only about 60 per cent of the total import bill. Private remittances, grants and loans financed the bulk of the trade gap. The continuation of the liberalised regime was therefore more a result of the ability to find recourse to other sources of finance (loans, aid and remittances) than of an export expansion - clearly an unsustainable phenomenon in the long-term.

For another, in a context where much of the investment was concentrated in non-tradable infrastructures and a high proportion of this investment (about 40 per cent) was financed by recourse to foreign finance, the inevitable consequence was a rise in the external debt service ratio. The debt service (amortisation and interest payments) as a proportion of export earnings (goods and services) rose sharply from less than 15 per cent in the late 70's to an average of 27 per cent in 1986-87. The fact that despite substantial availability of concessional loans, the debt service ratio rose to such heights (to absorb more than a quarter of the export earnings) reflects the biases in regard to the choice of investment - that is the fact that investment was largely oriented towards non-tradables, and even within tradables it was commodities with a high import content that expanded.

Furthermore, the rise in the investment rate (from the historical level

of 15-16 per cent of the GDP) to 26-27 per cent was made possible **not** by an increase in domestic savings (which in many years stagnated at 12-13 per cent of the GDP) but by an enhanced flow of foreign loans and aid. The greater portion of these foreign finances was utilised by the public sector and it was the rise in public investment which raised the overall investment rate in the economy. The picture that emerges therefore is not one of export-led growth under private enterprises based on increased private savings and investment. It was rather a case of a growth process **heavily concentrated on infrastructural services financed by foreign loans and aid and carried out largely by the public sector.** Hence to state that restoration of the market mechanism was responsible for the post-77 growth is not an accurate description of facts.

3.3 Failure to Make the Transition from Mercantile to Industrial Activity: Within the industrial sector, the most conspicuous development under private enterprise was the expansion of the garments industry. An important factor in the expansion of this industry was the quota exhaustion in other exporting countries such as S. Korea, Singapore and Hong Kong. Why is it that private enterprise did not venture out into the development of other export-oriented industries in order to diversify the export base? The reasons basically lie in the type of incentive structure that resulted from the post-77 reforms. For the private entrepreneurs, export-oriented activity did not in general rank high in relative attractiveness compared with mercantile activity in the domestic market.

Take the case of the exchange rate, for example, which is a key factor that influences relative profitability of exports vis-a-vis domestic market oriented activity. Despite the series of depreciations that took place over the years, the **real effective** <

TABLE 2 UNEMPLOYMENT AS A PERCENTAGE OF THE LABOUR FORCE IN DIFFERENT ECONOMIC SECTORS

	1978/79	1981	Percentage Decline
Urban Sector (Colombo City)	20.7 (20.5)	14.2 (12.3)	31.4 (40.0)
2. Rural Sector	14.6	12.0	17.8
3. Estate Sector	5.6	5.0	10.7

exchange rate of the Rupee had appreciated particularly during 1980-84. It is the real exchange rate (adjusted for the inflation differentials between Sri Lanka and her trading partners) rather than the nominal rate that influences trade flows. If the inflation rate in Sri Lanka is higher than that prevailing in her trading partner countries, Sri Lanka's real exchange rate would appreciate vis-a-vis the currencies of the trading partners. In other words, the favourable effects of a Rupee depreciation on exports could be offset by a domestic inflation. This is precisely what happened in Sri Lanka during 1979-84 when the annual rate of inflation averaged 16 per cent or more on all available price indicators. The high rate of domestic inflation in turn was largely a result of an investment programme in infrastructural long-gestation projects and bank borrowing as an expedient method of financing budget deficits. A vicious circle was created. While inflation negated the effects of the Rupee depreciation, there was a reluctance to adjust the Rupee to restore its real rate (now eroded by the inflation) for fear of greater inflation. In the face of the high domestic inflation, the policy measures proved inadequate to protect the export stimulating effects of liberalisation and Rupee devaluation. The bias against exports had continued. A complex set of forces operated to make mercantile activity more attractive relative to industry. The economic liberalisation and the aid-funded infrastructural activity opened up a host of low risk, quick yielding and high return opportunities for private en-

terprise, for example, import, wholesale and retail trade, work contracts, material supplies, repair and maintenance, financial services and real estate, travel, transport services, job recruitment services etc. As long as such opportunities were expanding, as it did particularly in the initial few years of the liberalised economy, industrial investment proved less attractive. Perhaps such an initial phase where mercantile activity tends to be preferred over industry is understandable and even unavoidable in a developing country context where industry in general is riskier than commerce. But the continued preference for mercantile activity by private investors even several years after liberalisation reflects a failure on the part of policy makers to take early corrective action to enhance the relative attractiveness/profitability of industrial activity. There was no deliberate and targeted encouragement of specific industries through a well formulated industrial policy and strategy. A bare outline of an industrial policy was announced only in 1987, that is nearly ten years after the initial liberalisation. Perhaps the major shortcoming of the post-77 reforms was the failure to evolve a framework and a strategy to effect the transition from mercantile activity to industrial activity. The reforms were not followed through to bring about structural change and broader based growth.

The experiences of the newly industrialising countries such as S.Korea (and even of Japan in the 1950's and early 60's) suggest that promotion of industry requires a close state-private sector dialogue and interaction and the evolution of a set

of relationships which fosters business confidence and assists the investors to overcome market imperfections, bottlenecks and other disadvantages they face vis-a-vis mercantile activity. The role of the state cannot be confined to the mere establishment of a 'right' set of relative factor prices, exchange rates and tariffs and wait for the market forces to usher in industrial growth. The state has to play an activist role. The industrial capitalism that has emerged in third world countries is a highly state sponsored and promoted variety rather than an autonomous growth under laissez-faire neutral conditions.

3.4 Growth of a Black Economy

The liberalised economy was characterised not only by a continued preference for mercantile activity but also a growth of a sizeable 'black economy'. The latter phenomenon represents either earnings from illegal transactions or earnings undeclared for tax purposes. Black economy is not a new phenomenon in Sri Lanka; but its size and the magnitude of its transactions appear to have recorded significant increase in the past ten years. Bribery and pay-offs, smuggling and gem business, unauthorised commissions, racing and gambling, narcotics, unrecorded earnings of professionals, underdeclarations of value in real estate and other business transactions and speculative deals of various sorts represent some of more important sources of 'black money'. A small portion of such black money has been mobilised by the commercial banks into anonymously held Certificates of Deposit (CDs), the volume of which has risen by more than six-fold since 1982 to reach a level of Rs 2032 million at the end of 1987. Guessestimates of the total black money in the country range from Rs 20 to 40 billion or 10 to 20 per cent of the GDP at current prices. Whatever its magnitude, the available evidence indicates the existence

of a sizeable stock of resources which fail to enter the mainstream economic activity. Moreover, the existence of such a black economy has some important implications for macro economic policies. The black economy lies outside the regulation of budgetary or monetary policy, rendering demand management difficult. These incomes tend to be highly consumption-oriented exerting an inflationary pressure on the economy.

3.5 Urban-bias in Employment Generation

The pattern of economic growth that emerged from post-77 reforms also appears to have been heavily urban biased. The fastest growing activities, namely the services and the garments industry, were largely concentrated in the urban sector. Hence it was the urban sector which experienced the highest employment expansion. This fact is very clearly seen in the unemployment data revealed by the Consumer Finance and Socio-economic Surveys of the Central Bank for the years 1978/79 and 1981/82.

As seen in Table 2, the highest decline in the unemployment rate was in the urban sector. This decline was more than 31 per cent during 1978-82 as against only 18 per cent in the rural sector. In the Colombo city (clearly the most important beneficiary of the post-77 reforms) the unemployment rate declined by as much as 40 per cent during this period. It may also be noted that within the urban sector it was the female unemployment rate which recorded the highest decline (33 per cent as against 19 per cent for males) which reflects the expansion of services and the garments industry which employ mostly female labour. In contrast, the female unemployment rate in the rural sector remained virtually unchanged during this period.

In marked contrast with the favourable impact of the liberalised economy on the unemployment situation in the urban sector, there is

TABLE 3 UNEMPLOYMENT AS A PERCENTAGE OF THE LABOUR FORCE IN SELECTED DISTRICTS: POPULATION CENSUS DATA

	1971	1981	Percentage Change
Hambantota	16.2	20.2	+ 24.7
Matara	21.4	28.0	+ 30.8
Galle	26.2	27.4	+ 4.6
Kalutara	26.2	27.7	+ 5.7
Gampaha	n.a.	26.9	-----
All Island	18.7	17.9	- 4.3

evidence to believe that in some of the rural districts unemployment has not merely failed to decline but has in fact increased. As seen in Table 3, according to the population census data the unemployment rate in five coastal districts of the Southern and Western parts of the country, were in the range 20-28 per cent and were higher in 1981 when compared with 1971. Continuation of such high unemployment rates clearly indicate that the post-77 reforms failed to make impact on the employment expectations of a significant proportion of the youth population in these districts. Nearly three-fourths of the unemployed are in the age category 14- 25 years and they continued to remain marginalised in the liberalised economy. It may be noted (as seen in Table 3) that the unemployment rate grew by as much as 25-31 per cent in the districts of Hambantota and Matara during 1971-81. The social and economic marginalisation of the rural youth (in contrast with urban youth) is clearly an important factor in any attempt to understand the youth unrest and violence that Southern districts are witnessing. Mention may also be made of the

Jaffna district where the unemployment rate (though much lower than in the Southern districts) also recorded an increase in 1981 compared with 1971 (14.2 per cent in 1981 compared with 12.6 per cent in 1971). Moreover, the liberalised economy led to a considerable loss of present incomes in this district during 1978-81 as a result of decline in the production of some key crops (chillies, onions and potatoes) owing to competing imports that followed the import liberalisation. This district failed to participate in the benefits of economic growth that followed the post-77 reforms- in fact the district has had to suffer economic losses without compensation. Once again this is a factor of direct relevance to an understanding of the militant struggle of the Tamil youth in the district concerned.

3.6 Increases in income Inequalities

There is also evidence to believe that the post-77 growth process was accompanied by a deterioration in relative income distribution of the country, that is to say a rise in income inequalities and a concentration of income in higher income brackets. The most commonly used indicator of relative

TABLE 4 INDICATORS OF INCOME INEQUALITY

	1973	1978/79	1981	Percentage Change: 1973-82
1. Gini Coefficient	0.41	0.49	0.52	+ 27
2. Share of the bottom 40% of the households in the total income (%)	19.3	16.1	15.3	- 21
3. Share of the highest 10% of the households in the total income (%)	28.0	35.8	37.3	+ 33

Source: *Consumer Finance Surveys*.

UNEMPLOYMENT: Non-comparability of Data

Absence of a set of consistent and comparable data series makes it difficult to estimate the magnitude of changes in employment, and employment that took place under the impact of post-77 reforms. Census data on employment/unemployment are available only for one year (1981). All other available data are from sample surveys of different sizes (varying from 2500 to 10,000 households), conducted at irregular intervals and for different purposes. Data on employment/unemployment revealed by most of these surveys are by-products rather than the main focus of the surveys concerned. Besides the complexity of the sources of data, the differences in the concepts and definitions of employment/unemployment and reference periods used (ranging from one week to three months), make these data extremely difficult to compare in order to derive meaningful conclusions. In fact, direct comparisons of such data can even lead to highly misleading conclusions.

To evaluate the impact of post-77 reforms on unemployment, the logical starting point would be an estimate of the unemployment level that existed immediately prior to the reforms (that is in 1977 or thereabout) to serve as a baseline. There were three sample surveys conducted during 1973-75 (all three by the Central Bank) which could provide a basis for such an estimate. (See Table I above.)

What can one say about the unemployment level in 1977 on the basis of the above data? Since 1977 is an important dividing line between two political regimes, there is often a tendency to pick a figure (from the above) that best serves one's particular interests. An enthusiast of the

TABLE I

Year	Survey	Sample Size (Households)	Unemployment Number	As % of Labour Force
1973	The Determinants of Labour Force Participation Rates in Sri Lanka	2500	793,000	17.3
1973	The Consumer Finance Survey	5000	1,073,000	24.0
1975	The Land and Labour Utilization Survey	5000	884,300	19.7

post-77 reforms for example would tend to use 24 percent (revealed in the Consumer Finance Survey of 1973) or even a higher hypothetical level to represent the unemployment level of the pre-77 era. Such an attempt ignores the fact that for the same year (1973) another survey (which specifically focussed on the labour force) revealed an unemployment rate of nearly 20%. The plain fact is that the three sets of data are not comparable for reasons stated earlier. For want of a better alternative, one may wish to use as an approximate baseline either the figure revealed in 1975 or an average of the two figures of 1973, both of which yield a more or less similar figure of around 20 per cent.

If we assume a labour force of about five million for 1977 this rate would yield an unemployed population of about one million as the base line figure.

How has the unemployment situation changed after the reforms? The data are available on upto 1982. Let us examine the data for 1981-82 by which time the post-77 reforms had made an impact and had created a high tempo of economic activity. There are two important sources of data namely the population census conducted in March 1981 and the Consumer Finance and Socio-Economic Survey (CFSS) conducted during October 1981 to September 1982. The time

TABLE II

Source	Labour Force (Thousand)	Employment (Thousand)	Unemployment (Number)	As % of Labour Force
Population Census 1981	5,107	4,119	897,243	17.9
Consumer Finance & Socio-economic Survey 1981-1982 (a sample of 8000 households)	5,282	4,678	604,640	11.7

gap between the two sets of data may be taken as approximately one year. (See Table II below).

Here again an enthusiast would tend to use the results of the 1981/82 survey results to conclude that the unemployment rate had fallen to a mere 12 percent and to demonstrate that the post-77 reforms had succeeded in reducing the unemployment rate by half (assuming a rate of 24 percent in 1977) within a matter of four years. Or else one may be tempted to compare the above two sets of data and to conclude that the unemployment rate had declined by one-third (from 18 to 12 per cent) within a period of just one year (1981-1982).

However an attempt to rush to such conclusions are unscientific since it ignores the considerable differences that exist in the concepts and definitions of employment/unemployment used in the census and the sample survey. One could define a term in narrower or broader terms and the narrower the definition one adopts the lower would be the figure one would arrive at. As shown below in the 1981/82 CFSS while employment has been defined in broader terms than in the 1981 census, unemployment has been defined in much narrower terms than in the census.

Concept of employment: In the 1981 census, the employed included all those persons who were engaged in any kind of work for pay or profit, and term covered not only full-time wage or salary earners but also part-time workers, self-employed persons and unpaid family helpers who help in a family enterprise for a **minimum period of 15 hours per week on average**. On the other hand, the sample survey (CFSS) of 1981/82 treated as employed all persons who did any work for pay, profit or family gain provided that they had

worked for **at least one day** (defined as a **minimum of three hours**) during the reference week. By including among the employed even those who had worked as low as three hours a week (who are grossly underemployed or virtually unemployed) the CFSS appears to have overestimated the employment level in the country. This may be one reason why (as seen in Table 11) the CFSS revealed an employment level which was considerably higher than that revealed in the census, an increase of as much as 560,000. Such an employment expansion would be an impossibility during a period of one year.

Concept of unemployment: On the other hand, the CFSS used a concept of unemployment which was very much narrower than that used in the census. In the CFSS, a person was considered unemployed only if (a) he/she was 14 years and above, (b) had no employment during the reference period and (c) was **actively seeking work** for pay, profit or family gain. The passive seekers of employment have been excluded from the unemployed. On the other hand, the census had used a broader concept namely all those persons (a) 10 years and above who are not employed and (b) were either **seeking work** or if not seeking work, **want to work and are available for work**. As the General Report on the population census of 1981 commented: "The United Nations recommendations for population censuses suggest that where employment opportunities are limited, the unemployment should also include persons who want work or are available for work even though they do not actively seek work for the reason that they believe no jobs are available. The inclusion of such persons as unemployed is based on the consideration that persons who have actively searched for work for varying lengths of time without success can become so demoralised that they stop

seeking. Also many young people leaving school who want employment, after seeing that the efforts of their elder brothers, relatives or friends have not been successful, may not themselves actively seek work because of the perception that jobs are hard to secure. In these situations a person's availability for employment is not expressed by any overt action as seeking work but merely as a state of mind. Hence, in addition to persons actively seeking employment, persons who want and are available for work even though not actively seeking work should also be regarded as unemployed."

The narrow definition of unemployed (as active seekers) used in the CFSS of 1981/82 had therefore underestimated the unemployed population in the country. What the CFSS has in fact covered is in a sense the 'hard core unemployment' in the country; but then its findings cannot be compared with the census findings or for that matter the findings of other surveys which had used different concepts. It should be clear therefore that the unemployment data revealed by different sources cannot be meaningfully compared. Such comparisons, ignoring the differences in concepts and definitions used, can even lead to misleading conclusions. Hence, in the absence of a comparable data series, one could only make guesses, hunches or crude observations but not fix exact magnitudes; such as, that unemployment declined by half during a given period. Figures are difficult to come by. But it is reasonable to make the following conclusions:

(a) The high tempo of economic activity that characterised the period 1978-1982 would have certainly led to a substantial expansion of new employment opportunities resulting also in a decline in the overall unemployment level in the country. Besides the organised sector (govern-

ment, organised private businesses, free trade zone etc.), the unorganised or the informal sector of the economy would also have shared in such employment expansion particularly as a result of the growth of activity in trade and transport.

(b) The unemployment situation would also have eased on account of two factors largely unrelated to the post-77 reforms, namely the exodus of persons in the labour force for employment in the Middle Eastern countries (estimated at around 200,000 in the period 1982-83) and outmigration of persons of Indian origin from the estate sector under the Sirima Shastri pact (about 100,000 adults during 1978-84).

(c) It also appears that the greater part of the employment expansion occurred in the services sector and in the industries (such as garments) which are mostly urban-centered activities. However, the urban sector accounts for only about 25% of the total unemployment in the country; the balance 75 percent being rural unemployment. What is not clear (this is a point of considerable doubt) is the extent to which rural unemployment had fallen as a result of the post-77 economic reforms and the higher domestic economic activity that followed.

(d) All evidence points to a decline in the growth of employment opportunities during 1984-87 and a rise in the level of unemployment in the country. Official estimates place unemployment at 1.1 million in 1987 or 18% of the labour force.

1/ The Finance Minister in his budget speech for 1988 stated as follows:- "there is no doubt whatsoever that we made considerable headway on the employment front during the period 1978-82. Unemployment was reduced from 26 per cent to 12 percent in these four years - a tremendous achievement for any country."

income inequality is the Gini Coefficient, an increase of which indicates a rise in inequality. As seen in Table 4, the Gini coefficient increased from 0.41 to 0.52 during 1973-82, an increase of 27 per cent. The implication of this change is seen in two clear developments namely (a) a noticeable decline (by 21 per cent) in the income share which accrued to the bottom 40 per cent of the households and (b) a rise in the share which accrued to the top 10 per cent of households, by as much as one-third. Very preliminary evidence available for the later years, indicates a possible continuation of rising income inequality even after 1982. The rise in unemployment, erosion of real wages and the relatively high inflation level (with its tendency to redistribute incomes in favour of profit earners) tend to support such a conclusion.

4. Conclusion

Improvement of the physical infrastructure, and the expansion of the service industries and the textile garments industry constitute the conspicuous achievements of the post-77 period. The economic growth process was heavily biased towards the service sector. Export-led growth was largely rhetorical, at best a hope unrealised. Despite the spectacular expansion of new industrial exports, given their low domestic value-added content, export structure (measured in net foreign exchange contribution) has not undergone a fundamental change. Agricultural exports continued at virtual stagnant levels without a positive growth trend. The policy reforms were not followed through to their logical conclusion, namely to create a positive bias in favour of export orientation. The real Exchange Rate appreciated during a good part of this period owing to high domestic inflation, creating a bias against the export sector.

While the state chose to invest heavily (using aid and loans) in physi-

cal infrastructural improvements, the preferred field of investment of the private enterprise was mercantile activity of some sort. The state was not successful in enhancing the relative profitability and attractiveness of industry vis-a-vis mercantile activity. Vigorous pursuit of a clear-cut industrial development policy and strategy was clearly lacking.

Besides the proliferation of mercantile activity, the growth of a sizeable 'black economy,' became a marked feature of post-77 years. The existence of a black economy rendered macro economic management difficult and introduced an inflationary bias into the economy.

The outcome of the failure to achieve an export-oriented growth pattern was the continued dependence on foreign loans and aid to sustain the liberalised economy and a sharp increase in the external debt service ratio (to absorb more than a quarter of the export earnings in recent years) - both of which are unsustainable in the long-term.

The service-biased growth pattern has clearly benefited employment expansion in the urban sector, the conspicuous beneficiary being the city of Colombo. But it has failed in meeting the aspirations of the rural youth population particularly in the Southern districts where the unemployment rates have continued at levels higher than in 1971. Import liberalisation created an adverse impact on rural incomes particularly in the Jaffna district - an economic loss without a compensation. Such conditions contributed to an aggravation of social tensions under the liberalised economy.

Besides the regional disparities in the distribution of benefits under the liberalised regime, there was a worsening of relative income inequalities. The bottom 40 per cent of the households were the losers and the top 10 per cent were the conspicuous gainers. The poorest of the poor (the bottom 20 per cent or so) may have even suffered absolutely, that is in nutritional terms.

EMPLOYMENT CONSEQUENCES OF ALTERNATIVE STABILIZATION ADJUSTMENT MEASURES: THE CASE OF SRI LANKA, 1970 - 1985.

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This is a revised version of a paper presented by Purnima Rajapakse of the Institute of Social Studies, Hague and at present on a consultancy assignment with the local Institute of Policy Studies. This paper was read at the Institute of Policy Studies Project Research Seminar on Employment and Unemployment issues, on February 11-13, 1988. The first half of the paper which dealt with the conceptual issues has been kept out for reasons of space.

THE ECONOMY AND EMPLOYMENT

Structural Features of the Sri Lankan Economy

Perhaps the single most striking feature of the Sri Lankan economy when compared with other countries of similarly low per capita income is the social progress made in such areas as literacy, health, life expectancy, mortality, population growth, and nutritional levels. Apart from this, however, Sri Lanka shares with its fellow LDC's a number of structurally retarding features.

Sri Lanka thus has a large agriculture sector which accounts for around 1/3rd of GDP and 2/3rds of employment; a relatively weak manufacturing sector accounting for some 15% of GDP; a small construction sector; a large service sector much of which comprising labour intensive activities with relatively low productivity; and a large informal sector comprising of around 20% of the total labour force and complementing the activities of the formal sector.

The dynamic of Sri Lanka's economic system - its growth and development potential - has tended to be greatly influenced by the export sector, comprising of mainly three primary commodities (tea, rubber and coconuts). Not only do export earnings provide the foreign exchange needed to buy certain basic consumption goods and the intermediate and capital goods necessary for any industrialization strategy, it has also provided the bulk of the government's revenue (through export taxation). The

problem for Sri Lanka with this structural over dependence on the export sector is that export earnings and the government's revenue base have been severely constrained by a tendency for its terms of trade to deteriorate. This means that the country is continually confronted with a choice between growth and mounting balance of payments and budgetary problems (problems which are compounded by the fact that the government is the biggest investor and importer of intermediate and capital goods), and no growth at all.

Macro Trends, 1970-1985

In considering the period 1970-1985 a distinction is usually made between the sub periods 1970-1977 and 1978-1986 since they were characterized by different governments with quite divergent policy regimes which had important implications for the structure and dynamic of the economy.

The effort to make domestic incomes less vulnerable to fluctuations in the country's terms of trade and the need to provide employment to a growing population led pre 1977 governments to promote industrialization based on import substitution. To this end quantitative restrictions on imports, a high tariff structure and, a dual exchange rate was established to encourage the creation of domestic industries. This process of state sponsored industrialization which began in the mid 1950's continued well into the 1960's and 1970's. During this period the foreign owned plantations, oil, transport, insurance and banking sectors were nationalized, and the state became the country's largest producer. Between 1970-1977, the government increased its presence throughout the economy, especially in the management of economic resources, with many prices being administered, and production and consumption being subsidized. By 1977 over 6,000 items were under price controls, and the extent of the coverage of subsidies meant that transfers under this heading came to account for around 23% of total government current expenditures.

During 1970-1977 the GDP growth rate fell from 4.4% in the previous decade to 2.9%. The sluggish growth performance during this period had to be explained by the acute scarcity of foreign exchange brought on by the poor performance of traditional exports due to deteriorating terms of trade for much of this period and, the fact that import substitution industrialization

7/ This is particularly so in the case of import substitution industrialisation since, structural changes brought on by this method of industrialisation is not costless as it inevitably brings on an acceleration in domestic inflation and to the extent that manufactured exports do not expand adequately to meet the new demands for imports brought on by such industrialization, an acute foreign exchange crisis. An acceleration in inflation comes about through a combination of factors such as: recurrent devaluations, as a consequence of continuous pressure being maintained on the exchange rate; import substitutes being more expensive than the goods they replace due to higher factor costs per unit of output, under-utilization of plant, and bureaucratic delays; upward pressure being exerted on factor costs in other industries partly because of the example set by the new comers, and partly because such factors have become more scarce and; strains appearing on the infrastructure of the economy due to the increased demand by the import substituting industries.

did not lead to a sufficient expansion of industrial exports to meet the new demands for imports of that sector. Moreover, the welfare and other claims on the stagnant earnings of the traditional export sector meant that the industrial sector could not adequately rely on the earnings of traditional exports to finance its import requirements. During this period capacity utilization in industrial plant averaged only 60%. A further consequence of the scarcity of foreign exchange was low domestic savings and this, coupled with the absence of any significant foreign capital inflows meant inadequate capital formation.

These factors together led to a rise in the rate of unemployment, much of which was concentrated among the educated and younger age groups. External factors such as deteriorating terms of trade were also seen to play a key role in the instability problems (i.e. inflation and current account imbalances) of this period (See Table 1).

1978-1985 by contrast has been characterized by a liberalisation of the economy. The development strategy initiated in late 1977 gave priority to export led growth, a reduction in the role of the state in the economy (and a corresponding increase in that of the private sector) and, to the expansion

of market forces in the allocation of resources. To this end there has been a reduction in price controls and subsidies, an elimination of quotas and their replacement by tariffs, a unification and devaluation of the exchange rate, a considerable relaxation of controls on foreign exchange transactions, incentives for foreign investment, the opening up of domestic trade to the private sector, and the recourse to interest rates for allocating credit.

When compared with the preceding period, 1978-85 reveals a GDP growth rate of 5.6% as against 2.9% and an increase in the level of invest-

TABLE 1
SELECTED STABILIZATION INDICATORS, 1970-1985

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Money supply (M) (Rs.Mn.) ^{1/}	3114.8	3434.9	3974.0	4153.9	4568.1	4757.0	6320.9	8716.8	10892.1	15057.6	19860.2	24446.8	30509.9	37256.8	43427.3	48408.9
Domestic Credit	4175.3	4480.5	4935.8	4811.9	5828.4	6232.8	7269.1	8796.1	10575.2	15113.8	25635.9	33824.2	42412.0	49806.7	49952.1	59226.1
Credit to Public Sector (Rs.Mn.)	3151.4	3367.7	3709.7	3450.8	4148.0	4373.0	4985.7	5890.6	5900.7	8175.2	14463.0	18570.7	23015.3	23740.9	20270.2	26089.8
Private sector Credit Expansion (Rs. Mn.)	1024.4	1108.6	1241.0	1372.5	1613.7	1839.6	2266.3	2884.2	8712.2	12193.4	16663.9	21035.1	25261.8	32273.6	35397.7	38534.7
Budget Deficits (Rs.Mn.)	936	1072	1082	1084	1298	2218	3044	2117	6001	7609	14774	13259	17479	16581	13633	18778
Govt. Cap. Exp.	812	742	888	1175	1410	1978	2671	2093	5266	7347	12680	11757	15886	16667	20963	23342
GDP Deflator (% change) ^{2/}		2.0	2.9	16.2	26.2	12.3	5.8	18.0	7.7	15.7	18.2	20.5	9.9	14.6	17.0	1.7
Colombo Cost of Living Index (% change) ^{2/}		2.7	6.3	9.7	12.3	6.7	1.2	1.3	12.1	10.8	26.1	18.0	10.8	14.0	16.6	1.5
Import Price (Index (% change))		6.3	5.9	33.3	75.0	16.7	-10.2	22.7	65.2	52.0	42.8	30.0	9.6	21.4	10.7	10.6
Trade Balance (Rs.Mn.)	-316	-287	-255	-298	-1263	-1421	-710	+350	-2393	-7288	-16312	-15616	-20403	-20168	-11850	-19328
Imports (c.i.f.) (Rs.Mn.)	-2332	-2218	-2153	-2644	-4663	-5334	-5417	-6290	-15600	-22570	-33915	-36123	-41501	-45206	-49048	-54710
Terms of Trade Index	100	92	89	77	68	55	74	96	94	68	55	43	36	42	47	37

1/ & 2/ (See following page)

Source: Compiled from data in Central Bank Annual Reports, and World Bank Sri Lanka Country Economic Memoranda

ment from 15% to 27% of GDP. These increases were made possible however not due to any appreciable expansion in exports, but, due to massive capital expenditures undertaken by the state and funded by an unprecedented (for Sri Lanka) volume of foreign (mainly official) finance, due to inadequate national savings.

Moreover, while increased growth resulted in a fall in the rate of open unemployment, the increased extraversion of the economy at a time when world market forces have been particularly disruptive has meant that growth was accompanied by mounting instability problems (See Table 1). In a bid to correct these imbalances, the government, with the active support of the IMF has launched a programme aimed at cutting its expenditure (especially investment expenditure) and strengthening the incentive framework through such measures as a depreciation of the exchange rate. This in turn has recently led to a slowdown in the rate of economic growth and an increase in open unemployment.

Though satisfactory data are lacking, there are grounds for suggesting that recent growth has not been able to resolve problems of poverty. In fact with the recent slow down in the rate of growth there are increasing signs that the incidence of poverty has become more widespread, income distribution deteriorated, and welfare and nutrition levels fallen (Khatkhate, 1982; Nicholas, 1984; Nicholas, 1986; UNICEF 1985; World Bank, 1977; World Bank 1978; World Bank 1986; World Bank 1987).

Employment: The Magnitude of the Problem and Policy Issues

In the 1970's unemployment was a key political issue in Sri Lanka. It could hardly have been otherwise given the highly visible link between open unemployment, particularly amongst the educated youth, and the 1971 insurrection. The issue, after having disappeared from the political agenda for a while has, due to the present social unrest in the country, once

again reappeared as a politically explosive issue.

The roots of the employment problem go back many years. Slow economic growth brought on by low levels of investment due to the scarcity of foreign exchange in the 1970's was accompanied by an increase in the level of open unemployment, which, based on the 1971 Census figures was projected to have increased from 18% of the labour force in 1971, to over 20%, or one million unemployed by 1977. Apart from slow economic growth, the ILO's influential 1971 study on unemployment in Sri Lanka also identified a "serious mismatch" between the job aspirations of those with post-primary education and the jobs available to them. The study argued for labour market reforms and educational reform to bring the two into line. Other important causal factors for the high levels of open unemployment included: the post-war demographic bulge that followed the eradication of malaria and; rising female participation rates, due to the rapid increase in female education; the financial need to work; the higher age at marriage and; reduced fertility (ILO, 1971; Irvin, 1986; World Bank, 1978).

As noted above, the rapid economic expansion after 1977 led to part of the unemployed backlog being absorbed. This was made possible by a growth pattern biased towards relatively labour intensive sectors (services, construction, paddy and garments). The liberalization of the economy has however also had negative employment consequences. In particular the increased availability of imported commodities has affected small scale labour intensive import substituting industries, many of which were located in the informal sector. A well known case is that of handlooms. Estimates prepared by the Ministry of Textile Industries indicate that out of 111,000 handlooms in the country at the time of liberalization, about 30,000 had ceased to function by 1980. The net effect on employment is moreover

likely to have been positive in the years immediately after 1977 especially since the large outflow of Sri Lankan labour to the Middle East during that time, and the out-migration of a significant number of plantation workers of Indian origin resulted in the labour force participation rate declining. There are however increasing signs that this positive impact has not been maintained in recent years since a number of factors that pushed past employment growth have lost their dynamism. The initial high growth rates in construction activity reflected the rapid expansion in the level of investment (in particular public investments in the accelerated Mahaweli Program and housing schemes and, tourist hotel construction). However with no new large scale, long gestation public schemes being planned, and with the hotel industry exhibiting chronic under utilization of capacity due to the current unrest in the country, construction activity has recently declined sharply. In terms of services, the recent expansion of the financial sector and trade was largely a catching-up exercise after the opening up of the economy, and increased domestic demand caused by the increase in public investment. Further growth here will depend on a continued high level of economic activity. In paddy, self sufficiency is within reach at existing per capita consumption levels, and since export prospects for Sri Lankan rice is poor, acreage increases and the intensification of production appear limited. Moreover employment in paddy during the post 1977 period consisted mainly of resetting existing workers on newly irrigated lands. Growth in the garment industry is being constrained by import quotas imposed by the developed countries. In terms of labour out-migration there are obvious limits to the repatriation of plantation workers of Indian origin, while slower growth of the Middle Eastern economies have meant a decline in demand for migrant workers and, in fact, there has been a significant re-migration of Sri Lankan nationals back to Sri Lan-

ka in recent years.

Due to these negative developments it is estimated that unemployment, which decreased to about 14.7% of the labour force in 1981, had increased to 16.2% by 1986.

Although the issue of a structural mismatch between jobs demanded and offered and the ensuing labour market segmentation may still be pertinent, this study is of the opinion (as will be demonstrated in the following pages) that the main problem of unemployment is the need to create more jobs. For instance, although industrial capacity utilization increased from 60% to 70% between 1977 and 1978, reflecting the release of the import constraint, capacity utilization has since grown very slowly averaging 73% by 1980. Since the supply of labour is determined to a large extent by longer term demographic trends, the main task must therefore be to stimulate the demand for labour through macro-economic policies. A crucial factor in employment generation is therefore the level of investment.

The impact of wages on employment generation does however appear to be more ambitious than what is suggested by orthodox theory. During 1970-77 for instance minimum real wages in the organized private sector increased by 47% while nominal wages increased by 113%.⁸ Employment in the organized private sector (based on Employment Provident Fund active accounts data) during this period increased by 15%. During 1978-85 on the other hand nominal wages increased by 161% while real wages increased by only 7%, reflecting the decontrol of prices during this period (see Table 6) The number of new active accounts with the EPF in the same period increased by 37%. The increased incidence of private sector employment generation during the latter period cannot however be attributed to a lower rate of real wage increases brought on by lower nominal wage increases (the rate of nominal wage increases in fact rising as between the

TABLE 6

Interest Rates

Year	Nominal Interest Rates on savings & 12 month fixed deposits (average) (percentage per annum)		Rate of Inflation percentage change in GDPD	Real Interest Rates ¹	
	NSB	Commercial Banks		NSB	Commercial Banks
1971	7.5	4.75	2.0	5.5	2.75
1972	7.5	4.75	2.9	4.6	1.85
1973	7.5	4.75	16.2	-8.7	-11.45
1974	7.5	4.75	26.2	-18.7	-21.45
1975	7.5	7.25	12.3	-4.8	-5.1
1976	7.5	7.25	5.8	1.7	1.45
1977	15.0	14.5	18.0	-3.0	-3.5
1978	15.0	14.5	7.7	7.3	6.8
1979	15.0	14.5	15.7	-0.7	-1.2
1980	20.0	20.0	18.2	0.8	0.8
1981	20.0	21.0	20.5	-0.5	0.5
1982	20.0	19.0	9.9	10.1	9.1
1983	20.0	21.0	14.6	5.4	6.4
1984	18.0	18.0	17.0	1.0	1.0
1985	15.0	15.0	1.7	13.3	13.3
1986	13.0	11.25	5.1	7.9	6.15

1. The difference between the nominal interest rate and price increases for a year gives the real rate.

Source: Compiled from data in Central Bank Annual Reports, and World Bank Sri Lanka Country Economic Memoranda.

two periods), but rather to better expectations of profitability. For instance during the boom period of 1978-80, despite the fact that both nominal and real wages were increasing sharply, the number of new active accounts with the EPF recorded its highest rate of increase for the entire 1978-

85 period. On the other hand during 1970-73 when nominal and real wages were held near constant, the pessimistic business expectations prevailing during that time meant that private sector employment generation recorded its lowest increase for the 1970-77 period.

8/ These figures are from Irvin (1986) and Korale (1985). The 1981 figure of 14.7% has been estimated by Korale from The Labour Force & Socio Economic Survey (1980-81), The Census of Population (1981) and, the Consumer Finance & Socio Economic Survey (1981-82), taking into account shortcomings in the sampling techniques and survey design used in those studies. The 1986 figures have been projected by Irvin from a 1981 base.

9/ Since no complete or consistent set of time series data are available for market clearing wages, minimum wages have been used here instead. Since the latter is set by Wages Boards which are in turn influenced by the government, minimum wages cannot be considered to be equivalent to market clearing wages. The use of minimum wages is however justified since what is being aimed here is only the illustration of certain salient characteristics of labour demand over time. Minimum wages in the public sector have not been used here to analyse the public sector demand for labour since the latter is also clearly influenced by non economic criterion.

EMPIRICAL CONSIDERATION OF EMPLOYMENT CONSEQUENCES OF PUBLIC EXPENDITURE, THE PRIVATE SECTOR RESPONSE, EXCHANGE RATE ADJUSTMENTS, PRICES AND INCOME POLICIES

The State's Role in Employment Generation

Monetarists would attribute the improvements shown in the rate of economic growth and employment creation in the years following liberalization in 1977 to precisely those liberalization measures undertaken, while the slowdown in the rate of growth and increased unemployment in recent years would be attributed to a loss of momentum in carrying forth further policy reforms. These include: the need to improve the overall incentive framework, particularly through further tariff reform and a more realistic exchange rate policy so as to lead to a more diversified export base; and the containment of public spending so as to release resources to the private sector and bring about a more "sustained growth".

Despite the admitted significant degree of liberalization since 1977, the driving force behind the relatively high rates of economic growth and employment generation in the subsequent years was not exports or market forces (the former providing only 60% of the foreign exchange required by imports during 1978-85), but rather massive capital investments undertaken by the state. Although the level of domestic saving during this period rose (as a result of falling real wages and a change in the wage-profit share in national income), this has not been enough to match the expansion in investment. The difference has been met by foreign savings. Thus, as a percentage of its own total expenditure, a total which has also risen massively, capital expenditures undertaken by the state have risen from an average of 28% in 1970-77 to around 44% in 1978-85, while as a percentage of GDP (at current market prices) it has risen from an average of 6.3% to 14.7% bet-

ween these periods. The state's role in the growth process is also evident from the fact that a slowdown in the rate of expansion of government investment expenditure since 1980 has been accompanied by a corresponding slowdown in the rate of growth of the economy in real terms from an average of 6.8% during 1978-80, to 5.2% during 1981-85 (See Table 2). Despite lower economic growth during 1970-77, the high levels of public sector employment creation (in relation to the available capital stock) during this period could perhaps suggest a more labour intensive development strategy than that adopted in the subsequent period (See Table 3). These employment figures moreover need to be interpreted with a certain amount of caution since quite apart from the fact that public sector employment generation since 1970 was from a low initial base, the nationalization of agricultural lands during this period tended to greatly inflate figures. In the subsequent period between end 1977 and end 1980 the rate of growth of employment in government and semi-government institutions was 12.6% and 24.6% respectively, while the corresponding rate of growth during 1981-85 was 4.5% and -4.0% the latter category decreasing by -5.0% between 1983-85 (See Table 3). Although to a certain extent, the creation of public sector jobs (especially those in clerical and allied grades) during the 1970's and early 80's could have been due to the need to provide immediate relief to alleviate the unemployment problem, the subsequent growth in employment in the public sector was mainly the result of the growth in public investment. This is illustrated by the fact that between 1970 and 1975 (prior to nationalization of the plantations) 89,969 new jobs were created in semi-government institutions whereas this figure was 168,684 for the period end 1977 to end 1983. Despite the increased recruitment of defence personnel (as reflected in the increased rate of growth in government sector em-

ployment since 1983), the decline in employment from the public sector as a whole in more recent years could be attributed to the completion of some large public investment projects such as the Mahaweli and the fact that they have not been followed up by new large-scale long gestation schemes. Moreover the present policy of streamlining the public sector as reflected in the current round of budgetary cuts and factory closures suggests that employment in this sector has already peaked. This much appears to be confirmed from Table 3. Given existing policies this means that in future the burden of domestic job creation will fall increasingly on the private sector.

The Private Sector Response

Inadequate and incomplete data precludes any definitive statement concerning private sector employment creation. There are however indications that the performance of this sector as a supplier of jobs has been insufficient given the leading role ascribed to it in the country's economic development. The inadequate performance of the private sector cannot however be attributed to it being crowded out by the public sector. During 1970-77 for instance, credit to the private sector increased by 182%. Whereas credit to the public sector increased by 87%. Between end 1978 and end 1985 on the other hand, credit to the private sector increased by 1049% while public sector credit expansion was only 343% (See Table 1). Moreover, during 1970-77 the steady decline in public sector capital formation was accompanied by a corresponding decline in private investment. A similar situation occurred during the 1980-85 period. As indicated in Table 2 private sector capital formation as a percentage of GDP has been steadily declining (since 1980) at a time when the state's involvement in the economy is being reduced as a conscious policy objective. The decrease in private investment activity since 1980 was in spite of the increased availability of Central Bank refinance (which enabled

commercial banks to grant loans to priority sectors at low interest rates) The recent slowdown in private sector demand for credit for productive purposes is the result of increased uncertainty in the future prospects of the economy due to the lower rate of economic activity and increased political unrest. In the absence of a significant demand for investment finance, the high private sector borrowing during the 1978-85 period could be explained by the deteriorating terms of trade caused by the 271% rise in import prices which fed into domestic inflation. It is also revealing that despite all the encouragement given to the expansion of the private sector, private investment as a percentage of GDP in the post liberalization period has not shown any significant improvement over the preceding 1970-77 period. This is perhaps an indication of the fact that despite the scarcity of foreign exchange, certain private sector concerns (especially industrial concerns) benefitted from the incentive structure (such as the dual exchange rate system) that prevailed during that period. As noted earlier while employment in the organized private sector appear to have increased by 31% as between end 1977 and end 1985, the number of active accounts has increased by only 3% during the period 1981-85. Data from the Greater Colombo Economic Commission (GCEC) show that while employment in enterprises coming under it (mainly in the FTZ) has increased from 261 persons in 1978 to 45,047 persons in 1986, over 80% of it are in the textile, wearing apparel and leather products category. Future employment prospects from this source however remains in doubt, given the quota restrictions faced by Sri Lanka in these lines of production.

The informal sector in Sri Lanka is characterized by a paucity of information. It is unclear as to whether the informal sector, which is responsible for a substantial portion of employment generation, benefitted from economic liberalization. While it is clear that employment generation in such

activities as private transport and wholesale and retail trade have increased quite considerably since liberalization, as noted above, it is equally clear that increased competition from liberalization also led to the closure of a large number of small scale enterprises producing for the domestic market. These enterprises, although inefficient in a number of respects, were nevertheless labour intensive.

Exchange Rate Adjustments

Since 1977, the Sri Lankan rupee has depreciated by almost 45% in nominal terms against the currencies of

its major trading partners (on a trade weighted basis)¹¹. However, due to relative international price movements the real exchange rate appreciated more or less continuously for much of this period with only the sharp nominal depreciation of the rupee in 1986 against the SDR (brought on by maintaining the rupee rate vis-a-vis the declining US dollar) leading to a depreciation of the real rate (by 3%) for the first time since liberalization (See Table 4). Moreover, if one looks at the real exchange rate movement relative to the US dollar of Sri Lanka's main competitors, the devaluation of the rupee that would be required to res-

11/Since 1983 the rupee has been set relative to the trade weighted bundle of currencies of its main trading partners. The countries included in this bundle are the US, UK, West Germany, France, Japan and India, and the weights given to each are 0.2462, 0.1761, 0.1276, 0.0507, 0.3083, and 0.0911, respectively.

TABLE 4

Index of Real Trade Weighted Exchange
Rate Movements
(Foreign Currency per unit rupee)

	end 1977	end 1980	end 1983	end 1985	end 1986
Nominal Trade Weighted Exchange Rate	100	76.9	69.9	62.6	55.2
Domestic Consumer Price Index (DCPI)	100	170	241	276.3	296.4
Foreign Consumer Price Index ¹	100	125	155	166.3	170.6
Real Trade Weighted Exchange Rate ²	100	104.6	109	104	96.6

1. This is obtained by taking the consumer price index of the selected countries and trade weighting them to obtain a composite index.
2. The real exchange rate is defined as the nominal trade weighted exchange rate in terms of foreign currencies, multiplied by the domestic consumer price index and divided by the composite foreign consumer price index.

Source: IMF, International Financial Statistics

tore the competitive position of Sri Lanka's exporters relative to that of its competitors would be around 11%

The appreciation of the rupee for much of the post 1977 period would, according to the monetarists, have been a major contributing factor in the lack of buoyancy of exports during the period, and in a slower rate of employment generation than what would have occurred under a more realistic exchange regime. The World Bank economic report for 1986 even queries the sufficiency of bringing the real exchange rate to its 1978 level, citing the deterioration in the terms of trade and loss of profitability of Sri Lanka's traditional exports, the increased scarcity value of foreign exchange due to the much higher debt service, and the fact that Sri Lanka's competitors have depreciated their currency, at much higher rates than Sri Lanka.

In terms of tree crops, given their low supply elasticities, devaluations are unlikely to bring about an immediate increase in export volumes. Even if it is assumed that tree crop supply elasticities are higher than had been supposed, devaluations while not affecting the world price level, will nevertheless stimulate domestic production further and lead to a further deterioration in the terms of trade, given that the initial deterioration was due to world over production. This in turn could have negative employment consequences not only in the tree crops sector but also for the rest of the economy, given the adverse effect terms of trade deteriorations have on foreign exchange availability. The role played by exchange rates in the stimulation of other exports and related employment are also unclear. An analysis of the export sector reveals that the products that have shown the fastest growth since liberalization have been petroleum re-exports and garments. The growth of these two product categories however had very little to do with the exchange rate structure, with the expansion of garment exports de-

pending on the quota allocations given to Sri Lanka. Within this context it should also be noted that the growth of other FTZ exports and employment also had far more to do with factors such as the investment incentives

part in the capital intensive production structure that emerged in the agriculture sector since it enabled the government to subsidize the increased cost of imported inputs that resulted from the depreciation of the rupee.

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given, than to exchange rates. Moreover, both the petroleum and garment industries have developed very poor linkages with the rest of the economy, with the former in particular having a minimal impact on employment generation. It is also misleading to attribute the growth in the service and construction sector (i.e. non-traded goods sector) to an over valued exchange rate. The growth of these two sectors stemmed from an increase in domestic demand caused by the massive increase in public expenditure.

Despite the appreciation of the real value of the rupee vis-a-vis other currencies for a greater part of the post liberalization period, it is unlikely that the true cost of importing capital goods was, as a consequence, so undervalued that it brought about, as suggest in Table 7, a three-fold increase in the capital intensity of production and thus prevented a more labour intensive production structure. Furthermore, during 1978-85, the volume of imported capital goods increased by 113% despite their obviously greater cost brought on by the nominal depreciation of the rupee. Perhaps a better explanation of this phenomena could be found in the fact that imports of investment goods are more responsive to the availability of foreign exchange, than their price. As noted above, during the 1978-85 period foreign exchange of an unprecedented volume has been made available to the country. The availability of foreign exchange also appeared to play a major

The impact of the dual exchange rate system, applicable during the 1970-77 period, on employment generation is less straight forward. While the existence of dual rates in conjunction with high import controls appear to have provided the private sector with adequate incentives to develop import substituting industries, the ability of these industries to satisfy the needs of the domestic market have however been constrained by their own dependence on imported inputs of limited availability. This in turn has led to instability problems. Moreover, in some instances the domestic market has been limited by the scarcity of complementary imported goods (for instance, the demand for tyres was limited by the ban on imported cars). Although inadequate data precludes any definitive statement, there appears to be no evidence to suggest that dual exchange rates brought on a more capital intensive production structure than the subsequent export led industrialization. In fact, the data from Table 7 suggests the reverse. If one uses imports of capital goods as a proxy for capital intensive investments, the volume of capital goods imports then increased by only 15% during 1970-77 whereas as noted above it increased by 113% during 1978-85. Although this could be attributed to the chronic shortage of foreign exchange that characterized the 1970-77 period, given the shortage, the dual exchange rate appeared to ration foreign ex-

change effectively to prevent excessive imports of capital intensive consumer goods and capital and intermediate goods that are labour saving, like two-wheel tractors and weed killers. During 1970-77 for instance, the volume of "other consumer goods" imports (excluding food, drink and textiles) increased by 9% whereas in the subsequent 1978-85 period it increased by 202%.

Prices and Incomes Policy

In analysing the employment consequences of the prices and defacto wages policy (whereby public sector wage increases were kept small with priority given to the increase in wages of the lower paid) of the earlier government of 1970-77, it would be necessary to investigate whether such policies brought on a more stable rate of growth of inflation and incomes and whether this in turn encouraged capital formation. Although it is generally acknowledged that the government's prices and income policy succeeded in narrowing income differentials, as seen from Tables 1 and 2, prices were not stable during the 1970-77 period and capital formation steadily decreased in both the private and public sectors. Other factors such as the deteriorating terms of trade and the availability of foreign exchange (or rather the lack of it) seemed to play a far more important role in determining the behaviour of prices and (in the absence of adequate domestic savings) capital formation. Moreover the introduction of a compulsory savings scheme together with a ceiling on incomes in the early 1970's (essentially to increase domestic savings), at a time when the government had imposed strict controls on its own expenditure, led to a further deterioration in economic activity with no concomitant increase in domestic savings.

Concluding Remarks

While the liberalization measures in-

roduced since 1977 such as the release of the import constraint did have a positive growth and net employment effect, it appears that this led to a once-and-for-all increase in economic activity. This is evident from the fact that a contraction of the public sector has been accompanied by a slowdown in the rate of growth of the whole economy. Within this context it could thus be argued that any adverse effects the budget deficits might have had on inflation and the current account balance needs to be set against the resulting benefits in terms of growth and employment, for there is no doubt that the latter have been the direct result of the massive capital expenditure programmes of the government.

It was also seen that the poor performance of the private sector during the 1970-85 period could not be attributed to it being crowded-out by the public sector. Moreover other stabilization policy instruments such as a continued depreciation of the exchange rate were not effective in changing the structure of production from a capital intensive to a more labour intensive one, while there is some evidence to suggest that a system of dual exchange rates is more effective in this respect. The employment consequences of a prices and incomes policy however appear to be more ambitious.

From the analysis of this paper it is evident that despite the significant degree of liberalization, the economic strategy actually implemented during the post-1977 period could, in fact, be better described as a type of right-wing Keynesianism, characterized by a leading role for the state in the accumulation process, and an erosion, in real terms, of social welfare expenditure. In this respect it warrants remarking that the development strategy adopted in 1978-85 was not, in essence, dissimilar to previous ones, especially if one allows for differences

in the amount of external assistance made available.

Given the fact that the gap between labour force growth and domestic job creation is likely to widen in the near future (especially in the context of negative net-migration as more temporary migrant workers to the Middle East will be returning than departing), recent studies have estimated that in order just to stabilize the rate of unemployment at its current level would require maintaining the investment share in GDP at its present level. As seen above, despite the increased role given to the private sector in generating growth and employment, its performance to date has been insufficient. In the present unsettled international environment and the state of unrest in the country it is unlikely that private sector activity (especially investment activity) will expand significantly in the near future. While one is not defending the inefficiencies of the public sector, in the absence of an adequate private sector response, the present policy as reflected in the 1987-89 stabilization programme, of curtailing public investment to bring about a "more sustainable growth" is problematic in that it is leading to a steady erosion of the productive base of the country in an environment where there is nothing to replace it.

Monetarist stabilization policies certainly cannot be regarded as costless in the short run. Even this much appears to be recognized by the World Bank which says in its 1986 economic report on Sri Lanka that: "It is unclear whether this adjustment can be made without disrupting the growth process and plunging the economy into recession". Moreover it appears that the "short term" stabilization measures that are recommended appear to be affecting the production structure of the economy in such a way that it will lead to long term costs.

Economic Policy and Agricultural Performance in Low-Income Countries

Christian Morrisson and
Hartmut Schneider

The disappointing performance of the agricultural sector in many low-income countries, in particular in Africa, is characterized by output levels which are insufficient to meet the competing demands for food, raw materials and export earnings. OECD's Development Centre has just finished an analysis of six countries (Burkina Faso, Kenya, Mali, Nepal, Sri Lanka, Tanzania), which goes beyond technical factors to consider the economic stimuli and disincentives that have affected the sector over the longer run.

In the early 1970s the world witnessed a paradoxical situation in which a Malthusian fear of worldwide food shortages coexisted with the promising prospects held out by the "Green Revolution" (a technological breakthrough of high-yielding cereal varieties). The global situation has now clearly shifted to massive food surpluses, resulting from sustained output growth in the North and from sometimes spectacular increases in food production in certain developing countries, especially in Asia. However, vigorous agricultural growth is far from being general in poor countries. Considerable differences exist not only among but also within countries, for example where one agricultural subsector has flourished (e.g. rice in Sri Lanka, cotton in Mali) while others have stagnated or declined.

The countries studied by the Development Centre were chosen for the characteristics they share: a low level of income, high dependence on agriculture and, in the case of neighbouring countries, similar natural conditions and approximate size of population. Since their differences lie mostly in the area of policies and institutions, the effects of different measures in an otherwise relatively similar natural and socio-economic environment can be traced and explained over a long period during which policy regimes and economic conditions changed more or less radically.

The approach followed is based on the idea that agricultural performance in a given country depends on three sets of

factors: exogenous constraints such as drought and the decline of the world market price for a major export crop; structural change brought about by governments; and macro-economic and agricultural policies pursued. A better under-



In Nepal, marketed farm production dropped after the government lowered real prices.

standing of the respective but related effects of constraints and policy decisions is necessary to assess the efficiency of various policies and to find ways of reducing certain constraints. The case studies show that in certain countries a combination of constraints, structural reforms and policies can lead the agricultural sector into a cumulative process of either decline or prosperity.

Structural Change

Of the six countries covered in this study, Sri Lanka and Tanzania have introduced particularly far-reaching reforms in their agricultural sectors. In Sri Lanka, the reform affected the bulk of its production of crops for export: two thirds of the area under tea, one third of the area under rubber and 10 per cent of the coconut area were nationalized in the early 1970s. Initially, this measure adversely affected private investment in these crops; subsequently it gave rise to numerous management problems. Performance suffered because of the lack of the necessary skills and administrative capacity in addition to the diseconomies of scale arising from the organization of the nationalized land under two huge state corporations.

The most radical reforms were intro-

duced in Tanzania. As from 1973, farmers were obliged to resettle in villages, which resulted in the movement of nine million people and the creation of 8,400 villages. The object of that exercise went beyond agrarian reform; its purpose was to transform the living conditions of the entire rural population. In fact, it contributed to a decline in agricultural production during the 1970s since, among other things, it increased the distance between farmers' fields and their homes. In particular, marketed production of cereals fell at an annual rate of 10 per cent and the volume of

export production at 7 per cent, as farmers gradually moved back towards a subsistence economy.

Government Intervention

The state controls the marketing of agricultural products to some extent in all of the countries under consideration, but the degree of control varies from one to another. Public intervention is the rule for export crops. Publicly-owned agencies usually have a monopoly on the purchase of producers' output (either directly or via private intermediaries at official prices fixed by the government) and its resale abroad. In principle, these public agencies intervene to stabilize domestic prices. Sometimes they offer efficient extension services to producers, such as for cotton in Burkina Faso and Mali. But they also play a fiscal role by retaining for the government 20 to 50 per cent of the export price (net of transport and marketing costs), thus acting as the principal instrument of a fiscal policy which can jeopardize the development of these crops.

Government intervention is usually more limited in the marketing of food crops. In only two of the countries studied did the governments try to impose complete control all the way from producer to consumer. This was the case in Mali from 1960 to 1968 and in Tanzania after 1973 when private food trade was outlawed. This policy had adverse effects in both cases: a decline in the volume marketed, the development of a black market, difficulties in meeting urban needs, and so on. More often, governments try to follow a dual pricing policy, with a guaranteed but low price for producers and a subsidized price for consumers. Experience shows that this kind of policy tends to fail. The burden of subsidies gradually becomes unbearable (in 1977 it reached 16 per cent of public expenditure in Sri Lanka), while producers reduce their sales at the official price and turn to the parallel market. If, however, the government limits its objectives to a relative stabilization of prices on urban markets through an institution which sells from its stocks when prices exceed a given ceiling, it can succeed in reducing price fluctuations, which is, of course, desirable.

Taxation of Farmers

The idea that agriculture should — in poor countries where it is the dominant sector — provide resources for the development of other sectors is widely advocated by economists and often applied by governments, if necessary by force. To create this flow of resources, the government can introduce a direct toll or income tax, but this tends to be inefficient in rural areas. Hence, governments use various indirect



In Tanzania, resettling farmers in new villages, which involved uprooting nine million people, did not produce the benefits expected.

taxes: for example, export taxes, levied by public agencies with marketing monopolies, mark-ups on transport and processing. All these measures result in imposing on producers prices which are lower than the price (net of transport and marketing costs) they would otherwise receive and thus in worsening the internal terms of trade in the short run (between agricultural products and manufactures). It should be noted that a long-term decline in the terms of trade may result from the modernization of agriculture, leading to an increase in yields and marketed output.

In a situation of rapidly increasing supply, market forces (competition among producers) induce a flow of resources from agriculture to non-agricultural sectors at increasingly lower prices in terms of non-agricultural products. However, to increase production capacity in the agricultural sector in the same way, the government must first channel resources into agriculture in the form of inputs, irrigation facilities, research and loans, and combine these flows with appropriate institutional measures and price policies conducive to increased productivity. It is only after such a phase of government-supported development that a decline in the terms of trade in favour of the non-governmental sector will take place automatically. This trend can then possibly be reinforced by the government through indirect taxes and other levies.

The experience of the six countries studied shows that agriculture is often

burdened with resource transfers to other sectors before it has benefited from a government-assisted development process, with the result that the agricultural sector may fail. The effects of government policies can be measured by the change in the internal terms of trade, i.e. agricultural prices in real terms, or by drawing up the balance sheet of positive and negative transfers between agriculture and government.

Comparative analysis shows that marketed production stagnates or declines when the government reduces real agricultural prices, be it to increase levies or to reduce consumer prices. Food production was depressed in this way in Tanzania and Nepal. Export production was similarly affected in Tanzania after 1973 and in Sri Lanka after 1965. The case of Tanzania is particularly interesting since in neighbouring Kenya during the same period, the same crops developed fast due to a favourable price policy (between 1972 and 1980, the real price of agricultural products in Kenya increased by 5 per cent while it decreased by 27 per cent in Tanzania).

The only case of a decline of real prices without negative consequences on marketed production is that of cotton in Burkina Faso and Mali. In these two countries, the real price declined due to increased levies, but because of the substantial support given to this crop from the 1960s onwards, technical progress has led to a very fast increase in yields. Consequently, net income per hectare has risen substantially in real terms, despite the decline in the price of cotton. This rise stimulated producers and brought about the growth in output. This example supports the conten-

tion that government cannot impose increased rates of taxation on cash crops without first encouraging an increase in acreage and/or yields and a modernization of production methods.

Macro-economic Interdependence

If a bottleneck occurs anywhere in the macro-economic system, it tends to be transmitted to other variables throughout the system. Thus, if agricultural output stagnates or declines, the repercussions on the rest of the economy and the balance of payments are likely to engender a feedback cycle of cumulatively worsening performance. Tanzania provides a notable example of such a vicious cycle throughout the 1970s and particularly in recent years.

On the *real* side, a production shortfall limits exports and hence foreign exchange earnings, and thereby restricts a country's capacity to import. The restricted level of imports limits industrial capacity utilization and the availability of imported inputs for the agricultural and transport sectors. The low level of industrial capacity utilization constrains the production of consumer goods and inputs for the agricultural sector, and this in turn reduces incentives for farmers and limits potential productivity gains in agriculture. In addition, the production shortfall calls for a higher level of food imports which further restricts the availability of foreign exchange. On the *financial* side, an inflationary spiral is triggered by growing shortages which lead to increased sales at higher prices on parallel markets. Inflation is simultaneously fuelled by public agencies' growing deficits.

Although there are many possible causes of such a cumulative process – some clearly outside the control of the policy maker – the neglect of agriculture by government (often on the pretext of needing resources to speed up the industrialization process) appears to be the principal one in poor developing countries. The relatively large resource flow syphoned off from agriculture (with minimum resources moving in the opposite direction), the establishment of new institutions more on ideological than on economic grounds (e.g. the village development programme), the introduction of a variety of quantitative control mechanisms and the replacement of private production and distribution channels by public agencies all constitute disincentives to agricultural production.

It is clear that both external and internal constraints can reinforce the cumulative deterioration in agricultural performance. Thus, worsening external terms of trade may further compound the balance of payments crisis. In some instances, the

vicious cycle may even be triggered by external constraints such as a sudden upsurge of import prices or worsening export prospects. These shocks can be amplified if the authorities decide that the agricultural sector should carry the full burden of the adjustment process and deprive it, for example, of its necessary inputs.

All the sample countries exhibited instances of such cumulative deterioration – albeit not to the same degree and extent as Tanzania. When an economy is in the midst of a vicious cycle it is difficult to change it into a virtuous one. Reversing the cumulative process typically requires discrete as opposed to incremental changes in the policy environment and multiple points of entry – which means a package of institutional-cum-policy measures which simultaneously affect different links of the cycle.

Appropriate Institutions and Policy Packages in Different Settings

One important lesson derived from the compared experiences of the sample countries is that specific institutions and policy measures are likely to be ineffective unless they are reinforced by a set of complementary measures. The combined effects of a package of consistent and complementary institutions and policy measures on various developmental objectives (including the utilization of the agricultural surplus) are likely to be much greater than the sum of the individual measures.

In the case of essentially subsistence crops (e.g. millet and sorghum in the Sahel countries and maize in East Africa and Nepal), total production, as opposed to marketed production, is affected much more by natural constraints and by the institutional environment (provision of inputs, output marketing, credit, extension services, etc.) than by policy variables such as prices and subsidies. The first objective, therefore, should be to ease the constraints (e.g. through soil conservation measures, increasing the area under irrigation or introducing seed varieties more resistant to drought). The institutional framework on both the production and distribution sides should be designed to encourage and facilitate the marketing of the subsistence crops.

Should the above conditions not be met, the use of price policies *per se* could lead to serious conflict. If farmers' total production is significantly less responsive to price signals than their sales (marketed production), residual consumption out of their own production could fall, leading to undesirable nutritional consequences. Alternatively, if the conditions are met and production is thereby encouraged, then the use of

more conventional policy variables, such as regulating prices and subsidizing inputs, can constitute an increasingly important stimulus to subsistence farmers' income, and ease the transition to market orientation without diminishing the availability of food out of own production. These general rules were confirmed by the case of rice production in Nepal and Sri Lanka (where it is a key foodstuff) and in the Sahel countries (where it is only a minor product).

On the whole, it appears that those regimes which relied more on a mixed economy approach than on an extreme one fared better in terms of both agricultural and overall economic performance. It would, of course, be simplistic to impute poor performance exclusively to the political system and prevailing ideology. A few lessons may nevertheless be drawn from the compared experience of the countries studied. The following elements appear to have contributed to poor performance:

- distrust of the role played by prices and other producer incentives, such as the ready availability of consumer goods and inputs in rural areas
- reliance instead on quantitative adjustment mechanisms (e.g. rationing of fertilizer, quota systems to regulate deliveries by farmers, unrealistic controlled prices)
- identification of industrialization with development, resulting in policies that discriminate against agriculture.

One general lesson which flows from the comparative study is that government has to encourage agricultural development at an early stage through appropriate institutions and policies. In other words, instead of channelling resources out of agriculture at the outset of the development process, the authorities should help recycle whatever "agricultural surplus" is available within the sector itself – for example, reinvesting revenue from agriculture in irrigation and other services for farmers. Thus, during the early stages of structural transformation, the agricultural sector should be seen as an engine of growth in its own right rather than as a source of surplus on which the rest of the economy can draw.

Once agriculture has taken off on a path of sustained growth, a more or less automatic transfer of the surplus towards non-agricultural sectors will occur without, or with a minimum of, government intervention as a result of the fall in internal terms of trade brought about by technological progress and market forces. Such a relatively automatic transfer will help finance non-agricultural development on a continuing basis, whereas a forced transfer imposed from the outset by government may throttle the development of both agriculture and non-agriculture. ■

THE ECONOMICS OF TEA PRODUCTION IN SRI LANKA

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The extracts reproduced here, from a paper based on an economic research study of Sri Lanka's tea industry, conducted during 1983 and 1984, deal with "tea production economics in practice" and "proposals for Sri Lanka's tea industry".

The first section of the paper which covers "tea production economics in theory" and involves a brief foray into economic theory as it applies to tea production is excluded for reasons of space. This section raised certain issues on ways of achieving and measuring profitability on particular tea estates; including controllable and uncontrollable inputs, short term and long term activities, and field and factory activities.

TEA PRODUCTION ECONOMICS IN PRACTICE

In response to the questions posed in the first section, this section has three parts which cover in turn the technical features of tea production, conclusions based on the estate specific efficiency ratings, and finally several detailed estate performance predictions.

Technical features of tea production

a) Economies of scale

As more of all inputs are used in a production process, output can generally be expected to increase but this increase may not always be in a direct proportion. For example, a doubling of all inputs will not necessarily result in a doubling of output. In their simplest form then, economies of scale refer to the ratio of change in the quantity of output following a given hypothetical change in the quantity of all inputs. Identically, economies of scale are often measured as changes in average cost (in common tea parlance, C.O.P.) as production levels change.¹⁷

Economists usually believe that, at low levels of production, a given increase in all inputs will result in a greater corresponding increase in output so that economies of scale are said to be increasing. At a certain level of production, this relation is reversed however and economies of scale are said

to be decreasing when further increases in all inputs result in smaller corresponding increases in output. In average cost terms, when economies of scale are increasing, the C.O.P. is falling when economies of scale are decreasing, the C.O.P. is rising so that average costs have a "U" shape. In this scenario, an ideal size for a production unit is one associated with the output level where economies of scale change from increasing to decreasing or similarly, at the point at the bottom of the "U" where the C.O.P. is lowest.

For field activities, my research showed quite conclusively that green leaf production followed this classic scenario of economists and that optimal production is associated with estates in the 300 to 400 hectare range with 400 hectares, if a specific size need be chosen, as probably being ideal. Estates of less than 300 hectares could clearly become more efficient by simply being larger. Above 400 hectares, this situation is the opposite and estates are increasingly inefficient simply because of their

size. In graphic terms, and if all costs were considered, estates between 300 and 400 hectares would, on average, have lower C.O.P. figures in the field than other estates.

By extrapolating this result at the low end,¹⁸ it may seem reasonable to conclude that plantation production of green leaf is more efficient than smallholder production. However, if smallholders employ a different technology than plantations in their production of green leaf, then such an extrapolation is not legitimate. A conclusive answer to this question would require a study including both smallholders and plantations on a comparable basis.

In the factory, the pattern for economies of scale differed considerably from in the field. Factory economies of scale were apparently increasing at all levels of production and in fact, the factory in my study with the largest measure for economies of scale was also the factory with the largest drying capacity (775 kgs of made tea per hour). This implies that as factories become larger, they also become more efficient simply due to their size. It is impossible to conjecture if, or at what size, this increasing efficiency stops. Nonetheless, building huge factories in order to obtain optimal economies of scale would probably not be wise since supplying sufficient quantities of green leaf to them would in turn become a problem. Optimal factory size then is likely not a question of economies of scale but rather of available green leaf within a transportable distance.

b) Effects of price changes

During the past thirty years, average staff wages in the tea industry have increased three times while average labour wages have increased ten times. Moreover, in a complex and sometimes volatile world economy, tea prices in Sri Lankan rupees can fluctuate dramatically from year to year.

¹⁵. In the context of tea production, an increase in inputs means not only labour, vehicle kilometrage and so on but also land area and factory capacity.

¹⁷. Since prices and many other factors may differ between estates, a direct comparison of the C.O.P. figures for large and small estates will rarely reveal any apparent economies of scale. Furthermore, examining costs may obscure the fact that economies of scale derive essentially from the technology of production.

¹⁸. The smallest estate in my study was 90 hectares.

It's often thought however that price changes have little effect on production and that technology or land area largely determine the amount of tea which an estate can produce and how much of each input will be required to produce it. In other words, inputs and outputs are tied in direct proportions. If this were true, then as made tea or input prices changed, profits and costs would be affected directly. A tea estate could do nothing in the face of changing prices other than the numbers on its account sheets change.

My research showed conclusively that this perception of tea production is false. In fact, tea estates are responsive to price changes and they adjust the "mix" of inputs and outputs in order to account for different relative prices. These adjustments are summarized in Appendix B at the end of this paper.

For example, on any given estate, if made tea selling prices were to increase by 10% - while holding all other prices and uncontrollable inputs constant - tea output would increase by 9.5%. To achieve this, the estate would increase fertilizer usage by 11.9%, field labour by 13.7%, electricity consumption by 13% and so on. On the input side, if field labour wages were to increase by 10%, tea output would decline, for example, by 5.5% and field labour employment by 8.9%.

There are three key points to consider when examining these percentage changes in quantities caused by price or wage changes. The first point is that they isolate effects to a single price change while other prices are assumed to remain constant. The second point is that they are short term changes in that all uncontrollable inputs like estate land area and factory size are assumed constant. The third point is that the larger the single price change is, the less precise are the predicted quantity changes. For example, if tea prices were to double overnight (a 100% increase), it's unlikely that tea output would increase by 95%. However, a smaller, more realistic increase in selling prices of 20% would likely mean tea output would go up by 19%.

Nevertheless, it should be obvious that declining production figures over the last twenty years for Sri Lanka's tea industry are in part explained by lower relative tea selling prices and higher labour wages. In a similar vein, government edicts to raise tea worker wages, Ceylon Electricity Board tariffication policies and tea export duty changes, to mention only a few possibilities, all have effects on the amount of tea produced and input requirements in the tea sector. These effects can be estimated generally from the table in Appendix B.

Efficiency ratings and correlation to socio-economic factors.

Efficiency ratings were calculated

for all of the estates for which I had information and are shown in Appendix A. The rating is the ratio between actually observed short term profit and the short term profit predicted by the parameters based on prevailing conditions. In essence, these conditions amount to the information listed on pages 8 and 9 and so efficiency in this sense refers to variations in profits due to factors other than those listed.

The best rated estate was Stafford in 1982 when its observed profit was almost 2.5 times greater than predicted. At the other extreme, the nine most inefficient year-end results had negative ratings because their observed short term profit was in fact negative.

Appendix B

Price Change Effects on Tea Production

100% change in: % change in quantity of:	Made tea selling price	Electricity price	Factory labour wage	Packing material price	Fuel price	Fertilizer Price index	Field labour wages	Supervisory staff wages	Vehicle driving costs
Made tea output	94.5	-4.8	-2.2	-6.9	-5.2	-11.1	-55.4	-6.7	-2.5
Electricity consumed	130.4	-28.6	-1.9	-7.5	-9.7	-12.1	-60.8	-7.3	-2.7
Factory labour employed	79.5	-2.5	-0.2	-23.4	0.2	-7.9	-39.4	-4.7	-1.8
Packing materials used	109.5	-4.3	-10.2	-10.6	-5.3	-11.6	-58.1	-7.0	-2.6
Fuel consumed	83.0	-5.7	0.1	-5.4	-20.9	-7.5	-37.6	-4.5	-1.7
Green leaf produced	93.1	-3.7	-1.9	-6.2	-3.9	-11.3	-56.9	-6.8	-2.5
Fertilizer put out	118.7	-4.7	-2.4	-7.9	-5.0	-10.7	-81.3	-3.8	3.0
Field labour employed	137.0	-5.5	-2.7	-9.2	-5.8	-18.7	-89.4	-5.0	-0.9
Supervisory staff employed	100.7	-4.0	-2.0	-6.7	-4.3	-5.3	-30.9	-40.8	-6.8
Vehicle distance driven	172.7	-6.9	-3.4	-11.5	-7.3	-19.7	-24.6	-32.0	-67.4

Twenty one results showed profits which were within 10% of predicted profits.

The average efficiency ratings for private estates was .99; for SLSPC estates .72 and for JEDB estates .50.

than that on average, they could be as efficient as private estates or as inefficient as JEDB estates.

In a similar vein, I compared three individual estates when they were under private and public (JEDB)

years: .36).

Furthermore, it would appear that the reason for any differences in efficiency between nationalised and private estates is essentially in the field and not the factory. Average efficien-

Table 1

Table 2

	Annfield Estate 1966-67 Private Efficiency Rating: 20th			Dessford Estate 1981 SLSPC Efficiency Rating: 6th		
	Actual Quantity	Predicted Quantity	Price (rupees)	Actual Quantity	Predicted Quantity	Price (rupees)
Made tea output (kgs)	540,340	442,285	17.83	174,938	177,787	3.93
Electricity (kwh)	375,354	297,352	1.198	72,230	119,907	.074
Factory labour (names)	13,677	13,302	16.26	6,894	7,505	3.06
Packing materials (full chests)	10,457	8,071	73.73	2,864	2,986	9.26
Fuel (litres)	232,858	162,796	5.793	101,455	51,756	.116
Estate green leaf output (kgs)	1,922,751	1,737,215	2.982	724,946	749,423	.852
Fertilizer (kgs)	159,129	166,961	4.240	88,932	98,780	.704
Field labour (names)	203,240	175,038	15.96	94,114	102,723	2.82
Supervisory staff (man-months)	558	457	966.65	229	199	341.84
Vehicles (kms)	43,830	42,050	2.205	7,865	10,778	.567
Bought green leaf (kgs)	253,142		2.808	16,169		.518
Total mature area (hectares)	353.11			143.56		
Estate condition index	882.62			845.50		
Rainfall index	133.22			226.88		
VP area (hectares)	49.33			0.00		
Factory dryer capacity (kgs/hour)	400.00			227.00		
		<u>Actual</u>	<u>Predicted</u>	<u>Actual</u>	<u>Predicted</u>	
Total profit (rupees)		1,577,089	1,027,732	202,550	190,763	
Field profit (rupees)		1,178,837	1,143,477	206,960	205,474	
Factory profit (rupees)		398,252	-115,745	-4,410	-14,800	

Although these averages are suggestive of relative efficiency, one should be careful in interpreting them. In fact, only the differences between the efficiency ratings for JEDB and private estates were large enough and occurred often enough for a firm conclusion to be made. In the case of SLSPC estates, little can be firmly said other

ownership. There were no significant differences between the efficiency ratings under private and public ownership for Frotoft and Mousakellie estates. However in the case of Annfield, it was clearly more efficiently operated as a private estate (average rating over four years: .94) than as a nationalised estate (average rating over three

cy ratings based on field profit observed and predicted showed the same ordering as for overall profit: private, SLSPC, JEDB with private estates being significantly more efficient than JEDB estates and SLSPC estates falling on average somewhere between the two. In the factory, the average ratings were in descending order:

SLSPC, private, JEDB although there was no solid consistency to this pattern which would allow for a firm conclusion.

Generally speaking, the age of a superintendent was tied positively to

ration of estates where the job of superintendent changed hands during the production year (average efficiency rating: .33) and estates where the same person occupied the position for the whole year (average rating: .66). In par-

diture was vaguely connected to efficiency, lacking other evidence, my suspicion is that efficient estates tend to make better profits and in turn spend some of the money on their workforce. This suspicion is based on the

Table 3

Table 4

	Mocha Estate 1981 SLSPC			Efficiency Rating: 52nd		
	Efficiency Rating: 45th			Gonapitiya Estate 1982 JEDB		
	Actual Quantity	Predicted Quantity	Price (rupees)	Actual Quantity	Predicted Quantity	Price (rupees)
Made tea output (kgs)	386,971	419,740	23.25	664,616	685,664	22.10
Electricity (kwh)	405,033	314,667	1.149	466,624	492,487	1.554
Factory labour (names)	10,842	13,078	16.63	17,442	17,042	20.14
Packing materials (full chests)	7,167	8,093	74.03	13,426	13,144	74.16
Fuel (litres)	192,566	189,601	5.76	296,906	339,765	1.175
Estate green leaf output (kgs)	1,544,126	1,724,929	4.308	2,625,289	2,819,516	4.203
Fertilizer (kgs)	142,033	180,628	3.659	289,877	286,800	5.083
Field labour (names)	198,991	208,008	15.475	338,641	312,872	19.24
Supervisory staff (man-months)	439	433	927.14	654	677	1,011.25
Vehicles (kms)	41,811	52,647	2.414	107,136	81,921	2.835
Bought green leaf (kgs)	81,721		2.808	49,709		3.312
Total mature area (hectares)	273.00			536.00		
Estate condition index	844.07			698.45		
Rainfall index	93.64			127.70		
VP area (hectares)	39.00			78.00		
Factory dryer capacity (kgs/hour)	425.00			472.00		
		Actual	Predicted		Actual	Predicted
Total profit (rupees)		2,376,574	2,853,126		3,144,900	4,107,613
Field profit (rupees)		2,544,785	3,022,684		2,076,410	3,452,550
Factory profit (rupees)		-168,211	-169,558		1,068,490	655,063

an estate's efficiency rating, although this connection was not strong enough to be definitive. As a result, it would not be fair to say that older (and presumably more experienced) superintendents are better at their work than younger ones. A more significant tie between superintendents and efficiency was apparent in the compa-

particular, a change in superintendent had a clear and significantly negative effect on efficiency in field activities.

Data on worker welfare measures such as estate residents per linerroom, residents per latrine and estate welfare expenditure per worker showed no clear correlation with the estate efficiency rating. Although welfare expen-

fact that more direct measures of worker welfare (e.g. linerroom and latrine crowding) showed no consistent relationship at all with efficiency.

The exception perhaps to this welfare/efficiency connection was the percentage of workers having obtained Sri Lankan citizenship which proved to be positively associated with an

estate's efficiency!¹⁹ This implies that a more secure workforce is a better workforce.

Performance predictions for five estates.

* In order to demonstrate the estimated parameter's ability to work as an analytical tool after the production year (or rather, as a backward looking budget model), I chose five estates more or less at random to make predictions of optimal profit, controllable input quantities and output of made tea. The five tables in the following pages summarize these predictions alongside the actually realized quantities and profits as well as observed prices.²⁰

Examining the first table for Dessford estate in 1981 which placed sixth amongst the 87 year-end results for overall efficiency, the additional profit over predicted was essentially made in the factory (a surplus of 500,000 rupees). This was achieved with an observed made tea/green leaf out-turn ratio of 4.03 which compares with a predicted ratio of 4.50. While this greater production required more of all controllable factory inputs than predicted, the extra cost was easily compensated by greater revenues. This was not the case for field activities where an overproduction of green leaf involved extra costs leaving actual field profit virtually identical to predicted field profit.

In Table 2, predictions are shown for Annfield estate when it was under private ownership in 1966-67. Placing twentieth for over all efficiency, Annfield's better than predicted profit, as with Dessford, was essentially made in the factory (a surplus of 10,000 rupees at 1967 values).

This extra factory profit was achieved as well with a slightly better made tea/green leaf out-turn ratio than predicted. Although observed electricity and fuel consumption were considerably different than predicted, these differences did not seem to influence

performance unduly. Lastly, while observed green leaf production in the field was smaller than predicted, an efficient use of field inputs left observed field profit almost identical to predicted field profit.

Table 3 presents predictions for

Table 5

Kelliewatte Estate 1981 JEDB Efficiency Rating: 81st

	<u>Actual Quantity</u>	<u>Predicted Quantity</u>	<u>Price (rupees)</u>
Made tea output (kgs)	162,498	173,581	17.22
Electricity (kwh)	111,430	132,456	1.137
Factory labour (names)	7,831	6,974	16.38
Packing materials (full chests)	3,384	3,211	72.58
Fuel (litres)	163,452	110,512	2.202
Estate green leaf output (kgs)	471,787	501,568	3.054
Fertilizer (kgs)	50,758	49,821	4.170
Field labour (names)	60,073	52,507	15.47
Supervisory staff (man-months)	222	164	911.53
Vehicles (kms)	9,712	6,100	5.345
Bought green leaf (kgs)	247,676		2.642
Total mature area (hectares)	112.50		
Estate condition index	873.79		
Rainfall index	142.96		
VP area (hectares)	24.28		
Factory dryer capacity (kgs/hour)	148.00		
		<u>Actual</u>	<u>Predicted</u>
Total profit (rupees)		-111,978	391,497
Field profit (rupees)		45,823	330,260
Factory profit (rupees)		-157,801	61,237

Mocha estate in 1981 which placed forty-fifth in the overall efficiency ratings. Mocha had a realized factory profit about equal to predicted factory profit, however field profit was 500,000 rupees less than predicted. This occurred principally because of insufficient field input usage, notably fertilizer, which led to an under-production of green leaf by 180,000 kilograms.

19. In the years 1980-82, a large percentage of workers on the estates I studied were still without citizenship. With the recent legislation of the Sri Lankan government however, the present situation may well be very different. Over and above domestic political concerns, this legislation should have the effect of improving efficiency on estates too.

20. Note that the price given to estate green leaf is the imputed price as described above in this paper. Note too that figures may not sum precisely because of rounding and that overall profits and costs as indicated here may vary substantially from estate accounts because of the definition of short term cost.

Table 4 shows the results for Gonapitiya estate in 1982 which placed fifty-second in overall efficiency. In this case, realized field profit was about 1,400,000 rupees less than predicted while a surplus of 400,000 rupees in the factory left overall observed profit 1,000,000 rupees less than predicted. This inefficiency in the field is clearly evident by the over-utilization of almost all field inputs but with a green leaf output over 200,000 kilograms short of predicted. The extra profit in the factory was achieved essentially with a better made tea/green leaf out-turn ratio and an efficient use of factory inputs.

Table 5 presents predictions for Kelliewatte estate in 1981 when its rating was eighty-first for overall efficiency. Kelliewatte's inefficiency is apparent in a deficit between observed and predicted profits in the factory of over 200,000 rupees and in the field of almost 300,000 rupees. The overall deficit was 500,000 rupees.

As with Gonapitiya estate, Kelliewatte used more of every controllable input in the field than predicted yet produced 30,000 kilograms less green leaf. (Predicted green leaf output per hectare was a relatively low 4,460 kgs/ha. Kelliewatte has over 20% of its total mature are in VP tea).

This inefficiency was carried into the factory where more of every controllable input, except electricity, was used than predicted to produce less tea. In particular, actual fuel consumption was 50,000 equivalent litres greater than predicted.

PROPOSALS FOR SRI LANKA'S TEA INDUSTRY

1) In the previous section, I presented detailed analyses for five estates in various years based on predictions made with the estimated parameters. With few problems, similar tables could have been prepared for all of the other estates included in my study. If extended to all tea estates of the SLSPC and JEDB, such tables could become a part of the general administration of estates with two specific uses. Firstly, prior to the production year, educated guesses could be made at the

regional office level for prices of controllable inputs for the coming year. Then, combined with information on uncontrollable inputs for each estate and expected tea selling prices, estate specific estimates could be drawn up in a form similar to the tables shown. These estimates could offer a valuable third opinion for when the superintendent and the regional offices draw up the actual estate cost estimates.

Secondly, after the production year, given information on the conditions which actually prevailed on each estate, these "predictions" could be made again in order to determine how estates performed and why some had better results than others. Such an estate specific analysis could be very informative for superintendents and help them to correct any mistaken practices.

It's worth noting that the required data for such work is already contained in the Estate Monthly Accounts and few if any adjustments to them would be necessary. At most, a microcomputer at the regional office level would help in carrying out the calculations.

2) Other than providing an analysis after the production year of such key factors as input usage and tea produced, preparation of estate-wise tables would also provide an efficiency rating based on predicted and achieved profit. Such a rating could be used in the calculation of a performance bonus for superintendents. The rating suggested here is ideal because it takes into account the factors beyond a superintendent's control and measures him strictly on his own year-end performance. In this sense, a competent superintendent on a run-down estate with bad climatic conditions could well have an efficiency rating higher than an incompetent superintendent on an estate with superior conditions.

However the corporations may decide to calculate a performance bonus, there is little doubt of its need. Superintendents are key individuals in tea production and if competent, they should be properly rewarded

as an incentive. Because of the bureaucratic nature of the present industry, an ad hoc system of bonuses as was used in the agency houses days is probably unworkable now. Performance bonuses must be calculated by a fair and open method so that everyone knows who received what and why. This is the sort of policy change which could have dramatic effects on productivity.

3) An organization of the industry along lines suggested by the economies of scale would result in estates of about 400 hectares producing green leaf and then large central factories manufacturing the green leaf into made tea. Since green leaf cannot be transported more than 20 or 30 kilometers without damage, factories would have to be strategically located amongst the estates and their dryer capacity determined by available green leaf in the region. In fact, this is somewhat the way the Kenyan tea industry is organized with smallholders supplying large factories.

Given Sri Lanka's existing tea industry, it would be impossible to reform radically the present arrangement. However, certain efforts could be made to move in the right direction. For example, rather than investing in equipment for small factories, it would be wiser to shut them down and invest the funds in a larger nearby factory which could then be used to manufacture the leaf instead. If necessary, the smaller estate could keep its selling mark even though the manufactured tea would no longer be coming from its own factory. Similarly, if any plans are made for shifting boundaries of estates, as much as possible, they should lead to the creation of estates between 300 and 400 hectares.

4) For a period in 1980, Sri Lanka had a most enlightened electricity tariffication policy which was unfortunately changed losing its economic sense. There are good reasons for returning to a modified version of the previous policy.

In effect, because of the seasonal nature of the monsoon, cheap

hydroelectricity is available for about half the year and expensive hydrocarbon based electricity for the other half. This seasonal difference in electricity generation cost led to the Fuel Recovery Charge (FRC) which was initially adjusted on a post monthly basis. Then, because of understandable complaints about after the fact price changes, the Ceylon Electricity Board simply applied an average FRC for the whole year.

The results of my research show that, at least for tea production, electricity demand is responsive to electricity prices. In specific terms, a 10% increase in the price of electricity will result in a 3% decrease in tea factory electricity consumption. This is important because a scarce resource like electricity should be used wisely and the best way to do this is by letting the price indicate its rarity.

Therefore, the CEB would be advised to return to perhaps to FRC changed every six months and based on a reasonable six month prediction of electricity generation costs. With such an FRC in place, tea estates at least would decrease consumption and make efficient use of expensive electricity generated with imported fuel.

- 5) In 1980, export duties applied to tea yielded 1,920 million rupees in revenue for the government. If, as has been estimated, the tea sector employs directly 700,000 workers (estate and non-estate) then this export duty revenue represents a tax of 2,700 rupees per worker. An extremely liberal estimate of annual wages in 1980 for a tea worker would be about 5,400 rupees (270 days at rupees/day). Therefore, the export duty on tea is equivalent to an income tax rate of 33% applied to those workers who are amongst the poorest in Sri Lanka. Is this fair?
- 6) Export taxes applied to tea do however have a well justified place in the government's fiscal policies. Given the important role that Sri Lankan tea plays in the world tea market and the distinctive nature of its quality, it is likely that Sri Lanka can control to some extent

the foreign price of its own tea. With such control, Sri Lanka could act as a monopolist by raising prices, reducing production, and so making a monopolist's profit. An export tax on tea, by raising the price and reducing demand, has the effect of doing precisely this and the monopolist profit will be the government revenues from the export tax. While this may not be in the interest of foreign tea consumers and will mean a lower tea output, the export tax revenue will more than compensate for lost sales and so it is certainly to the advantage of Sri Lanka as a whole. Such a policy however requires information about the shape of the demand curve (in technical jargon, the demand elasticity) for Sri Lankan tea which is crucial for determining the optimal size of an export tax. A tax too high will needlessly choke off demand and not only mean a suboptimal level of tea production but also a lower gross revenue for the government from the export tax. Alternatively, a tax too low is a pecuniary gift to foreign tea consumers which otherwise could find its way into the government's coffers.

Although incidental, Saudi Arabia effectively applied such a policy with oil in the seventies and early eighties through OPEC. However, the possibility of a tea cartel of even a commodity agreement with other producers is next to non-existent and the lessons of the tin market should be illustrative for those who think otherwise. Monopoly profits obtained through an export tax are still possible though based solely on Sri Lanka's own power in the market which could be determined by an econometric study of the demand for Sri Lankan tea.

- 7) There remains another source of revenue for the government through taxation of the tea industry and this consists essentially in collecting any economic rents. In ordinary circumstances, these rents would be collected through the profits made by the corporations and paid to the government. There may be certain

practical difficulties though in ensuring that any profits actually find their way to the government. For this reason, a form of land tax to capture the most important rent associated with land might be more appropriate. In my study, I determined that, on average in 1981, the imputed yearly rent for a hectare of seedling tea was 6,900 rupees and for VP tea 9,400 rupees. These are average figures for developed land while an economic rent is more properly based on undeveloped land and will vary from estate to estate. Nevertheless, a land tax to collect the economic rent could be approximated by these figures.

- 8) The imputed rents noted above are better suited to another purpose beyond that of a government land tax. Since they represent the amount estates would be willing to pay yearly, if they had to, for another hectare of land, these rents implicitly give an idea of land's value. For example, with an annual real interest rate of 5%, the value in 1981 of a hectare of seedling tea would be 138,000 rupees and of VP tea 188,000 rupees. In this sense, if the cost of procuring and replanting a hectare of land is less than these amounts, then investment in tea land will be profitable. Similar comparisons could be made with diversification projects. It is imperative to bear in mind though that these are average figures in 1981 rupees.
- 9) If the heads of the two tea corporations are party to government discussions about price changes which may effect the industry, they should willingly use the statistics of Appendix B to defend their case about repercussions on tea production. Similarly, the Ministry of Finance should make use of them in the preparation of the government's budget so that some idea can be had of the net effect on revenue of any tax changes. Given the relative size of the tea industry, any large statistical models of Sri Lanka's economy require as well the information in this table if forecasts of any value are to be made.

10) One of the areas of tea production most sorely neglected by Sri Lanka's industry is the marketing of its own tea. Practically speaking, the industry's work stops at the auctions in Colombo where the large foreign blending and marketing firms take over. Unbagged tea is sold on the supermarket shelves of Europe and North America at prices (currently around U.S. \$ 9.00/Kg. or Rs 270/kg.) as much as eight times higher than those received by estates. Taxes, transport and distribution charges do not account completely for this spread.

More relevant perhaps is the fact that the distinctive features of Sri Lanka's tea are lost when blended with inferior teas from other countries. This is justified in the name of a consistent superior taste throughout the year. However, would French vineyards for example permit their wine to be mixed with other wine to maintain a consistent so-called superior taste?

Finally, Sri Lankan tea faces competition not only from other tea producers but also from coffee, soft drinks and all beverages. Compared to the competition, the tea industry devotes little if any effort to promoting and marketing itself despite the popular qualities of its product.

This is an extremely complicated problem but a good start would be the creation of aggressive marketing strategies for the two main markets of Sri Lankan tea: the Middle East and the developed West. At least in this latter case, my feeling is that excellent possibilities exist for Sri Lankan tea to be marketed in ways similar to wine with specific identification to regions and even plantations in Sri Lanka. Increasingly, this is how coffee is marketed and it means premium prices for premium quality.

11) Sri Lanka exports 95% of its tea. This fact should not be forgotten because it means that the product of the industry has almost no social value for Sri Lankan society other than as an earner of foreign exchange. Any direct or indirect

subsidies to the industry are in effect subsidies to foreign tea consumers. In this sense, the industry should be run on a strict albeit long term profit basis with at most a consideration for using domestic inputs as much as possible. Since wages make up the largest part of production costs, the domestic value added in tea is already high. In a mercantilist sense, this is one reason that it's good industry for Sri Lanka's economy.

12) Given the present nationalised structure of the industry, it is possible to have, and indeed there should be, a clearer definition of the roles of the superintendent and the regional offices. Given his position to control the day-to-day operations of an estate, a superintendent should have for principal task to ensure that they are carried out efficiently. The control of the long term development of an estate is better left to the staff of the regional offices who, working with the superintendents under their purview in order to obtain basic information, can determine the long range investment strategies for each individual estate. These roles should be more clearly defined and respected. Too often superintendents have to deal with the regional offices for minor affairs which are purely operational in nature. As well, the regional offices don't seem to make proper use of their strategic position to budget investment funds efficiently amongst estates.

13) The Estate Monthly Accounts form one of the most important informational links in the administrative chain of command of the tea industry. Since they were the basic source of data for my research, I spent a considerable amount of time going through them, verifying numbers, and comparing the accounts of different estates. Although confusion abounded, it's to the industry's credit that extremely rarely did I find errors and never did I find a case of illegality. This may come as surprise to some. The accounts contain a wealth of information which unfortunately is seldom put to good use. The fundamental problem, in my view,

is the practical impossibility of comparing the performance of different estates through their accounts. While some see in this a justification for a drastic simplification in the accounts' format, I take an opposite view for several reasons. Firstly, office clerks are relatively easy to come by in Sri Lanka and their salaries are not extravagant. An extra clerk to compile the accounts, even in great detail, is not an expensive luxury. Secondly, if the accounts were to lack considerable detail, they would be impossible to understand and to verify. Like it or not, it's in the nature of estate offices to present basic information in their own way. The more aggregated the information is, the more likely they are to invent their own methods of calculation. For this reason, any hope for having accounts which are comparable between estates is doomed to failure if the format is drastically simplified. Thirdly, there is a bureaucratic inertia embodied in chief clerks and estate offices which is not an entirely bad thing. They are reticent to change simply for the sake of change and inevitably, attempts at radical change will lead to major confusion. Is the matter such a priority that it's worth it? Fourthly, if properly prepared, the details contained in estate accounts could form an important administrative tool for the regional and head offices.

Nevertheless, some serious reforms are required in the way information is presented in the monthly accounts although generally, these reforms should be less in the structure of the accounts and more in making what exists now work better. Two examples will serve to illustrate my point. Labour employed on estates and wages paid are calculated in many different ways (e.g. lent labour, cash plucking, overtime, contract work) which render almost impossible comparisons of total figures. However estates decide to present labour statistics, it should be clear how much labour was employed on the estate and what payments were made. Furthermore, three im-

portant types of labour should be distinguished: 1) Workers employed to produce tea (e.g. pluckers, factory labour); 2) Workers employed for worker's welfare (e.g. linerroom sweepers); 3) Workers employed for long term activities (e.g. replanting, infilling). Only by making these distinctions is it possible to examine the productivity of different estates on a comparable basis. Bought leaf presents similar problems of incomparability. Sometimes it's included directly in the accounts as another input of production while sometimes the manufacturing charges are deducted from factory costs. Regardless of how an estate receives outside leaf, the cost of manufacture should be included directly in the accounts; any charges paid by other estates should be included as a revenue and the made tea included as an output of the manufacturing estate.

These examples indicate the need for standardising the accounts. The current procedures of sending out circulars generally leads to confusing contradictions. One method to ensure standardisation would be a single comprehensive manual, written for chief clerks, which clearly indicates how to include various statistics in the accounts. However, implementing any viable method to achieve greater standardisation would pay dividends in improved information and decision making.

- 14) In the early days of nationalisation, one of the unfortunate problems for the tea industry was the undue influence of politics. Now, the greater danger seems to lie in the undue meanderings of the bureaucracy. This is clearly apparent in the too frequent changes of superintendents on estates when such changes are significantly correlated with estate efficiency ratings. Perhaps a different method for assigning superintendents to estates should be considered so that, once placed, a superintendent will not grumble about being shifted and the corporations will not be tempted to reconsider the appointment as a short term posting.
- 15) In my study, no differences were

apparent between domestic and imported tea chests which suggests that estates should buy whichever is cheaper. The same can be said of different types of firewood where no appreciable difference was apparent. In terms of rupees per kilocalorie though, firewood is much cheaper than liquid fuel. Where possible, estates should convert.

- 16) For the estates which performed poorly in the field, often the cause seemed to be an under utilization of fertilizers and pesticides. This occurred often enough that some rethinking should be done about this aspect of field work.
- 17) Prices paid for bought leaf were in almost every instance lower than the imputed price of the manufacturing estate's own green leaf. In other words, the value to the manufacturing estate of a kilogram of green leaf, which the imputed price represents, was higher than the price paid to green suppliers. While this was a welcome source of profit for the estates that bought green leaf, it is also grossly unfair to the green leaf producers who sold it to them and inefficient for the industry as a whole. Lacking any kind of market in green leaf, at present, an accounting formula is used to determine the price of bought leaf. Unless this formula has been radically changed recently, there is good reason to believe that green leaf producers are receiving as much as 50% less than they should.
- 18) While conducting my research, I was surprised to learn that there was no modern manual about the technique of tea production written for superintendents. Most technical matters, including even new ideas developed by the Tea Research Institute, seemed to be dealt with in off hand and informal discussions between superintendents. Often, I found that a superintendent working alone on an estate would experiment with different techniques with little knowledge of what had been tried elsewhere. While discussions and experimentation of this sort have their place, I think a comprehensive manual incorporating the latest research could prove to be an invaluable reference source

for many superintendents. In a similar sense, the training and education of young superintendents could be given a more rigorous basis.

- 19) The comparison of efficiency ratings between private and nationalised estates contains, I feel, an important lesson. Although it may seem reasonable to conclude that in the agency house days, estates were probably more efficient than they are now and this lower efficiency is probably caused by improper field activities, the specific comparisons - then and now - for Annfield, Fortoft and Mousakellie estates should not be ignored. In effect, it does not appear that nationalisation has been the direct cause of, or in every case led to, inefficiency. Rather, it appears that, for whatever reason, estates have been affected differently by nationalisation. Perhaps some estates have developed problems and under public ownership, these problem have been less easily rectified while other estates without problems have unaffected by the ownership change. Whatever the explanation, the implication for the industry is good. If efficiency were affected across the board by nationalisation, then this would suggest that there was something inherently wrong with it and the government would have to choose between a less efficient nationalised industry or some form of reprivatization. On the contrary, nationalisation has not meant across the board inefficiency and so it would be incorrect to conclude that something is inherently wrong. However, the present lower efficiency of some estates implies that changes in the administrative methods of the corporations could lead to important improvements in their results.
- 20) Lastly, it would be impossible for me to write of Sri Lanka's tea industry without mentioning the workers' living conditions which are noteworthy because they are so abominable. It may trouble the reader, but a few facts need to be recalled. The estate infant mortality rate is twice Sri Lanka's average while the maternal death rate is thrice. The percentage of people on

estates who have had no education is twice the percentage for the island as a whole. Sri Lanka's average literacy rate of 85% is only 60% for the estate sector. Too often, women give birth without knowledgeable assistance because of a lack of facilities, midwives or transportation to isolated line-rooms. While parents work, their preschool children are herded, 40 or more together, into a small room and barely supervised by one inexperienced adult. Where a school and teacher exist, older children

are taught in rotation and receive at most several hours of instruction per week.

In the words of one superintendent: "The average labourer has simple needs. If his roof doesn't leak and there is enough drinking water for his family, then he is happy". Unfortunately, the dates inscribed on the outside walls of linerrooms attest to their modernity while the boulders placed on their tin metal roofs attest to their sturdiness. The too frequent outbreaks of fatal dysentery are indicative

of the quality of the water supply. I'm well aware that estate living conditions are often excused by comparisons to the past and to local village conditions. However, these excuses beg the question. Sri Lanka's tea industry exists not only to earn foreign exchange but also to provide a livelihood for literally hundreds of thousands of people. There seems little point if this livelihood means a bare survival. The industry can and should offer more.

Appendix A

Efficiency Ratings

No.	Name of estate	Owner	Year	Actual profit Predicted profit	No.	Name of estate	Owner	Year	Actual profit Predicted profit
1.	Stafford	JEDB	1982	2.45642	44.	Frotoft	Private	1960	0.83736
2.	Nuwara Eliya	SLSPC	1981	2.07807	45.	Mocha	SLSPC	1981	0.83297
3.	St.Leonards	JEDB	1982	1.92824	46.	Mousakellie	Private	1952	0.82760
4.	Laxapana	SLSPC	1981	1.81711	47.	Talawakelle	SLSPC	1981	0.82216
5.	Brownlow	SLSPC	1981	1.54089	48.	Robgill	JEDB	1981	0.82023
6.	Dessford	SLSPC	1981	1.53453	49.	Dimbulla	JEDB	1981	0.81270
7.	Labookellie	Private	1972	1.53155	50.	Fordyce	JEDB	1981	0.79603
8.	Darrawella	JEDB	1981	1.48132	51.	Annfield	Private	1964-65	0.76865
9.	Maturata	JEDB	1982	1.47032	52.	Gonapitiya	JEDB	1982	0.76563
10.	Hapugastenne	JEDB	1981	1.46957	53.	Norwood	SLSPC	1981	0.75225
11.	St. Leonards	JEDB	1981	1.43645	54.	Wanarajah	JEDB	1981	0.74833
12.	Mousakellie	JEDB	1982	1.41607	55.	Glentilt	JEDB	1981	0.69618
13.	Eskdale	JEDB	1981	1.28710	56.	Kelliewatte	JEDB	1982	0.60629
14.	Mahacoodagala	JEDB	1982	1.26055	57.	Kirkoswald	JEDB	1981	0.60407
15.	Kenilworth	JEDB	1981	1.18006	58.	Gonapitiya	JEDB	1981	0.59567
16.	Moray	SLSPC	1981	1.16333	59.	Drayton	JEDB	1981	0.56417
17.	Tientsin	SLSPC	1981	1.12783	60.	Dickoya	JEDB	1980	0.55885
18.	Ingestre	JEDB	1981	1.09301	61.	Mount Vernon	JEDB	1980	0.55487
19.	High Forest	JEDB	1981	1.06748	62.	Annfield	JEDB	1981	0.55340
20.	Annfield	Private	1966-67	1.06229	63.	Mount Vernon	JEDB	1981	0.54063
21.	Uda Radella	SLSPC	1981	1.05636	64.	Bogahawatte	JEDB	1982	0.53871
22.	Frotoft	Private	1962	1.04450	65.	Vellai Oya	JEDB	1981	0.52728
23.	Annfield	Private	1967-68	1.04231	66.	Tillyrie	JEDB	1981	0.44993
24.	Talawakelle	SLSPC	1982	1.03324	67.	Craigie Lea	JEDB	1981	0.42453
25.	Mousakellie	Private	1953	1.02661	68.	Dimbulla	JEDB	1980	0.35669
26.	Mousakellie	Private	1954	1.02466	69.	Bogahawatte	JEDB	1981	0.34173
27.	Mount Vernon	JEDB	1982	1.01902	70.	Annfield	JEDB	1982	0.32824
28.	Frotoft	Private	1963	0.99243	71.	Ferham	SLSPC	1981	0.31284
29.	Labookellie	Private	1971	0.97751	72.	Stamford Hill	JEDB	1981	0.28892
30.	Battalgala	JEDB	1981	0.96400	73.	Bogahawatte	JEDB	1980	0.24261
31.	Frotoft	Private	1961	0.94874	74.	Luccombe	JEDB	1980	0.21219
32.	Yuilliefield	JEDB	1981	0.94813	75.	Annfield	JEDB	1980	0.20877
33.	Stonycliff	JEDB	1981	0.94563	76.	Dickoya	JEDB	1981	0.10905
34.	Abbotsleigh	JEDB	1981	0.94376	77.	Venture	SLSPC	1981	0.10214
35.	Mousakellie	JEDB	1981	0.94149	78.	Luccombe	JEDB	1981	0.01050
36.	Abbotsleigh	JEDB	1980	0.93947	79.	Kelliewatte	JEDB	1980	-0.14460
37.	Kirkoswald	JEDB	1980	0.92764	80.	Luccombe	JEDB	1982	-0.18676
38.	Mousakellie	JEDB	1980	0.91808	81.	Kelliewatte	JEDB	1981	-0.28603
39.	Frotoft	JEDB	1981	0.89773	82.	Derryclare	JEDB	1981	-0.33849
40.	Annfield	Private	1965-66	0.88703	83.	Carolina	SLSPC	1981	-0.71859
41.	Labookellie	Private	1973	0.88512	84.	Lonach	JEDB	1981	-1.80115
42.	Stockholm	SLSPC	1981	0.86500	85.	Harrington	SLSPC	1981	-2.86038
43.	Mahacoodagala	JEDB	1981	0.84626	86.	Mulhalkelle	JEDB	1981	-3.44675
					87.	Mayfield	JEDB	1981	-6.23092

In its thirteen Years of publication the 'Economic Review' has produced several issues, that are still in demand. We receive repeated inquiries on many of the specific subjects we have dealt with in the Review. We list below some of the popular subject titles of which a few copies are still available.

- HIGHER EDUCATION
- TOWARDS MACHINE INTELLIGENCE
- RURAL BANKS
- MINERAL RESOURCES
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