5. ECONOMIC AND SOCIAL OVERHEADS

5.1 Overview

The Government has been the provider of most economic and social infrastructure services in Sri Lanka. Public investment in this area has been declining over the last fifteen years in the wake of increased resource constraints due to the growth in security expenditure and structural weaknesses of the budget from both revenue and expenditure sides. Total public investment on economic and social infrastructure has declined from 16.5 per cent of GDP in 1980 to 5.0 per cent of GDP in 1997. As a per cent of total government expenditure, infrastructure investment declined from 36.1 per cent in 1980 to 18.9 per cent by 1997. Meanwhile, it is increasingly recognized that many economic infrastructure services are not public goods and that these could be provided more efficiently through the private sector. The policy environment for private sector participation in economic infrastructure has been strengthened through a general improvement in the macro economic conditions as well as through the privatisation programme. In addition, various fiscal incentives such as import duty exemptions for project related imports, income tax holidays and provision of government land for the building of related infrastructure have been granted during the past few years to attract private investment to these sectors. To provide financial support, the Private Sector Infrastructure Development Company Ltd. was established in 1997, with the assistance of the World Bank. The private sector has gradually entered this field in some areas such as health, education, postal services, mass media, telecommunication, transport etc. on its own initiative as well as a result of the Government's conscious policy of promoting private sector led growth. Despite all these efforts, the current levels of investment in these sectors are still inadequate. Considerable improvement is necessary in key areas such as roads, the transport network including railways, supply of energy, ports, and social infrastructure, over and above what has already been achieved.

In 1997, attempts were made to enhance private sector participation in economic infrastructure, improve commercial viability and expand existing infrastructure stock. The power generating capacity of the national electricity grid was increased by 177 MW of thermal power, the first increase during the past five years, thereby reducing the reliance on hydro power and improving the reliability of the power supply. Coverage of telecommunication facilities was enhanced greatly with increased participation by the private sector. Restructuring of Sri Lanka Telecom Ltd. progressed further in an open and competitive manner with the divestiture of 35 per cent of the shares of the company to a strategic partner. Negotiations were in progress to expand the existing capacity of the Colombo Port with private sector participation on a BOO/BOT basis. Addressing prolonged management deficiencies in the transport sector, peoplised bus companies were restructured to form 11 cluster companies during the second half of the year.

TABLE 5.1

Government Investment in Infrastructure

Year	Economic Services		Social Services		Total	
	Rs. Mn.	% of GDP	Rs. Mn.	% of GDP	Rs. Mn.	% of GDP
1980	9,712	14.6	1,249	1.9	10,961	16.5
1985	18,950	11.7	1,826	1.1	20,776	12.8
1990	18,798	5.8	3,019	0.9	21,817	6.7
1991	26,022	7.0	2,964	0.8	28,986	7.8
1992	20,444	4.8	6,137	1.4	26,581	6.2
1993	29,600	5.9	6,075	1.2	35,675	7.1
1994	29,304	5.1	7,677	1.3	36,981	6.4
1995	36,106	5.4	9,854	1.5	45,960	6.9
1996	31,409	4.1	10,322	1.3	41,731	5.4
1997	33,014	4.3	11,552	1.3	44,556	5.0

Source: Central Bank of Sri Lanka.

Vital policy reforms were introduced in respect of the education sector in order to develop a sustainable education system, which is suitable for the contemporary needs of society. With a view to improving the efficiency of the health care delivery mechanism and addressing the emerging issues in the sector, policy reforms have been suggested during the year by a Presidential Task Force.

Despite these favourable developments on the supply side, the growing demand for economic infrastructure, particularly for transport, telecommunication, housing and water supply, created a mismatch, exerting extra pressure on the existing facilities. In view of the growing demand for port services, a comprehensive port development programme has been proposed which will help to expand the capacity and to improve the efficiency of port services and management of the ports (Box 3). The proposed plan, when implemented, is expected to enhance competitiveness and Sri Lanka's market share. In the case of transport, close monitoring and supervision of Regional Transport Companies is essential to avoid any recurrence of managerial deficiencies and to improve commercial viability. Similarly, early and prompt implementation of the proposed reforms with respect to the education and health sectors is needed to reap the expected benefits. Adequate allocation of resources is a pre-requisite for the success of these reforms. There is also a need to further improve the targetting of benefits under existing welfare programmes with a view to ensuring that benefits are granted only to the deserving. Private investment in economic infrastructure increased in 1997. The Government maintained its investment, as a percentage of GDP, in the case of social services. Investment in economic services increased marginally in 1997.

5.2 Health

The country has been able to maintain and preserve the earlier achievements in the health sector without a serious setback. The demand for health services has been rising sharply, not only due to the natural growth of population, but also due to emerging and re-emerging diseases, the presence of a large number of casualties and disabled persons as a result of the civil war and a relative ageing in the population. The health status is also threatened by diseases associated with poor environmental conditions. The re-emergence of cholera and continuous occurrence of Dengue, Japanese Encephalitis, Malaria etc. emerged as the most serious hazards to the health status of the people. Meanwhile, non-communicable diseases that emerge with the transition in the demographic profile and improvement in life styles are also on the increase, indicating the possible health expenditure burdens that could occur in the foreseeable future. A marked increase in mental disorders, drug and alcohol dependence, suicide rates and poisoning are some adverse developments that have emerged in the health sector, which require serious attention. Newly emerging diseases such as HIV/AIDS also further threatens the health status of the country compelling the Government to allocate more resources for control and awareness campaigns. Heart diseases, cancer, liver diseases and pesticide poisoning continued to be the leading causes of mortality in the country.

In the context of the emerging health situation, the major thrust of the health policy in 1997 was to consolidate the earlier achievements and further improve the health status of the people through an efficient health care delivery mechanism. Maternal and child health care, nutritional deficiencies, poverty related diseases, Malaria, problems of the elderly, mental health, suicide, heart diseases, physical disabilities and diabetes were identified as the priority areas, which required attention. The key strategies were the promotion of preventive health care, equitable allocation of resources among regions, a rational drug policy and promotion of health research.

The need for promoting the private sector in accommodating the growing demand for health services was duly recognised and strong incentives were offered, signalling the vision for the health sector in the foreseeable future. As it appeared that the existing health care delivery mechanism had not effectively addressed the emerging issues in the health sector, a Presidential Task Force was appointed in 1997, in order to prepare an action plan for the heath sector and to make recommendations to address the glaring issues in the sector. The major areas of concern identified by the Task Force were identification and prioritisation of health needs, services required to meet the health services of the community, organisation and the management of the health sector and mobilisation of resources for the health sector. Some of the recommendations made by the Task Force were the setting up of a National Health Commission, setting up of a regulatory and institutional framework to monitor private sector health care, effective decentralisation of health sector activities, allocation of resources based on regional needs, improvement in revenue earning capabilities of health institutions, enhancing regulatory powers, offering incentives to work in rural areas, restructuring existing health institutions etc. A Unit to implement the recommendations made by the Task Force has already been set up in the Ministry of Health. Initial steps were taken to establish a National Health Commission empowered with more regulatory authority to design, direct and implement health policies and co-ordinate and monitor health related activities between Provincial Councils and the Ministry. Action has been taken to draft the Medical Institutions Act giving powers to the Ministry of Health to monitor the operations and quality of the services provided by the private sector. The effectiveness of the recommended reforms will rely largely on their early implementation, with close monitoring of procedures.

In 1997, total government investment in the health

TABLE 5.2
Public Health Services

Item	1995	1996	1997 (a)
Hospitals (practising Western Medicine) (no.)	535	540	548
No. of Beds	52,528	52,613	55,441
Central Dispensaries (No.)	386	377	383
Total No.of Doctors	3,986	4,391	5,316
Total No. of Asst. Medical Practitioners	1,324	1,464	1,405
Total No. of Ayurvedic Physicians	14,874	14,808	15,078
Total No. of Nurses	13,310	13,846	15,976
Total No. of Attendants	5,579	5,758	6,178
No.of In-Patients ('000)	2,953(b)	3,339	n. a
No.of Out - Patients ('000)	32,084(b)	35,348	n. a
Total Health Expenditure (Rs.Mn.)	10,952	11,913	12,135
Current Expenditure (Rs.Mn.)	8,818	9,260	9,581
Capital Expenditure (Rs.Mn.)	2,134	2,538	2,554

(a) Provisional.
(b) Excludes Jaffna, Killinochchi, Mullaitivu and Ampara Districts

Sources: Ministry of Health and Indigenous Medicine
Central Bank of Sri Lanka

sector increased marginally to Rs.2,554 million. Total expenditure in relation to GDP declined from 1.5 per cent to 1.4 per cent between the two years. More than three fourths of the resources were spent on maintenance of health infrastructure, while the balance was spent on new investment. Considering both the need to further consolidate the recent macroeconomic achievements and the compelling need to allocate more resources for preventive health care, it is of paramount importance to implement an efficient health care management system early. Exploitation of the revenue earning potential of public health institutions and improvement of the operational efficiency of large institutions by giving them more autonomy to be run as separate entities, are some effective measures to be considered in this regard. Ensuring the quality of drugs, as well as timely availability, is also considered a crucial issue that needs to be addressed on a priority basis.

In general, over 3 million in-patients and 36 million out-patients are treated annually in the 540 government hospitals. The average number of beds available per 1,000 persons increased from 2.8 to 3.0 in 1997. A total of 3,926 health personnel, including 1,063 intern and post intern medical officers, were recruited during the year under review. The availability of doctors improved from 24 to 29 per 10,000 population, while the nursing staff strength improved from 76 to 86 per 10,000 population between the two years. A wide disparity in the regional distribution of health personnel, with a high concentration in the Colombo District and an acute shortage of specialist doctors continued to be major problems in 1997.

Public investment in health infrastructure was further strengthened in 1997. Initial steps were taken to construct a National Nurses Training School with JICA assistance at the Sri Jayawardenapura Hospital with a capacity to train 300 nurses per year. The estimated cost of the project is Rs.722 million. Construction work on a ten storied building complex for the Lady Ridgeway Hospital (LRH), with a bed capacity of 390, was in progress during the year and the estimated cost of this project is Rs.320 million. An agreement was signed with the Korean Government to improve the patient care services of the Base Hospitals at Gampaha and Negombo at a cost of Rs.224 million and to provide clinical facilities for teaching medical students at the Colombo South Teaching Hospital at a cost of Rs.108 million. The Health and Population Project funded by the Asian Development Bank at a cost of Rs.1,259 million was in progress to improve the health care system in rural areas. A health service project at a cost of US dollars 22.6 million funded by IDA was also initiated in 1997. This aims at eradicating Malaria, sexually transmitted diseases (STD), malnutrition among lower income groups and promoting health education. A Population and Reproductive Health Programme, funded by the UNFPA, was also started this year.

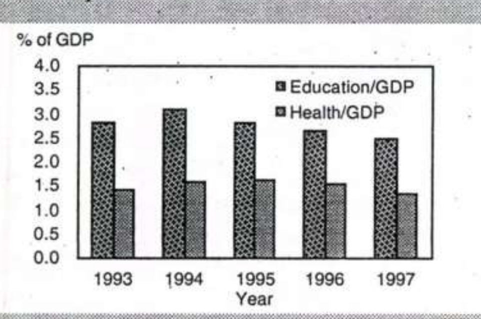
Strenuous efforts were made to preserve the earlier gains achieved in the field of primary health care and to restrain the adverse impact of emerging outbreaks of disease to a minimum level. The immunisation coverage of infants against the six vaccine preventable diseases was sustained at a high level (above 90 per cent) during the year under review. The National Immunisation Programme for Polio was conducted for the third consecutive year and was able to cover almost the entire child population under 5 years. During the year, the Rubella Immunisation Programme was further extended, covering five provinces. A fresh outbreak of cholera, the first after 1993, caused 12 deaths and 412 reported cases by end 1997. An efficient disease surveillance system, together with effective awareness programmes contained the outbreak to a large extent. Despite the implementation of the National Dengue Control Programme and various awareness programmes, the recurrence of Dengue since 1989 has continued to be a major problem and more than 1,000 cases were reported in 1996 as well as in 1997. The incidence of Japanese Encephalitis was reduced in 1997, while the vaccination programme was extended to the Colombo, Kalutara and Gampaha Districts. Malaria still continues to be a major health problem in Sri Lanka. Despite the various control activities undertaken, the incidence of Malaria continued to increase by 19 per cent to 218,544 cases confirming the trends observed in the previous year. The main reasons for the setback were the operational problems encountered in carrying out control activities in war affected areas and the large influx of refugees to neighbouring areas. With a view to controlling Tuberculosis, a new method, DOT (Directly Observed Therapy) has been initiated in selected districts under the respiratory diseases control programme. Screening, counselling, surveillance and dissemination of information about STD are the major strategies adopted by the STD/AIDS control programme.

Private Sector Health Care

An efficient private health care system, which is competitive and complementary to state health services is long overdue, considering the ever growing demand for health services and the capacity limitations and inefficiencies in the public sector health services. A well established regulatory framework, a rational incentive structure, an affordable price and a clear and convincing vision of where the health system should be moving are key elements for its success. Having recognised these needs, initial steps have been taken during the year to make private sector health care more acceptable to the community and attractive to investors. Exemption of health services from turnover taxes and GST, exemption of medical equipment from import duty and reduction of import duty on drugs were introduced with a view to lowering the cost of medical bills as well as the cost of investment. The proposal to provide free land for private hospitals and exempt them from taxes for a reasonable period will further attract investors into this area.

According to Health Ministry sources, the private sector presently caters to about 50 per cent of the total patient load, while the provision of in-patient care is still insignificant compared to the public health sector. The services are provided through a general practitioner network and an institutional network covering private hospitals and nursing homes. According to the Ministry, at present, there are 118 private hospitals with a bed capacity of 2,467. More than half of these hospitals is located in the Western Province. According to a survey covering 23 private hospitals carried out by the Central Bank (1996), in-patient as well as out-patient services provided by these hospitals were less than 5 per cent of the total number of in-patients and out-patients handled by the government hospitals. These private hospitals had a bed capacity of 1,300 and, in respect of all major hospitals, the bed occupancy ratio was almost 80 per cent. There are 103 permanent doctors, 222 part-time doctors, 1,479 nurses and 280 technicians serving in these hospitals. However, of these hospitals, 9 major hospitals, including two in the outstations, accounted for more than 75 per cent of the total bed capacity, 84 per cent of the nursing staff strength and 95 per cent of the technical staff strength. Extensive consultancy services were also provided in almost all hospitals. However, private sector participation in health services is plagued by some major problems such as the high cost of infrastructure, high cost of health care, a shortage of qualified and skilled personnel and low quality of service.

Chart 5.1
Expenditure on Health and Education



5.3 Education

The need to establish a sustainable education system, which will effectively respond to the private sector needs, has been strongly felt over the last two decades. Addressing some of the issues, but only in some specific areas, various policy measures have been introduced from time to time over the last 20 years. Nevertheless, most of these measures did not yield positive results and some were short lived, as they were not designed as a comprehensive package that would address all the issues in the sector simultaneously. Having recognised this need, a set of far reaching educational reforms was introduced in 1997 to address the crucial issues in the sector, such as low quality, low efficiency and little relevance of educational attainment to labour market requirements. The core of the new educational reforms is the identification of competence and development of practical skills of students and promotion of those skills. The key strategies are the improvement and expansion in qualitative and quantitative inputs, strengthening teacher education and improvement in organisation and management of the schools system. A special unit has been set up in the Ministry of Education to implement and direct the reforms relevant to general education. Early and timely implementation of the proposed reforms with proper monitoring procedures is essential to reduce the mismatch between labour market requirements and educational attainment. Adequate allocation of resources to provide qualitative and quantitative inputs are prerequisites for effective implementation of the proposed reforms. Nevertheless, as the sustainability of the reforms would depend entirely on the commitment and quality of the teaching staff, teacher education and deployment issues have to be addressed on a priority basis.

Reforms of General Education

The reforms are focussed on five major areas, namely, extension of educational opportunities, improvement in quality of education, improvement in quality of teaching strength and rationalisation of the profession, development of technical and practical skills and improvement in organisation and management of education.

A proposal has been made to enforce compulsory education regulations under the new reforms, aiming at improving school participation rates. In 1997, an all island survey was launched to identify the magnitude of non-participation to take remedial action.

Quality improvement in education is expected to be undertaken at four different levels: pre-school, primary level, junior secondary and senior secondary stages. These are to be achieved through syllabus revisions, provision of teaching materials, provision of quantitative inputs such as buildings and activity rooms, teacher training, classroom assessment etc. These changes will require additional resources. In the area of primary education, a child-centered, competency-based education system, which will provide learning through activities, will be established. The new curriculum is to be introduced for Year 1 in schools in the Gampaha District from 1998. The junior secondary stage education is designed to lead towards subject based curricula and learning through projects. Practical work is to be emphasised in the teaching methodology. The senior secondary stage of education will aim at expanding available opportunities and developing skills of students in various fields. The duration of the GCE Ordinary Level programme will be two years. The present curricula will be made more flexible by introducing a number of core and optional subjects. The GCE Advanced Level curriculum is to be redesigned, providing a variety of further educational and work opportunities. A new technological stream will be introduced and the choice of subjects across the different streams is to be made more flexible.

The training of all teachers in service by the year 2000 and the provision of pre-service training for all new recruits are expected under the programme. With a view to planning, monitoring and co-ordinating teacher training activities, a National Authority for Teacher Education is to be established. Special programmes will be carried out to strengthen teaching abilities in English and technology. The number of Colleges of Education will be increased to 14 to meet the future demand. Attempts will be made to have a rationalised school structure with the re-organisation of schools on the basis of a school mapping exercise, development of senior secondary schools, development of schools in disadvantaged areas, school-based management, performance appraisal of teachers, external supervision etc.

General Education

Public expenditure on infrastructure development in education has been relatively low due to resource constraints. This has declined further in 1997 to 0.5 per cent of GDP from 0.6 per cent in 1996. In absolute terms, total Government expenditure on education increased from Rs.20,402 million in 1996 to Rs.22,349 million in 1997. A sum of Rs1,798 million was spent for the distribution of free school text books, free uniform materials and the provision of concessionary travel facilities for school children. With respect to the composition of expenditure on education, a high wage bill (75 per cent of total current expenditure on education and 25 per cent of the total salary bill) largely limited the allocation of resources for essential inputs such as teaching materials, equipment, supplies and other maintenance. A higher allocation of resources to the education sector, with increased commitment to provide quality inputs, would be necessary to reap the expected benefits from the educational reforms.

In 1997, there were 10,216 government schools with a student population of 4,123,656 and a teaching staff strength of 181,050. The availability of a school network and teaching staff strength was extensive and favourable, with one school for every 6 sq.km. and 23 students per teacher. Nevertheless, the beneficial effects that could have been obtained from the extensive infrastructure network are largely undermined by a number of factors. First, there are wide regional inequalities in the availability of educational facilities and deficiencies of resources in certain subject areas. Second, the lower productivity of the teacher force, which resulted from weak recruitment polices in the past, was further aggravated by over generous retirement policies adopted in 1996 and 1997 allowing experienced and trained teachers to leave. Finally, under-investment in quality inputs has led to an acute shortage of adequate equipment and materials to match curriculum needs, thereby lowering the quality of education. According to a project appraisal report for the Second General Education Project prepared by the IDA, it is estimated that required quality inputs are available only in less than 20 per cent of the schools and that about 80 per cent of schools have no permanent libraries.

Addressing some of these crucial issues in the education sector, a number of foreign-funded projects were continued during the year. With a view to promoting quality improvements in the education sector, the General Education Project II funded by the IDA, was commissioned in 1997 at a cost of US dollars 83.4 million. The main areas of concern were curricula development, text books and educational publications, school rationalisation, quality inputs, library development, education management etc. In order to improve secondary education in the schools in the 1AB (those with GCE advanced level – Science, Commerce & Arts streams) and 1C (those with GCE advanced level without Science) categories, the Secondary Education Development Project funded by the ADB at a cost of US dollars 40 million was continued during the year. The Primary School Development Project, which aims at developing the quality of education in the remote rural primary schools, funded by the Swedish International Development Agency (SIDA), was also in progress. Another project, titled the Plantation Sector Education Development Project, funded by the SIDA, has also been launched. The improvement in the quality of teaching and the learning environment in schools, equitable deployment of teachers and the rationalisation of teacher education institutions are the key objectives of the Teachers Education and Teacher Deployment Project which commenced in August 1996. The total cost of the project is estimated at US dollars 79.3 million. In order to co-ordinate training activities among various teacher training institutions, a proposal to set up a National Authority for Teacher Education was submitted to the Parliament. A primary English language project and a primary mathematics project financed by the British International Development Agency (BIDA) was in progress during the year. The Project for Development of Schools by Divisional Secretariat Level has identified a total of 317 schools to be developed and a sum of Rs.210 million was spent in 1997.

TABLE 5.3

General and University Education

Item	1995	1996	1997 (a)
General Education			
1. Total Schools (No.)	10,832	10,936	10,863
1.1 Government Schools	10,239	10,312	10,216
National Schools	198	238	252
1.2 Other Schools	593	624	647
Private	79	79	83
Pirivenas	514	545	564
2. Pupils (No.)	4,351,022	4,265,076	n.a.
2.1 Government Schools	4,216,571	4,132,749	4,123,656
2.2 Other Schools	134,451	132,327	n.a.
Private	87,674	86,707	n.a.
Pirivena	46,777	45,620	43,228
3. New Admissions	342,386	322,686	353,639
4. Teachers (No.)	195,210	193,720	n.a.
4.1 Government Teachers	187,574	185,842	181,050
4.2 Others	7,636	7,878	n.a.
5. Pupil/Teacher Ratio	22	22	23
6. Total Expenditure on Education (Rs. Million) (b)	18,908	20,402	22,329
6.1 Current	15,784	16,018	17,737
6.2 Capital	3,124	4,384	4,592
University Education			
1. Universities (No.)	10	12	12
2. Students (No.) (c)	32,004	32,800	34,139
3. Lecturers (No.) (d)	2,524	2,808	2,927
4. Graduated (No.)	5,342	5,216	n.a
4.1 Arts and Oriental Studies	1,999	1,999	n.a
4.2 Commerce & Management Studies	982	999	n.a
4.3 Law	140	160	n.a
4.4 Science	958	844	n.a
4.5 Engineering	458	403	n.a
4.6 Medicine	442	505	n.a
4.7 Dental Surgery	66	58	n.a
4.8 Agriculture	210	165	n.a
4.9 Veterinary Science	31	27	n.a
4.10 Architecture	23	23	n.a
4.11 Quantity Surveying	-	33	n.a
5. New Admissions for Basic Degrees (No.)	8,015	8,663	9,787

Sources: Ministry of Education and Higher Education
University Grants Commission
Central Bank of Sri Lanka

(a) Provisional
(b) Includes government expenditure on higher education too.
(c) Excluding the Open University of Sri Lanka
(d) At the beginning of the year.

Initial steps have been taken to install computer systems at provincial ministries under the Education Management Information System (EMIS). During the first eight months of 1997, 1,893 teachers were admitted to the Teacher Training Colleges and pre-service training was provided to 2,059 persons at the Colleges of Education. The National Institute of Education, which is responsible for the establishment of a base for the implementation of the proposed educational reforms, has commenced initial work on curriculum development, training education officers, development of school based techniques etc. A survey has been carried out on international schools, with a view to formulating policy guidelines and making recommendations for the regulation of the international school system. Some of the recommendations made were - registration of international schools with the Ministry of Education to be made mandatory, diversification of syllabi and teaching methodologies, development of core curricula with an appropriate national content, development of guidelines and stipulation of norms in respect of infrastructure facilities and human resources and developing an effective supervising system.

Higher Education

There were 12 national universities and 6 postgraduate institutions in the country by end 1997. Having recognised the need to develop skills based education, computer education branches were opened at the Universities of Colombo, Sri Jayawardenapura and Peradeniya. New degree courses in law policies, pharmacology, surveying and nursing were commissioned at the Universities of Colombo, Sri Jayawardenapura, Sabaragamuwa and the Open University. Professional guidance units were established in four universities with a view to providing information on employment opportunities available in the state sector as well as in the private sector. Projects were in progress to provide educational equipment and construct new building complexes at the Universities of Peradeniya and Sri Jayawardenapura at a cost of Rs. 1,925 million with Japanese aid. In addition several large construction projects have been undertaken to expand and upgrade the building complexes for the medical and engineering faculties at Peradeniya and Ruhuna during the year under review.

New admissions to the universities expanded by 1,124 to 9,787 (about 14 per cent of students who qualified for university education) in 1997, increasing the total enrolment to 34,139. This is equivalent to about 1 per cent of the relevant age group of the population. The expansion was mainly in the fields of arts, commerce and management studies. The total academic strength in the universities also expanded by 4 per cent. The share of the admissions on the basis of achievements (extra curricular activities) increased.

The total number of students receiving Mahapola scholarship and bursaries expanded by about 2,000 to 36,000 by end 1997.

The Open University conducted 34 courses at diploma, degree and post-graduate levels under three faculties namely engineering technology, humanities and social sciences and natural sciences. By end 1997, there were 32 Technical Institutions in the country with a total student enrollment of 15,397. During the year under review new admissions to the Technical Colleges expanded by 2,000 to 12,238.

Reforms of university education is needed to be implemented early, considering the mismatch between formal educational achievements and the skills required in the labour market. According to the Central Bank Consumer Finances and Socio Economic Survey 1996/97, there are about 11,740 unemployed graduates in the country. As there are a large number of students who are debarred from entering the universities, promotion of the expansion of private sector higher educational institutions, including professional education, should be a part of the educational reforms.

5.4 Communication Services

Postal Services

In order to address the present structural and institutional rigidities of the postal service, a comprehensive restructuring programme has been proposed with the assistance of the World Bank and the Universal Postal Union (UPU). The restructuring programme proposes to transform the present Postal Department into a Postal Corporation. The proposed Postal Corporation is to be provided with greater autonomy for enhancing management efficiency in the service. The proposed reforms also intend to improve commercial viability, develop innovative postal products, use modern technology and promote private sector participation in certain areas of the service. With a view to regularising the free postal service offered to the Government and reducing the operational cost of the Postal Department, maximum limits were imposed on the volume of free postal services. The postal services provided during week ends and public holidays were also suspended with a view to reducing operational costs.

With the opening of 2 new main post offices, 16 agency post offices and 45 rural agency post offices, the postal network increased to 4,302 in 1997. Consequently, the area served by a post-office declined further to 15.3 sq. kms. by end 1997. The Express Mail Service (EMS) was expanded to cover 57 countries by end 1997 and an EMS pick up service was also introduced during the year. Another 50 main post-offices were provided with fax machines, thereby increasing the total number of post offices with fax facilities to 177. The postal delivery service in the City of Colombo, which has so far been performed by the Central Mail Exchange, was decentralised. Independent letter sorting and delivery services were introduced in the Borella, Kotahena, Slave Island and Wellawatte postal divisions. In order to meet the increasing demand for postal facilities, the Rural Agency Post Office System was introduced with the assistance of 'Sanasa' as a pilot project in 1996, and 17 such Post Offices were established during 1996. As at end 1997, there were 62 Rural Agency Post Offices in the country. Postal services in the Jaffna Peninsula were also expanded substantially during 1997. At present, 30 main post offices and 124 sub-post offices are operating in the Jaffna area.

The total number of inland mail articles handled by the Department of Posts dropped by 5 per cent in 1997 over the previous year. This was largely due to the restriction imposed on non-paid postal services provided to the Government in 1997. Free postal services provided to the Government dropped considerably to 56 million mail articles in 1997 from 128 million in 1996. Consequently, the average number of letters per person dropped from 27 to 24 between the two years. However, the paid postal services, at 390 million articles, rose by 14 per cent during the year. The overall expansion in the postal service in the foreseeable future appears to be gloomy unless it is restructured to meet the demands of modern society in the context of a rapid expansion in the speedier alternative modes of communication such as telephones, IDD facilities, telefax, e-mail and private courier services. Foreign mail handling also dropped marginally during the year.

The total revenue of the Postal Department rose by 6 per cent to Rs.1,409 million, mainly due to the upward revision of the postal charges in 1997. Meanwhile, the total operational expenditure of the Postal Department at Rs.1,664 million, showed a marginal decrease. Accordingly, the operational loss of the Postal Department dropped from Rs.344 million in 1996 to Rs.255 million in 1997.

Telecommunication

The telecommunication sector continued to expand during 1997 with increased participation by the private sector and a higher level of performance of Sri Lanka Telecom Ltd. (SLTL). The linking of SLTL with the Nippon Telegraph and Telephone Corporation (NTT) of Japan in 1997 will pave the way for attracting more investment, introducing modern technology, infusing management capabilities and enhancing the technical and professional skills of the staff of SLTL. The number of new telephone connections given during 1997, at 72,453, was the largest given during a single year. This represents about 23 per cent of the total existing land telephone lines in the country. About 62 per cent of the existing telephone lines were given during the last 5 years. At the same time, with an increasing number of new connections, the growth of the waiting list has decelerated during the past few years. The share of the private sector in the telecommunication market is also growing rapidly and the telecommunication sector appears to be a promising sector for faster growth in the future.

Along with the sale of 35 per cent of the shareholding of SLTL to NTT, the management of the restructured company was also taken over by the NTT in accordance with the agreement. The NTT management team has formulated a business plan for 1997 and 1998 and a medium-term plan that extends to the year 2000, in order to address critical issues in the sector and to accelerate development programmes. As a result, a significant improvement in the overall performance of the SLTL was witnessed during 1997. The switching capacity of exchanges increased significantly by 41 per cent to 436,550, while the total number of international circuits increased by 16 per cent to 1,717. Meanwhile, the number of direct working telephone lines increased by 24 per cent to 315,241. Of the total direct lines, 186,674 or 59 per cent were in the Colombo metropolitan area. However, the proportion of telecommunication facilities available outside the Colombo metropolitan area increased from 35 per cent in 1996 to 41 per cent in 1997. In the meantime, the number of applicants on the waiting list increased by 5 per cent to 284,876, which represents 47 per cent of the expressed demand. The telephone density (number of persons per telephone)

TABLE 5.4

Growth of Postal and Telecommunication Services

Item	1995	1996	1997(a)	Percentage Change	
				1996	1997 (a)
1. Postal Service					
Delivery Areas (No)	6,729	6,729	6,729	0.0	0.0
Post Offices (No)	4,148	4,239	4,302	2.2	1.5
Public	3,966	4,025	4,028	1.5	0.1
Private	182	214	274	17.6	28.0
Area Served by a Post Office (Sq.Km)	16.8	15.5	15.3	-7.7	-1.3
Population Served by a Post Office	4,393	4,339	4,326	-1.2	-0.3
Letters per Inhabitant	29	27	24	-6.9	-11.1
2. Telecommunication Service					
2.1 Sri Lanka Telecom Ltd. (SLTL)					
Telephone Lines (No.)	204,350	254,500	315,241	24.5	23.9
New Telephone Connections given(No.)	24,556	50,170	72,453	104.3	44.4
Applicants in Waiting List (No.)	237,800	270,800	284,876	13.9	5.2
Express Demand for Telephones (No.)	442,150	525,300	600,117	18.8	14.2
Telephone Density (Telephones per 100 persons)	1.12	1.39	1.69	24.1	21.6
2.2 Other Private Sector					
Cellular Phones					
Operators (No.)	4	4	4	0.0	0.0
Subscribers (No.)	51,316	71,028	114,888	38.4	61.8
Total Cumulative Investment (Rs. Mn.)	4,139	5,307	6,870	28.2	29.5
Public Pay Phones					
Operators (No.)	4	4	4	0.0	0.0
Subscribers (No.)	1,597	2,152	2,571	34.8	19.5
Total Cumulative Investment (Rs. Mn.)	424	610	718	43.9	17.7
Radio Paging Services					
Operators (No.)	5	5	5	0.0	0.0
Subscribers (No.)	9,565	10,721	10,829	12.1	1.0
Total Cumulative Investment (Rs. Mn.)	210	221	222	5.2	0.5
Data Communication Services					
Operators (No.)	6	7	9	16.7	28.6
Subscribers (No.)	273	355	9,045	30.0	2,448
Total Cumulative Investment (Rs. Mn.)	434	574	665	32.3	15.9
Wireless Local Loop Telephones					
Operators (No.)	-	2	2	-	0.0
Subscribers (No.)	-	527	26,381	-	4,906
Total Cumulative Investment (Rs. Mn.)	-	1,743	6,796	-	289.9

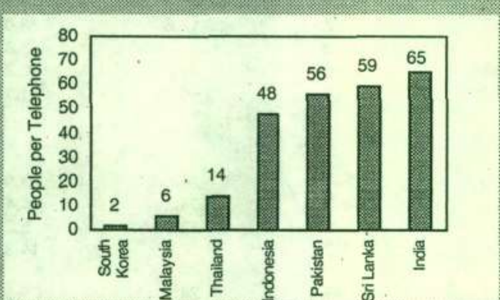
(a) Provisional

Sources : Department of Posts
Sri Lanka Telecom Ltd.
Telecommunications Regulatory Commission of Sri Lanka

improved from 72 in 1996 to 58 in 1997. The medium-term target is to have a telephone density of 20 persons per telephone by the year 2001.

Most of the major projects in the second telecommunication programme funded with assistance obtained from international aid agencies such as the World Bank/IDA, ADB and OECF were completed during 1997. These projects have contributed towards the increase in capacity and improvement in the transmission system, resulting in a considerable improvement in the quality and reliability of the service. The 150,000 Line Telecommunication Development Project, which is being implemented by Sri Lanka Telecom Services Ltd. (SLTS), a subsidiary of SLTL, was also in progress during 1997. This project is being implemented to add about 200,000 exchange lines to cover townships and rural areas in almost all the provinces. This project commenced in 1996 and by the end of 1997, about 120,000 exchange lines had been added to the network. A total of 69 exchanges with a capacity of 67,344 exchange lines were commissioned during 1997.

Chart 5.2
Telephone Density in Selected Countries - 1997



A number of value added services have also been provided by SLTL to its subscribers. These include telephone hunting facilities, abbreviated dialling, absentee service, call waiting, call forwarding, conference calls and pre-assigned number facilities. In addition, SLTL had installed 1,111 units of public pay phones, provided Internet and e-mail services to 3,683 subscribers and packet switching services to 12 customers by end 1997. On account of increasing demand for facsimile, Internet and e-mail services, the demand for telex services has been declining.

The 3rd Telecom Development Programme has been reviewed under the new management and a medium-term development programme has been drawn up for providing 400,000 telephone lines during 1998 - 2000. According to the proposed investment programme, SLTL expects to invest Rs.23,000 million in 1998, Rs.16,800 million in 1999 and Rs.6,600 million in 2000. Funds will be generated from foreign sources, suppliers' credits and SLTL's own funds. Once these development projects are completed, SLTL will be able to provide telephone facilities on demand. With respect to SLTL projects, procedural delays in the procurement process, lack of co-ordination with other utility agencies such as the RDA and problems relating to land acquisition for building purposes remain impediments to speedier execution of projects.

Telecommunication facilities provided by the private sector further expanded during 1997. There were 24 licensed private sector companies providing various telecommunication services at end 1997 against 22 in 1996. At end 1997, there were 4 cellular telephone operators, providing services to 114,888 subscribers. The cellular subscriber network increased by 62 per cent during 1997. The total number of pay phone booths increased by 19 per cent to 2,571. Radio paging services were being provided by 5 companies to 10,829 subscribers in 1997. The subscriber network of data communication services, which includes e-mail and Internet services, increased more than twofold to 9,045 during 1997. Two companies commenced providing Wireless Local Loop (WILL) telephone services in 1996. At end 1997, there were 26,381 subscribers to this service. When the WILL telephone connections are also taken into account, the telephone density stands at one telephone for 54 persons. The total cumulative private investment in the telecommunication sector amounted to Rs.15,270 million by end 1997, of which Rs.6,844 million was made during 1997. The total number of employment opportunities in this sector, excluding those in SLTL, was 1,627.

5.5 Energy

The energy sector showed a strong recovery in 1997 from the severe power crisis experienced in 1996. The continuity and reliability of the power supply was ensured by expanding the thermal power generating capacity of the national grid by 177 MW. Consequently, total power generation grew by 13 per cent compared with a decline of 5 per cent in the previous year, satisfying the growing demand. As in the previous year, hydro electric power generation was adversely affected by dry weather conditions that prevailed during the first half of 1997 but a substantial improvement occurred during the latter part of the year. The shortfall in hydro power generation was off-set through thermal power generation. The expansion of the thermal power generating capacity in the national grid together with short-term crisis management measures adopted since 1996 such as hiring of diesel plants from the private sector, power purchases and encouragement of private sector self-generation of power, ensured the continuity of power supply. Nevertheless, in order to cover the substantial increase in the cost of thermal power generation (fuel cost, power purchase expenses and generator hiring charges) the electricity tariff was raised by 11 per cent with effect from September 1997. Meanwhile, the demand for two major petroleum products, namely, auto diesel and furnace oil, continued to expand on account of increased thermal power generation and enhanced transport and industrial activities. The increased reliance on imported energy sources raised the cost of the country's oil bill substantially. However, the marginal decline in the international prices of crude oil and duty waivers offered in respect of imports of crude oil improved the financial position of the Ceylon Petroleum Corporation in 1997.

During the year under review, appreciable efforts were made to improve the reliability of the power system. The urgent actions taken to expand the capacity of the national grid in 1997 and the anticipated expansion by 51 MW. in 1998, would help to avert a power crisis situation in the short run. However, a repetition of a crisis situation as experienced in 1996 would have a severe adverse impact on a growing economy such as Sri Lanka. Hence, the reliance on hydro power should be further reduced and continuity of the power supply should be improved in the medium and long-term by implementing a well designed generation plan based on economic needs. Procedural and implementation delays should be minimised and projects should be implemented on a very strict time schedule. It is essential to avoid short-term measures which are costly, such as hiring power generation, as it would impose heavy burdens on consumers by way of high electricity tariffs. Meanwhile, the electricity pricing system should be further rationalised by removing cross subsidies in order to improve the competitiveness of the export sector. Despite heavy investments in improvement in the transmission and distribution network, serious attention should be paid to the high level of distribution losses. As the reliance on thermal power is gradually on the increase and considering its possible impact on energy prices and on the balance of payments, implementation of an effective energy conservation programme is essential.

Electricity

In 1997, the total installed capacity of electricity generation including electricity hired from the private sector, expanded by 11 per cent to 1,607 MW. from 1,453 MW. in 1996. This implied a reduction in dependence on hydro power from 81 per cent in 1996 to 71 per cent in 1997 reducing the vulnerability of the power system to weather factors. The most welcome development and a long felt need was the expansion in the national grid by 178 MW. to 1,587 MW. by adding three thermal power plants, namely, the Kelanitissa gas turbine project of 115 MW., the Sapugaskanda Power Station Project (extension) of 40 MW, at a total cost of Rs.5.5 billion and the first private sector Build, Operate and Own (BOO) power project of 22.5 MW. constructed by Lakdhanavi Private Ltd. in December 1997 at a cost of Rs.1,000 million. These 3 power plants increased the annual power generation potential by 1,280 GWh. to 6,696 GWh. by end 1997. In addition, as a result of the generous incentive scheme offered to the private sector to import generators, a total of 248 BOI and non-BOI companies had installed a capacity of 108 MVA by end of 1997. Meanwhile, hired private power which increased to 150 MW. by end July 1997 to meet the shortage of hydro power, was confined to 20 MW. by end of the year with improved water levels in reservoirs.

The electricity generated from all sources (CEB, private sector, hired power and self generation) in 1997 rose by 13 per cent to 5,126 GWh. compared to a decline of 5 per cent in the previous year. Hydro power generation by the CEB, which dropped by 12 per cent in the first half of the year, improved substantially in the second half of the year due to a favourable North-East Monsoon. Consequently, hydro power generation during 1997 rose by 6 per cent compared with a decline of 28 per cent in 1996. In order to meet the shortfall in hydro power and the rising demand, there was a substantial expansion in thermal power generation. Thermal power generation, including private power and self-generation, increased by 31 per cent to 1,678 GWh. during 1997. Self-generation by private sector entities stood at 217 GWh. recording an increase of 43 per cent compared with the previous year, reflecting an improvement in captive generating capacity. Consequently, in terms of generated power, the reliance on thermal power improved to 33 per cent in 1997 compared with 28 per cent in 1996. The increased thermal power generation and the urgent need to expand the generating capacity had a significant impact on the financial operations of the CEB in 1997. According to the CEB, total expenditure on thermal power generation, including payments for hiring charges, self generation and power purchases, was in the region of Rs.7,235 million.

In the wake of high cost thermal power generation, electricity tariffs were revised with effect from 1 September 1997, to raise the rate of return of the CEB. The average tariff of electricity was increased to Rs.4.52 per unit from Rs.4.05 or by 11 per cent. The domestic average tariff increased by 14.6 per cent. For the domestic sector, the CEB has introduced a minimum charge of Rs.25 in order to safeguard the low income consumers from the large tariff increases which will occur if normal tariff is applied. The average tariff for the industrial sector rose at a relatively lower rate of 9 per cent compared to other categories, reducing the cross subsidy provided to the domestic sector.

TABLE 5.5
Salient Features of the Energy Sector

Item	Unit	1995	1996	1997(a)	Percentage Change	
					1996	1997
1. Petroleum Products						
Quantity of Exports	MT '000	616	661	538	7	-19
Value of Exports	Rs. Mn.	4,349	5,740	5,743	32	0
	US$ Mn.	85	104	97	22	-7
Quantity Imported						
Crude Oil	MT '000	1,860	2,033	1,814	9	-11
Refined Products	MT '000	562	729	1,087	30	49
L.P. Gas	MT '000	66	71	87	8	23
Value of Imports (C&F)						
Crude Oil	Rs. Mn.	12,360	16,809	15,584	36	-7
	US$ Mn.	241	304	263	26	-13
Refined Products	Rs. Mn.	4,812	8,465	12,512	76	48
	US$ Mn.	94	153	212	63	39
L.P. Gas	Rs. Mn.	1,121	1,237	1,635	10	32
	US$ Mn.	22	22	28	0	27
Average Price of Crude Oil (C&F)	Rs./Barrel	903	1,116	1,167	24	5
	US$/Barrel	17.59	20.19	19.42	15	-4
Local Sales	MT '000	1,721	2,120	2,327	23	10
Super Petrol	MT '000	190	197	194	4	-2
Auto Diesel	MT '000	796	1,048	1,295	32	24
Heavy Diesel (b)	MT '000	80	87		9	-
Super Diesel	MT '000	27	26	32	-4	23
Kerosene	MT '000	222	228	225	3	-1
Furnace Oil	MT '000	238	336	371	41	10
Avtur	MT '000	91	110	111	21	1
L.P. Gas	MT '000	77	88	99	14	13
Local Price						
Super Petrol	Rs./Litre	40.00	50.00	50.00	25	0
Auto Diesel	Rs./Litre	12.40	13.20	13.20	6	0
Heavy Diesel	Rs./Litre	11.70	-	-	-	-
Super Diesel	Rs./Litre	15.20	18.50	18.50	22	0
Kerosene	Rs./Litre	9.50	10.40	10.40	9	0
Furnace Oil						
500 Seconds	Rs./Litre	7.10	7.80	7.80	10	0
800 Seconds	Rs./Litre	6.80	7.50	7.50	10	0
1,000 Seconds	Rs./Litre	6.50	7.20	7.20	11	0
L.P. Gas	Rs./Kg.	19.23	22.30	22.30	16	0
2. Electricity						
Available Capacity	MW	1,409	1,453	1,607	3	11
Installed Capacity	MW	1,409	1,409	1,587	0	13
Hydro	MW	1,137	1,137	1,137	0	0
Thermal	MW	272	272	427	0	57
Private Power	MW	-	-	23	-	-
Hired Private Power	MW	-	44	20	-	-55
Units Generated	GWh	4,783	4,530	5,126	-5	13
Hydro	GWh	4,514	3,249	3,448	-28	6
Thermal	GWh	269	974	1,050	262	8
Private Power	GWh	–	155	411		165
Self Generation	GWh	–	152	217		43
Total Sales	GWh	3,915	3,740	4,254	-4	14
Domestic	GWh	1,034	1,046	1,212	1	16
Industrial (c)	GWh	1,527	1,513	1,647	-1	9
Commercial	GWh	631	592	689	-6	16
Local Authorities	GWh	683	542	657	-21	21
Street Lighting	GWh	40	47	49	18	4

(a) Provisional
(b) From June, 1996 onwards heavy diesel sales are also classified under auto diesel

Sources: Ceylon Petroleum Corporation
Ceylon Electricity Board
Shell Gas Lanka Ltd.
Lanka Marine Services (Pvt.) Ltd.

The average tariff for the commercial sector increased by 12.8 per cent to Rs.7.03 per unit.

Despite the increase in electricity tariffs, total power consumption (including self generation) during the year 1997 showed an increase of 14 per cent. Even when adjusted for energy losses due to power cuts in the previous year, demand for power grew by 10 per cent reflecting a growing demand resulting from expanding economic activities and domestic needs. Total power consumed by the domestic sector rose by 16 per cent partly reflecting an increase in the consumer network from 1.56 to 1.71 million households. The use of electricity by the industrial and commercial sectors also increased by 9 and 16 per cent, respectively. Sales to Lanka Electric Company (LECO) also increased by 21 per cent during 1997.

The investment expenditure on generation, transmission and distribution projects was in the region of Rs.7,756 million. Of this, Rs.3,840 million or 49 per cent was spent on power generation projects. Foreign funded power generation projects which showed progress during the year were the Sapugaskanda Power System Expansion Project (Rs.509 million), the West Coast Coal Project (Rs.151 million), the Kukule Hydro Power Project (Rs.280 million), Samanalawewa (Rs.636 million) and the Sapugaskanda KFW Second Extension Project (Rs.413 million). The balance Rs.3,916 million was spent on transmission and distribution projects with the aim of upgrading and expanding MV and LV distribution lines, reducing system losses and improving voltage levels and reliability. The main transmission and distribution projects undertaken during the year were the Transmission and Grid Substation Development Project (Rs.591 million), the Transmission System Augmentation and Development Project (Rs.220 million) funded by the OECF, the Augmentation of Grid Substation Project funded by KFW, the Power System Expansion Project (Rs.516) funded by the ADB and the Second Power Distribution and Transmission Project (Rs.2,256 million) funded by the IDA. In addition, a sum of Rs.417 million was spent under the Rural Electrification Scheme funded by the ADB, with a view to improving and expanding the distribution network in rural areas. Once this project is completed, it will provide electricity to about 110,000 additional consumers by the year

Chart 5.3
Major Energy Sources

Chart 5.3.1
Electricity Generation and Sales
(1990 = 100)

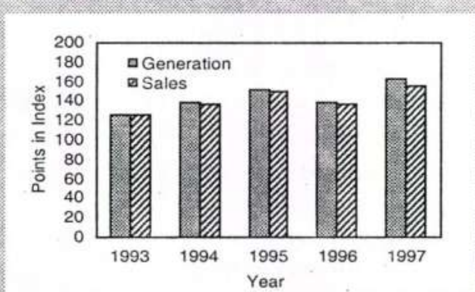


Chart 5.3.2
Electricity : Average Tariffs and Unit Costs

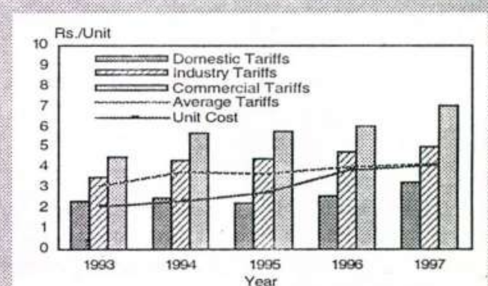


Chart 5.3.3
Petroleum: Prices and Costs

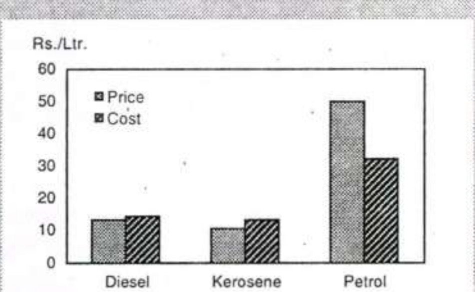
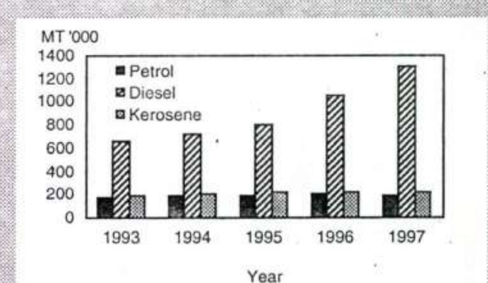


Chart 5.3.4
Petroleum Products - Domestic Sales



2000. According to CEB sources, there has been an underutilisation of funds allocated for these project due to delays in shipment of materials and delays in signing contracts.

In order to improve the power generation capacity and system reliability in the medium and long-term a number of thermal and hydro power projects are in the pipeline. Construction work on the 51 MW. KHD power project at a cost of US dollars 62 million was in progress during 1997. The project is expected to be completed in mid 1998. The Sapugaskanda Power Station Expansion Project Extension 2 (40 MW) funded by the KFW and the CEB at a cost of Rs.3,321 million, commenced in 1997 and the scheduled completion year is 1999. Initial site works and tender procedures have been in progress on the 60 MW. Kukule Ganga Hydro Power Project, estimated to cost Rs.12,635 million and to be funded by the OECF and the CEB. Initial work on a combined cycle gas turbine plant (150 MW.) funded by the OECF at Kelanitissa at a cost of Rs.8,000 million commenced in 1997 and is scheduled to be completed in the year 2000. With respect to private sector power projects, proposals were called for a 150 MW. combined cycle power project and two 20 MW. diesel power plants at Matara, Matugama and Anuradhapura. Negotiations have been in progress to build a 60 MW. Barge Mounted Plant at Kotugoda.

Energy conservation through the sale of energy saving compact fluorescent lamps has been continued during the year under review. A programme to sell 220,000 lamps to achieve a saving of 3.75 GWh. was introduced in the Western Province. A similar scheme was introduced for the public sector by the Energy Conservation Fund. In addition, energy audits, surveys and publicity programmes were also carried out.

Petroleum Products

The expenditure on petroleum imports grew by 5 per cent to US dollars 503 million, accounting for 10 per cent of the total import bill. This was due to an increase in the volume of petroleum products to meet the additional requirements for thermal power generation and enhanced transport demand. The international price of crude oil, which rose steeply during the first quarter, recorded a downward trend during the third and fourth quarters of the year. Consequently, there was a marginal decrease in the average international price of crude oil in 1997 compared with an increase of 15 per cent in the previous year. The volume of crude oil imports dropped by 11 per cent to 1.8 million metric tons during 1997 due to the closure of the oil refinery for routine maintenance purposes from January to February 1997. In order to meet the shortfall in supply, the import of refined products increased to 1.1 million metric tons by 49 per cent. The expenditure on imports of liquefied petroleum gas (LPG) rose due to both a higher volume of imports and increased international prices.

Domestic prices of petroleum products remained unchanged in 1997. The cross subsidies on kerosene, auto diesel and fuel oil were also continued. At the end of the year, auto diesel and kerosene were being sold at 7 per cent and 21 per cent, respectively, below cost. Furnace oil was heavily subsidised by selling it at 29 per cent below the unit cost of production. A 10 per cent waiver on Customs duty was effective throughout the year, the import duty being lowered from 35 per cent to 25 per cent. This, with a marginal decline in international prices and the strict overhead cost control measures adopted, enabled the financial position of the CPC to reach a break-even level in 1997, compared with a loss of Rs.3,000 million in 1996.

The domestic consumption of petroleum products rose by 10 per cent in 1997. The demand for auto diesel further expanded by 24 per cent, following a 32 per cent increase in the previous year, reflecting the additional needs related to enhanced thermal power generation and the growing transport needs of the economy. Meanwhile, the demand for furnace oil grew by 10 per cent, partly due to expansion in industrial sector activities. The sale of kerosene remained around the same level as in 1996 as a substitution is taking place towards electricity. The demand for petrol declined by 2 per cent indicating a switch from petrol to diesel and gas driven vehicles due to the relative price advantage.

Several projects were undertaken to improve and expand the distribution network for petroleum products. The contract for rehabilitation of storage tanks at the Orugodawatta and Kolonnawa installations and the construction of a new distribution terminal at Sapugaskanda was awarded in 1997. The project is to be funded by an ADB loan of US dollars 24 million and the local component of Rs.1,000 million by a NDB loan. The project is to be completed by end 1999. Another project to improve regional storage facilities by constructing 13 storage tanks was in progress during the year. The total cost of this project has been estimated at Rs.62 million. The development of an aviation re-fueling facility at Katunayake, reconstruction of retail outlets, revamping of high vacuum and bitumen blowing plant and the sulpher recover plant were undertaken during the year. In the wake of the power crisis in 1996, measures were taken to equip 80 per cent of retail outlets with their own generators, assuring continuity of service. Meanwhile, measures were taken to rehabilitate storing, marketing and distribution facilities for petroleum products in the Northern Province which had been destroyed during the civil war. Five storage tanks of 100,000 litre capacity were installed at Kankasanthurai (KKS) for storing kerosene and diesel. The distribution system from the KKS harbour to the KKS tank farm has been rehabilitated. Approximately 40 retail outlets in Jaffna have been rehabilitated and reactivated and this has effectively resulted in a reduction of the cost of diesel and kerosene in that area.

5.6 Transportation

Transport Network

The national transport network expanded slightly in 1997, as a result of enhanced involvement by the private sector. However, there are many areas, particularly roads and passenger transportation, where qualitative improvements are needed. The country has nearly 100,000 kms. of roads of which 11,147 kms. have been categorized as A and B class roads which are under the Road Development Authority (RDA). There were no additions to the A and B class roads in 1997. C and D Class roads of nearly 15,000 kms. are being maintained by the Provincial Councils. The remaining road network is under local governments and other public and private institutions such as the Mahaweli Authority, Irrigation Department, Forest Department, Wildlife Department and plantation companies.

The total vehicle stock of the country at end 1997 stood at 1,407,381, including motor cycles, and grew by 6 per cent. The vehicle stock, without motor cycles, was 731,747 at end 1997. The 11 Regional Transport Companies (formerly Peoplised Bus Companies) owned 8,007 buses, but the average number of buses operated per day was 4,487. There were approximately 12,800 private buses engaged in passenger transportation in 1997. The rolling stock position of Sri Lanka Railways (SLR) remained almost unchanged during 1997. It owned 57 locomotives, 26 power sets, 1,312 carriages and 2,575 wagons to operate a rail track network of 1,463 kilometers. SLR's share in goods transportation has been declining over the years and as a result, private truckers handled about 95 per cent of the goods transportation by land. There are about 55,550 trucks mainly engaged in goods transportation.

The major ports of the country, namely, Colombo, Galle, Trincomalee and Kankasanturai, are managed by the Sri Lanka Ports Authority. The Port of Colombo, which handles more than 90 per cent of the cargo, has the capacity to handle 1.6 million Twenty-Foot Equivalent Container Units (TEUs) per annum in addition to the capacity to handle bulk and liquid cargo.

With respect to air transportation, there are 12 domestic airports, in addition to the Bandaranaike International Airport at Katunayake. Air Lanka, the national carrier, owns a fleet of 9 aircrafts and operates scheduled passenger services to 28 destinations in twenty countries.

During 1997, several important steps were taken to expand and improve transport infrastructure, particularly with regard to passenger transportation. The formation of Regional Transport Companies (RTC) was completed during the year with the intention of improving the efficiency of public bus transport services. Import tariffs on public transport vehicles were completely removed with the 1998 Budget as an incentive for investment in the transport sector. At the same time, funds were allocated to import 1,500 bus engines for the RTCs to replace non-operational buses. In addition, several financial assistance programmes have been introduced for investors in the transport sector through commercial banks and other financial institutions.

Road Development

The RDA is the apex institution responsible for the development and maintenance of the national highway network which comprises all A and B class roads to the extent of 11,147 kilometers. The RDA also maintained 4,422 bridges during the year. Total expenditure of the RDA on road construction/rehabilitation in 1997 was Rs.5,730 million, which represents a sharp increase of 72 per cent over the expenditure of the previous year. However, national road maintenance expenditure increased only by 13 per cent, to Rs.266 million, during the year. Funds allocated for road maintenance are inadequate. With the present annual allocation, only about one tenth of the national road network can be maintained. Provincial Councils, (except the North-East Provincial Council) have reported that there are approximately 15,000 kilometers of roads under their purview. Total expenditure on roads incurred by the Provincial Councils (PCs) decreased by 7 per cent to Rs. 724 million in 1997. The Ministry of Transport and Highways allocated Rs. 800 million to assist PCs in road development activities.

Sri Lanka has a road coverage of approximately 1,550 kms. per 1,000 sq. kms. of area or road density of 54 kms. per 10,000 persons, which is considered to be remarkable when compared to Asian standards. However, periodic and routine maintenance of roads has not been in keeping with the expansion of economic activities and the increasing vehicle fleet. Inadequate allocation of funds has been the major impediment to satisfactory maintenance. As a result, road conditions, particularly those of provincial and local roads, have deteriorated considerably over the years, thereby increasing transport costs. It has been observed that available resources have not been properly utilised to derive the maximum benefit due to poor co-ordination and weak monitoring of road maintenance by various institutions, in particular, at provincial and local levels.

The road rehabilitation programme of the RDA continued during 1997 with foreign assistance. The World Bank's Third Road Rehabilitation Project, designed to rehabilitate 397 kms. of roads and reconstruct 19 bridges in the Southern, Western and North Western Provinces, was in progress in 1997. Under this project, rehabilitation work on 221 kilometers of roads was undertaken at a cost of Rs.1,712 million during the year. Reconstruction of 5 bridges in the Gampaha District and 10 bridges in the Matara and Hambantota Districts at a cost of Rs.182 million was also in progress. Under the ADB - Third Road Rehabilitation Project, 184 kms. of roads will be rehabilitated at a cost of Rs.1,966 million. This project includes the rehabilitation of 103 kms. of the Katunayake - Puttalam road at a cost of Rs.1,084 million. The construction work of the OECF funded Baseline Road Reconstruction Project - Phase I, which commenced in 1997, will be completed by end 1998. The project includes construction of a dual 3 lane road from the Kelanitissa roundabout to the High Level Road at Kirulapone with a fly-over across the railway line at Dematagoda and a pedestrian sub-way at the Borella junction. Contracts are to be awarded shortly for the construction of the OECF funded Sri Lanka-Japan Friendship Bridge - Phase II to provide two additional lanes. With assistance from the Kuwait Fund for Arab Economic Development, rehabilitation/reconstruction of 28 bridges at a cost of Rs.600 million is in progress. The detailed engineering design work for rehabilitation of the Ratnapura - Beragala - Badulla road with Korean assistance has been completed and construction work is due to commence in 1998.

Under the OECF assisted periodic road maintenance programme, extensive sand sealing and surface dressing of 1,760 kms. was completed at end 1997 at a cost of Rs.875 million. The construction of Stage I of the Kandy sub-way was completed in 1997 and construction work of Stage II is in progress. A fly-over across the main railway line at Ragama is also in progress and the estimated cost of this project is Rs.200 million. The Southern Highway Project has been referred to the ADB to carry out a feasibility study with the objective of getting ADB assistance for construction of the highway. In respect of the Colombo - Katunayake expressway, the feasibility study and the environmental impact assessment have been completed. This project is intended to be carried out as a BOO/BOT Project.

Passenger Transport

Although there was no noticeable progress in the passenger transport sector during 1997, a strong commitment to improve the scale of operations of the passenger transportation through restructuring and capacity expansion was observed during the year. In terms of the National Transport Commission (Amendment) Act No.30 of 1996, the formation of Regional Transport Companies (cluster companies) was completed during 1997. Accordingly, the 93 Peoplised Bus Companies were clustered into 11 RTCs. This enabled the RTCs to operate a well integrated service network in the respective regions and to share resources in management, training and maintenance while benefiting from the economies of scale. It is too early to conduct a complete evaluation of the new system as the formation of RTCs continued until the latter part of the year. The above Act also stipulates that the private sector bus operators should form themselves into companies, with each company to own at least 50 buses within 5 years from the date of Gazette notification of this requirement. The Gazette notification will be issued in due course. However, as a prerequisite, non-licensing of low-roofed buses and low carriage capacity buses has already been adopted.

Private investors have responded favourably to the 20 per cent fare increase effected from July 1996, and the accompanying incentives given by way of tariff concessions, credit and leasing facilities. However, the sluggish performances of the SLR continued during 1997, owing to a chronic shortage of investment in rolling stock, track maintenance and traffic control.

Bus Transport

The scale of operations of the Peoplised Bus Companies/RTCs declined during 1997, mainly owing to a drop in the active bus fleet for passenger conveyance. The average number of buses operated per day in 1997 dropped to 4,487 from 4,716 in 1996. A total of 460 new buses was added to their fleet by RTCs during 1997 compared to 272 new buses during 1996. Some non-operating buses were disposed of to the private sector during the year. To keep the time tables in order and provide a reasonably satisfactory bus service to the public, the RTCs require an active bus fleet of 6,275.

The operated kilometerage of RTCs further dropped by 3.6 per cent to 335 million kilometers in 1997. Reflecting the same trend, the passenger kilometerage also dropped by 6.7 per cent to 18,902 million kilometers in 1997 against a 4.5 per cent increase in 1996. The total revenue of RTCs was Rs.4,897 million, of which Rs.4,585 was from passenger fares. Operating expenditure increased by 8 per cent to Rs.6,471 million due to an increased wage bill and maintenance expenditure. As in the previous year, the RTCs received Rs.360 million from the Government as subsidies for operation of bus services in non-remunerative roads and for issue of season tickets to school children at subsidised rates. Accordingly, the operating loss of RTCs expanded by 44 per cent to Rs.1,214 million in 1997.

TABLE 5.6
Salient Features of the Transport Sector

Item	Unit	1995	1996	1997 (a)	Percentage Change 1996	Percentage Change 1997 (a)
1. New Registration of Motor Vehicles						
Omnibuses (b)	Nos.	1,653	1,364	1,999	(17.5)	46.6
Private Cars (c)	Nos	30,046	31,921	31,338	6.2	(1.8)
Motor Cycles	Nos	34,207	31,955	36,755	(6.6)	15.0
Goods Transport Vehicles	Nos	7,293	5,660	5,561	(22.4)	(1.7)
Land Vehicles	Nos	9,294	8,340	7,652	(10.3)	(8.2)
Private Coaches	Nos	47	115	60	144.7	(47.8)
Others	Nos	30	65	16	283.3	(47.8)
2. Sri Lanka Railways (SLR)						
Operated Kilometres	'000	8,541	7,705	7,734	(9.8)	0.4
Passenger Kilometers	Mn.	3,321	3,241	3,342	(2.4)	3.1
Freight ton Kilometers	Mn.	136	107	92	(21.3)	(14.0)
Total Revenue	Rs.Mn.	947	938	1,030	(1.0)	9.8
Current Expenditure	Rs.Mn.	1,735	1,826	1,742	5.2	(4.6)
Operating Loss	Rs.Mn.	788	887	712	12.6	(19.7)
Capital Expenditure	Rs.Mn.	3,117	4,624	4,187	48.3	(9.5)
3. Regional Bus Companies						
Operated Killometers	Mn.	353	348	335	(1.4)	(3.6)
Passenger Killometers	Mn.	19,390	20,259	18,902	4.5	(6.7)
Total Revenue	Rs. Mn.	4,702	5,170	5,257	10	1.7
Operational Expenditure	Rs.Mn.	5,337	6,012	6,471	12.6	7.6
Operating Loss	Rs.Mn.	635	842	1,214	32.6	44.2

(a) Provisional.
(b) Omnibuses registered by Regional Bus Companies and Private Sector
(c) Includes dual purpose vehicles.

Sources: Department of Motor Traffic
Sri Lanka Railways
Sri Lanka Transport Board
National Transport Commission

In addition to the semi-luxury bus service which was introduced in 1996, a single rate luxury bus service was introduced in the latter part of 1997, in the suburbs of Colombo with a view to curtailing the traffic congestion in Colombo through attracting personal vehicle users to this bus service. The semi-luxury bus service, was also further expanded during 1997 and at the end of the year, there were 230 buses providing this service. These bus services helped to ease the pressure on passenger transport, particularly during peak hours.

Private sector participation in passenger transportation improved slightly in 1997. The total number of permits issued to private bus operators by all Provincial Councils (except the North-East) and the National Transport Council (NTC), increased by 19 per cent to 12,776 in 1997. Of the total permits issued, 5,422 permits had been issued by the Western Provincial Council. The seating capacity of private buses in provincial services also increased significantly by 24 per cent to 337,028 in 1997. Meanwhile, the number of bus owners in the provinces declined to 8,018 in 1997 from 8,227 in 1996, indicating a gradual shifting of ownership from single owners to fleet owners. This is a welcome development because it reduces the overhead cost of bus operations and eases monitoring by the authorities.

The NTC continued to implement several programmes during 1997 with a view to strengthening the passenger transportation service of the country. Based on the recommendations made by the Committee on Reorganisation of Peoplised Bus Companies and Private Bus Operators, the formation of RTCs was carried out by the NTC during 1997. In order to improve the quality of service, a comprehensive project for the training of private bus crews has been undertaken by the NTC in collaboration with the Provincial Transport Authorities and assistance from the World Bank. A total of 2,876 drivers and conductors have been trained during 1997. The NTC also implemented a programme under which un-remunerative rural bus routes were offered to private bus operators on a competitive tender basis. Under this programme, five rural routes have been offered during 1997 and 19 other routes have been identified for the calling of tenders. In addition, the NTC disbursed Rs.200 million to RTCs in respect of providing bus services in un-economic rural routes. A programme has also been introduced to provide free transport facilities for disabled armed service personnel and police personnel.

Rail Transport

The performance of SLR continued to be unsatisfactory in 1997. The operated kilometerage remained unchanged at 7.7 million kilometers in 1997 while the passenger kilometerage increased by 3.1 per cent to 3,342 million kilometers, against a 2 per cent decrease in 1996. Freight transportation by SLR dropped significantly by 14 per cent in 1997, further losing its market share.

Several decades ago the SLR played a dominant role in passenger and freight transportation, but today it has become less important due to competition from other modes of transportation and various inefficiencies built up within its operations. There is a critical need to rehabilitate and restructure the entire SLR to make it a commercially viable enterprise. Additional investment is needed for upgrading and modernising the outdated railway infrastructure which causes frequent derailment and enforcement of number of speed limits. The depleting rolling stock position restricts operations and causes cancellation of scheduled services. The obsolete centralised traffic control system and communication system also impede the day to day operations of SLR.

Despite these difficulties, the SLR took several steps to expand its operations with the objective of providing extra services to commuters. An additional night mail train, Colombo/Badulla/Colombo, was introduced in 1997. A third rail track from Maradana to Ragama was opened for traffic in the latter part of 1997. Seven new railway substations were also opened during the year. Additional carriages were coupled to long distance commuter trains while some suburban services were extended to ease congestion. Meanwhile, broad gauging of the Kelani Valley line upto Avissawella was completed during the year.

The rolling stock position of the SLR improved slightly during 1997, owing to progress on several projects implemented by the SLR. Under the OECF funded Railway Rehabilitation Project 6 locomotives were released for service while under the re-engining programme 3 locomotives were released. In addition, 4 locomotives of the M8 class were purchased under an Indian line of credit and added to the fleet. The SLR also undertook several programmes to improve the railway infrastructure. Two railway bridges at Panadura and Kalutara were repaired and opened for traffic, while the construction of 3 new bridges was initiated during the year. Under the OECF funded Rail Track Rehabilitation Project, 75 per cent of track rehabilitation between the sections Galle/Kandy and Ragama/Negombo has been completed. The construction of a duplicate track from Panadura to Kalutara and from Polgahawela to Rambukkana has also been initiated.

The revenue of the SLR increased by 9.8 per cent in 1997, mainly due to the 20 per cent passenger fare increase effected from March 1996 and due to a marginal increase in the passenger kilometerage. Meanwhile, current expenditure dropped by 5 per cent to 1,742 million, mainly due to a 17 per cent drop in the maintenance expenditure to Rs.1,079 million. Consequently, the operating loss of SLR dropped by 20 per cent to Rs.712 million in 1997. The capital expenditure of SLR dropped by 10 per cent to Rs.4,187 million in 1997.

Port Services

The demand for port services continued to grow during 1997 and surpassed the present capacity of container handling of the Port of Colombo. At current productivity levels, the Port of Colombo has the capacity to handle 1.6 million TEUs per annum whereas it handled 1.7 million TEUs in 1997. Container throughput recorded a 24 per cent growth when compared to a 29 per cent growth recorded in 1996. Transshipment container handling, which accounts for about 75 per cent of the total container handling, further rose by 26 per cent after a sharp 40 per cent growth recorded in 1996. The number of ships that called at the Port of Colombo increased by 5 per cent to 3,627, while the total volume of cargo handling increased by 18 per cent to 27 million metric tons in 1997. Meanwhile, cargo handling at the ports of Galle and Trincomalee dropped by 23 per cent and 4 per cent, respectively, during 1997.

The Sri Lanka Ports Authority (SLPA) encountered severe difficulties during the year due to capacity limitations of the Port of Colombo. The turnaround time of cargo vessels calling at the Port of Colombo increased significantly as the Port was operating at its full capacity in 1997. The average waiting time of main liners, feeders and conventional vessels increased from 6.4, 14.2 and 24.9 hours, respectively, in 1996 to 6.9, 24.6 and 28.5 hours, respectively, in 1997, while the average berth stay of these categories of vessels increased from 15.6, 29.8 and 114.1 hours, respectively, to 27.0, 47.4 and 120.1 hours, respectively. Attempts were made to ease these difficulties by improving the productivity of the Port. Gross gantry moves per hour increased from 18 in 1996 to 20 in 1997. Net gantry moves per hour increased from 23 in 1996 to 26 in 1997. In addition, to meet the steadily growing demand for port services, several short-term projects were also initiated during 1997. The development of the North pier to handle 100,000 TEUs per annum with general cargo was initiated with assistance from the Overseas Economic Corporation Fund (OECF). The total cost of this project has been estimated at US dollars 15 million. Work is also in progress to add 3 Container Cranes and 6 Transfer Cranes to the Jaye Container Terminal (JCT) at a cost of US dollars 40 million, funded by the OECF. This would facilitate stacking empty containers to a height of 8 containers from the present 5 containers, thereby increasing the yard capacity by 300,000 TEUs per annum. Programmes were also underway to develop the Galle and Trincomalee jetties to ease the pressure on handling general cargo in the Port of Colombo.

Sri Lanka has high potential for emerging as the premier shipping centre in the region provided that the port

TABLE 5.7
Performance of the Port Services

Item	1995	1996	1997 (a)	Percentage Change 1996	Percentage Change 1997 (a)
1. No.of Vessels Arrived	3,612	3,857	4,088	7	6
Colombo	3,277	3,467	3,627	6	5
Galle	69	84	57	22	(32)
Trincomalee	266	306	404	15	32
2. Total Cargo Handled (MT '000.)	19,517	22,722	26,832	16	18
Colombo	17,414	20,885	25,117	20	20
Galle	237	236	182	(0)	(23)
Trincomalee	1,866	1,601	1,533	(14)	(4)
3. Total Container Traffic (TEUs '000)(b)(c)	1,049	1,356	1,687	29	24
Colombo	1,049	1,356	1,687	29	24
4. Trans-shipment Container (TEUs '000)(b)(c)	700	980	1,232	40	26
Colombo	700	980	1,232	40	26
5. Revenue (Rs. Mn.)	4,820	9,007	10,974	87	22
Colombo	4,582	8,775	10,731	92	22
Galle	75	81	81	8	(0)
Trincomalee	163	151	162	(7)	8
6. Expenditure (Rs. Mn.)	5,461	6,551	8,194	20	25
Colombo	5,129	6,188	7,807	21	26
Galle	128	150	152	17	2
Trincomalee	204	213	235	4	10
7 Net Profit-Before Tax (Rs.Mn.)	1,360	2,456	2,780	81	13
Colombo	1,453	2,587	2,924	78	13
Galle	(53)	(68)	(72)	28	5
Trincomalee	(40)	(63)	(73)	58	15
8. Employment (Nos.)	16,492	17,476	19,033	6	9
Colombo	14,851	15,589	17,101	5	10
Galle	779	841	831	8	(1)
Trincomalee	862	1,046	1,101	21	5
9. Productivity Indicators					
Gantry Moves Per Hour (Gross)	14	18	20	29	11
Gantry Moves Per Hour (Net)	15	23	26	53	13

(a) Provisional
(b) Containers are handled only in the Port of Colombo
(c) TEUs = Twenty-feet Equivalent Container Units

Source: Sri Lanka Ports Authority

capacity is expanded sufficiently and port productivity and efficiency are increased to competitive levels. Past performances of the Port of Colombo indicate that there is a direct relationship between capacity expansion and growth of demand for port services. In an environment where neighbouring ports in the region are expanding rapidly and compete to attract demand for shipping services emerging in the region, Sri Lanka has to take firm action to expedite the execution of planned port expansion projects without any further delays. In view of this, the Government has formulated several plans to expand the port services of the country. The recently declared National Ports and Shipping Policy of Sri Lanka states that the policy envisages the emergence of Sri Lanka as the premier shipping centre in South Asia with Colombo operating as a hub port, complemented by modernised ports at Galle, Kankasanturai and Trincomalee and new ports at Oluvil and Hambantota. The implementation of several proposals made for the expansion of port infrastructure facilities to develop the Colombo Port as the hub port in the region is already under serious consideration. The development of the Queen Elizabeth Quay (QEQ) under a BOO/BOT basis to enhance the container handling capacity to one million TEUs per annum, at an estimated cost of US dollars 200 million, is to commence shortly. Proposals for the development of a new South Port of Colombo and new North Port of Colombo are very large projects involving the construction of breakwaters etc. to meet the growing demand for port services, particularly for transshipment, envisaged during the next decade. The container throughput at the Port of Colombo has been forecast at 2.3 - 3.6 million TEUs in the year 2005 and at about 3.8 - 6.7 million TEUs in the year 2015. In this context, planned port expansion projects have to begin without further delay to cater to this demand and harness the opportunities that Sri Lanka has in this sector, primarily due to her advantageous location. The development of the Port of Galle into a multi-purpose port which will cater to transshipment and domestic containerised cargo as well as conventional cargo is also planned. A decision has been taken to call for fresh proposals to develop the Port of Galle on BOO/BOT basis. A feasibility study is underway to develop a new port at Oluvil in the Ampara district. The Government is also considering the erection of a new port for oil and dry cargo handling in the vicinity of Hambantota.

The total revenue of the SLPA increased by 22 per cent in 1997 after an 87 per cent increase in the previous year, Box 3

National Ports and Shipping Policy of Sri Lanka

A National Ports and Shipping Policy of Sri Lanka (NPSP) was formulated by the Government in 1997. This policy envisages the emergence of Sri Lanka as the premier shipping centre in South Asia with Colombo operating as a hub port, complemented by modernised ports at Galle, Oluvil, and Hambantota, primarily through the expansion of port infrastructure. It also provides a framework for the promotion and development of ancillary services, provision of maritime training, the development of a national merchant shipping fleet and revitalisation of the Ceylon Shipping Corporation, new modes of financing port development and managerial restructuring of the SLPA. Sri Lanka's policy towards the protection of the marine environment and safety of life at sea have also been emphasised in the NPSP of Sri Lanka.[1]

In view of the fact that the economies of the South Asian region, the 'hinterland' of Sri Lanka, are growing rapidly, the Port of Colombo which is close to international navigation lanes has tremendous opportunities to emerge as the hub port in the region. The container throughput of the Port of Colombo which was 1.7 million TEUs in 1997 is expected to reach 2.3 – 3.6 million TEUs by the year 2005 and 3.8 – 6.7 million TEUs by the year 2015. The present capacity of the Port of Colombo is 1.6 million TEUs per annum. Therefore, the NPSP expects to consolidate Sri Lanka's natural and strategic position in the shipping arena by developing the ports of Colombo and Galle as hub ports and competitive transshipment centres, while developing other ports and ancillary services substantially. The NPSP envisages this development as follows :

1. Development of container handling facilities at the Port of Colombo :
   - As a short-term strategy the Queen Elizabeth Quay (QEQ) is to be developed on BOO/BOT basis to handle 1 million TEUs as against the present 230,000 TEUs per annum. In addition, the North Pier will be developed with facilities to handle break-bulk, bulk and containerised cargo.
   - As a long-term strategy a new South Port of Colombo in the area adjacent to the QEQ, is to be developed on a BOO/BOT basis, with a capacity of 4.9 million TEUs per annum. As Phase II of the project, construction of a new North Port of Colombo has also been proposed to cater to the potential further demand for transshipment facilities.
   - The private sector is to be encouraged in the financing and operation of port infrastructure on BOT terms together with public sector financing wherever necessary and feasible.
2. Other Infrastructure Development
   - Plans for improving conventional cargo handling facilities and off-dock facilities at the Port of Colombo are included in the NPSP.
   - The NPSP envisages the development of the existing Port of Galle into a hub port as well as constructing a new port in Galle with 3 berths on a BOT basis to handle one million TEUs per annum.
   - Development and expansion of the Port of Trincomalee as a multipurpose port dealing with cargo handling as well as shipping and tourism related activities have also been recognised in the policy frame work.
   - Construction of a new commercial port at Oluvil and an oil and dry cargo handling port at Hambantota have also been included in the NPSP.
3. Port Productivity and Efficiency
   - Main line and feeder operators will be encouraged to use the Port of Colombo, by improving productivity, promoting a feeder network and implementing a marketing and promotional plan.
   - The NPSP visualises the importance of improving port efficiency and management skills towards achieving a higher level of port performance. In this regard, policies are to be formulated to strengthen planning and maintenance, promote training, establish a level playing field for common services, follow cost-effective procedures etc. In addition, it has also been proposed to operate key port services by subsidiaries of the SLPA while other services are provided by the private sector. The appointment of an independent port regulator to safeguard fair competition and national interests has also been suggested in the policy report.
4. Ancillary Services
   - The involvement of the private sector in ancillary services such as ship repairs, ship building and ship-breaking, multi-country consolidation, entrepot trade and bulk shipping, bunkering, off-shore supplies, cruise shipping and marinas and ship management etc. has been recognized in the NPSP.

1 *National Ports and Shipping Policy of Sri Lanka*, Ministry of Shipping, Ports, Rehabilitation & Reconstruction 1997

mainly due to substantial increases in port charges. The growth in expenditure was 25 per cent. As a result, net profit before tax of the SLPA rose by 13 per cent to Rs.2,780 million in 1997. Employment in port services increased by 9 per cent.

5.7 Irrigation and Settlement Schemes

The Mahaweli Development Programme, which is the largest ever multipurpose irrigation project undertaken by the State, has neared completion. The main activities during 1997 were systems development and rehabilitation activities. The Mahaweli Authority of Sri Lanka (MASL) has reported that the total expenditure incurred during the year amounted to Rs.847 million. The total extent cultivated under the Mahaweli command area increased by 6 per cent from 120,500 hectares in 1996 to 128,250 hectares in 1997. The extent under paddy increased by 10 per cent to 112,578 hectares, while the extent under other field crops decreased by 13 per cent to 15,700 hectares. This may be attributed to the fact that a better distribution of rainfall and higher levels of water in irrigation tanks in 1997 compared to 1996, enabled more land to be brought under paddy cultivation.

During 1997, several new projects were implemented by the MASL. Rehabilitation work in system "H" commenced in February and will continue up to the year 2003. On 6 August, the Huruluwewa Feeder Canal was gazetted as a special area of the MASL. The implementation of the Mahaweli Authority Restructuring Project to commercialise activities of MASL commenced in December, with World Bank assistance. This is expected to be completed by 2003. The Walawe Left Bank Extension and Upgrading Project was also inaugurated in December. Further, a sum of Kuwait dinar 300,000 was negotiated for the Moragahakande Project feasibility study. The rehabilitation and development of Zone 2 of System C and System G of the Mahaweli Consolidation Project, funded by the European Economic Co-operation (EEC), was initiated during 1997. The project on Repairs and Maintenance of the Polgolla and Walawe dam gates, funded by the Japan International Co-operation Association (JICA) was completed in the year under review.

Operations in three major foreign funded projects continued in 1997 as well. The Minipe Nagadeepa Irrigation Rehabilitation Project (MNIRP) and the North Western Province Special Irrigation Project (NWPSIP) have spent a sum of Rs.361 million and Rs.44 million, respectively, during the year. Eight schemes were to be completed in the NWPSIP in 1997. The National Irrigation Rehabilitation Project (NIRP), which has so far incurred the highest expenditure out of the three major projects, had completed work on 282 minor irrigation projects up to 1997. Total expenditure incurred on these projects in 1997 has been estimated at Rs.917 million.

Locally funded irrigation projects too performed well in 1997. There are 12 projects under this programme and it is planned to settle 7,370 families once the projects are completed. The Irrigation Department has estimated the total expenditure incurred on these projects in 1997 to be Rs.53.6 million.

Settlement activities under irrigation schemes continued in 1997. Under the Mahaweli Programme, settlement activities were carried out only in System B and System C where 157 and 392 families, respectively, were settled.

TABLE 5.8

Expenditure on Selected Major Foreign Funded Irrigation Schemes

Name of Project	Source of Aid (a)	Total Foreign Aid Commitment (In Mn.)	Expenditure in 1996 (b) (Rs.Mn.)	Expenditure in 1997 (c) (Rs.Mn.)	Cumulative Expenditure at end 1997 (Rs.Mn.) (c)
1. Minipe Nagadeepa Irrigation Rehab. Project					
(a) Mahaweli Bridge	JICA	J. Yen 2,276	458	283	781
(b) Irrigation	OECF	J. Yen 1,850	185	78	728
2. North Western Province Special Irrigation Project	CEC	ECU 6.3	83	44	346
3. National Irrigation Rehabilitation Project	IDA EEC	Rs.1,406.9 Rs. 622.6	535	512	1692

(a) JICA - Japanese International Co-operation Agency
OECF - Overseas Economic Corporation Fund (Japan)
CEC - Commission of European Communities
IDA - International Development Association (World Bank)
EEC - European Economic Community

(b) Revised

Source: Irrigation Department.

Settlement activities were affected by the adverse security situation. The total number of families settled under the Mahaweli Programme from the year of inception of the settlement programme up to 1997 was 92,071 families.

Participatory management in irrigation schemes was promoted through the ongoing programme of 'Waphaula'. During the year the programme was in operation in 152 major and medium irrigation schemes covering around 64,000 hectares. Of these schemes, 39 have been brought up to the 'specified' status under the Irrigation (Amendment) Act No. 13 of 1994. This means that the relevant farmer organisation has been able to meet various requirements of the Irrigation Department to prove its capacity of taking over the operation and maintenance of the irrigation scheme from the Irrigation Department. This also paves the way for the farmer organisation to achieve corporate status under the Agrarian Services Act and charge a fee from its membership for irrigated water. Steps have been taken to bring an additional 20 schemes up to the specified status depending on the strength and capability of the farmer organisation.

5.8 Special Programmes

Housing

In the context of a growing urban population in the country, which is anticipated to be about one third of the total population by the year 2000, the major focus of the Government's housing policy in 1997 was the expansion of housing facilities in urban areas, while improving the quality of estate and rural housing. In this regard, the scarcity of usable lands, high cost of construction, lack of investment and lack of affordability are some of the serious issues to be addressed by the Government. Improvement in living conditions of existing urban settlements, providing adequate infrastructure and providing alternative accommodation to shanty and slum settlers are also serious issues that need the attention of the Government. The key strategies to address these urban sector issues were encouraging private sector led medium and large scale housing development, assisting lending institutions to improve their capital structure and constructing houses for specific low and middle income groups by the State. With respect to the rural sector, the provision of concessionary financial support and assistance in kind to lower income groups, assistance to plantation sector workers to improve their living quarters and promotion of housing settlements with basic amenities were the strategies adopted during the year.

With respect to the state sector, policies for housing development activities are formulated under two approaches. The first is to extend assistance to low income families to build houses based on the enabling approach. The second is to construct houses to relocate slum and shanty squatters by making maximum use of land to liberate prime land for optimum use on a provider basis. The National Housing Development Authority (NHDA) which is responsible for state sector housing programmes, directed seven major programmes during the year under review. The major projects in progress were the Jana Udana Programme, Rural Housing Programme (RHP), Urban Housing Programme (UHP), Estate Housing Programme (EHP), Direct Construction Programme (DCP), Disaster Housing Programme (DHP) and a Fisheries Housing Programme (FHP).

There was moderate progress in the state sector housing programme in 1997. The total number of units completed under the public sector housing programme rose by 10 per cent to 32,548, while total loans and grants provided grew by 17 per cent to Rs.619 mn. compared with the previous year. In 1997 significant progress was made under the rural sector housing programme, while activities under the 'Jana Udana' slowed down compared with the previous year due to delays in the release of lands. A new housing programme commenced in 1997 to assist the fisheries families in 7 districts.

In 1997, the Plantation Housing and Social Welfare Trust (PHSWT) continued to provide housing loans and infrastructure facilities such as survey of lands, access roads, water supply and sanitary facilities for estate workers under the Social Welfare Progamme II (SWP II). Under this programme, 718 units were completed in 1997 compared with 460 units in 1996. New units and upgradings under construction were 2,937 in 1997 compared with 1,723 units in 1996. A sum of Rs.56 million was spent under the SWP II during the year. Meanwhile, the Mahaweli Authority of Sri Lanka completed 1,520 housing units in 1997 compared with 2,283 units in 1996.

The role of private developers as well as housing financing institutions in accommodating the future housing demand is immense, particularly with respect to the urban sector. Considering the scarcity of land and the need to obtain the maximum use from it, there is an imperative need for the construction and development of multi-storeyed flats, housing complexes etc. However, the magnitude of the investment required is beyond the availability of public sector investment funds or the capacity of individuals. Hence, a rational incentive structure which will protect the interests of both housing developers and buyers is essential. In view of this need, incentives by way of tax concessions, provision of land and trust funds to invest in large and medium scale housing complexes, were introduced through the 1998 Budget.

TABLE 5.9
Public Sector Housing Programme

Sub Programme	Units Commenced (No.)		Units Completed (No.)		Disbursements (Rs.Mn.)	
	1996	1997(a)	1996	1997(a)	1996	1997(a)
Janaudana Programme	15,599	6,582	14,061	9,751	230	142
Rural Housing Programme	2,086	12,811	5,791	6,103	52	190
Sevena Housing Grant Programme	15,572	10,715	7,315	14,821	77	118
Urban Housing Programme	342	1,060	971	626	11	13
Estate Housing Programme	631	1,008	814	883	10	19
Direct Construction Programme	208	562	459	92	133	123
Coastline Housing Programme	0	0	192	0	14	...
Disaster Housing Programme (Southern Province)	186	184	25	92	1	4
Fisheries Housing Programme	0	1,006	0	180	0	10
Total	34,624	33,928	29,628	32,548	528	619

(a) Provisional

Source: National Housing Development Authority

Meanwhile, individual housing loans were provided at market rates by the two state banks and other housing financing institutions such as the State Mortgage and Investment Bank (SMIB), National Savings Bank (NSB), Housing Development Corporation of Sri Lanka Ltd. (HDFC), Insurance Corporation of Sri Lanka etc. In 1997, the number of housing loans provided by the SMIB was 8,438 compared with 5,520 In 1996. Total loan disbursements, amounting to Rs.1,378 million, recorded an increase of 26 per cent between the two years. People's Bank has introduced six new housing loan programmes for armed service and police personnel, employees of Sri Lanka Telecom Ltd., Air Lanka Ltd. and local government service employees and Members of Parliament. People's Bank had granted 14,097 loans at a cost of Rs.641 million during the first 10 months of 1997. According to People's Bank, the repayment of housing loans granted against EPF balances was at a very unsatisfactory level in 1997. There has been a growing demand for housing loans provided by the NSB in 1997 largely due to the low interest rates relative to other housing financing institutions. In 1997, a total of 1,436 loans were granted by the NSB, an increase of 11 per cent over the previous year. The total value of loans disbursed was Rs.839 million. Sri Lanka Insurance Corporation Ltd. has granted 829 housing loans with a value of Rs.193 million under the Rakshana Sevana Housing Loan Scheme. The HDFC granted 3,298 housing loans in 1997, as against 9,261 housing loans in the previous year. The value of housing loans at Rs 448 million indicated a decrease of 22 per cent over the previous year. The HDFC introduced a special housing scheme for officers in the armed and Police services and for disabled soldiers.

Urban Development

The provision and maintenance of basic economic and social infrastructure for urban communities is primarily in the hands of local governments. Sri Lanka has 13 Municipal Councils, 38 Urban Councils and 254 Pradeshiya Sabhas. The Urban Development Authority (UDA) was established in 1978 for the promotion of integrated planning and development of urban areas in Sri Lanka. The responsibilities entrusted to the UDA include the development of commercial complexes, industrial estates, housing projects, administration complexes, infrastructure development and environmental improvement. The UDA has declared over 150 local authority areas for the purpose of promoting integrated planning and physical development.

During 1997, the total cost of projects undertaken by the UDA amounted to Rs.765 million compared to Rs.540 million in 1996. Of the total expenditure, Rs.608 million or 79 per cent was for the projects undertaken on behalf of clients. Total expenditure incurred on the Urban Development Sector Project (UDSP), which has been categorised under client projects, was Rs.518 million, a 32 per cent increase over the previous year's expenditure. Under the ADB funded UDSP, the infrastructure facilities in 17 small and medium size towns are being developed at a cost of US dollars 36 million. Development of roads, bridges, water supply and sanitation, drainage, solid waste collection and disposal, low income housing and small scale industrial parks are some of the activities carried out under this Project. The UDA spent Rs.53 million during the year for the development activities of administrative complexes at Battaramulla and Pelawatte. Integrated development projects, which include the construction of the Nittambuwa Shopping Complex, Peliyagoda Development Scheme and Panchikawatte Triangle, absorbed Rs.55 million. Under the Town Improvement Project Rs.16 million was spent on improvement of low cost housing, public servants' housing schemes and middle income housing schemes.

In addition to the above activities, the UDA undertook several industrial development projects at Moderawila, Peliyagoda and Homagama. The UDA has also prepared the new landscape plan for the Galle Face Green area which is now being implemented. In addition, the UDA undertook the preparation of a Regional Structure Plan for the Colombo Metropolitan Region as well as the development of the City of Colombo. The draft final report is now being completed. The preparation of the Kotte Capital City Development Plan is also in progress.

Water Supply and Sanitation

In the sphere of water supply and sanitation, the major policy thrust was to improve access to safe water and provide adequate sanitation facilities especially in the rural areas. The efficient use of all water resources, both surface and underground, encouragement of private sector participation, adoption of cost sharing principles and rationalisation of tariff policy have been identified as the key strategies to be adopted in this area. By end 1997, 64 per cent of the total population had access to safe drinking water (pipe borne water facilities, tube wells and protected wells) when compared to 61 per cent in 1996, while sanitation facilities were available for about 64 per cent of the population. In the urban areas, 91 per cent of the population had access to water supply services. Access was low in the rural sector (64 per cent), compared with South Korea (93 per cent), Thailand (89 per cent), Malaysia (78 per cent) and the Philippines (86 per cent). The challenge ahead is to raise the resources required for the necessary expansion and improvement in the supply of water at cost effective prices. In this regard, promotion of private sector participation should be given serious consideration not only to expand the water supply infrastructure, but also to remove the present operational inefficiencies in the water supply sector.

The demand for water supply facilities continued to grow in 1997. The National Water Supply and Drainage Board (NWS&DB) as the main institution responsible for the provision of water supply and sanitation facilities, operated 279 water schemes providing 270 million cubic meters of water at the end of 1997. The number of connections provided by the NWS&DB grew by 32,278 to 386,106 by the end of 1997. Of the total new connections, 17,216 or 53 per cent were provided to the rural sector while the rest were provided to the urban sector in Municipal Council (MC) and Urban Council (UC) areas.

The expansion in urban population, inadequate availability of safe water in rural areas and high growth in industrial and commercial businesses compelled higher investment in water supply in 1997. The NWS&DB spent a sum of Rs.2,900 million on the water supply sector during the year under review. Of this investment, 57 per cent was received from foreign sources such as IDA, ADB, OECF and ODA on concessional terms. The major water supply schemes (WSS) continued during the year were the Ambatale WSS, Towns East of Colombo WSS, Matara WSS, Towns South of Colombo WSS, Deep Drilling in Hambantota area and Udunuwara - Yatinuwara WSS. Meanwhile, with the objective of expanding water supply coverage in rural areas, the Community Water Supply and Sanitation Project (CWSSP), funded by IDA, was in progress during the year. The CWSSP continued in 1997 under sub-programmes such as the Village Water Supply and Sanitation Programme, the School Water Supply and Sanitation Programme and the Small Town Water Supply and Sanitation Programme with the aim of serving a 650,000 population in the Badulla, Matara and Ratnapura Districts. Under this programme, 172 village water supply schemes and 98 school water supply schemes have been completed during 1997. A sum of Rs.588 million was spent under the CWSSP during 1997 to expand water supply facilities in rural areas under this project.

The improvement in commercial viability of the NWS&DB became a prime concern during the year under review. Tariff policy with respect to the water supply sector is designed to cover operational and maintenance expenditure and interest payments on investment loans obtained. The NWS&DB revised the water tariff twice during 1997 after 3 years. Accordingly, the water tariff for the average domestic consumer rose by 46 per cent in 1997 compared with 1996. The reduction of high cross subsidies from the non-domestic sector to the domestic sector and re-couping the escalation of the salary bill and overhead costs over the last 3 years, were the major reasons for this increase. However, the average tariff rates for the industrial and commercial sectors are still well above the average domestic tariffs and domestic tariffs cover only 20 per cent of the production cost. Hence, a rational pricing policy for water reflecting its true cost is essential not only to improve the efficiency of financial operations of the NWS&DB but also to minimise wasteful consumption. Improvement of billing procedures, reduction of the high level of unaccounted water (37 per cent) resulting from leakage, unbilled consumption, illegal tapping and lack of regular maintenance are major areas of concern in improving operational as well as financial efficiency of the water supply sector.

Integrated Rural Development Programme

The Integrated Rural Development Programme (IRDP) commenced in 1979 with heavy investment in infrastructure development and provision of basic needs in rural areas. Since 1989, the programme has focussed attention on the involvement of the private sector in employment and income generating activities in rural areas. The participatory approach in rural development was strengthened after 1989. Since

1997, the IRDP is being re-oriented by the Ministry of Plan Implementation and Parliamentary Affairs (MPIPA) as a Rural Economic Advancement Programme (REAP) to focus mainly on employment and income generating activities. The management of most IRDPs was changed at the beginning of 1997. In 1997, the IRDP consisted of 15 active projects which covered nearly two thirds of the districts in the country. The programmed budget for the IRDP in 1997 was Rs.1,512 million of which Rs.1,375 million or 91 per cent was utilised.

The Matara District IRDP made progress in activities such as vocational training, transport improvement and rural credit. A Rural Economic Advancement Programme was implemented in the Dickwella and Devinuwara Divisional Secretariat (DS) Divisions as pilot projects. The Hambantota District IRDP concentrated on community development, small scale business development and skill development activities. The long-term objective of the Nuwara Eliya district IRDP is to alleviate poverty in the rural sector and to promote economically and ecologically sustainable development in the District. The mid term review mission undertaken in May 1997 had underlined the need for a change in orientation. The second Badulla District IRDP is designed to alleviate poverty, and improve food security and nutrition among the poorest rural households. The mid term review mission in July 1997 had proposed the extension of the project by another year up to 2000. Self -help community development, village market centre development and land regularisation were the new components included in the project. The final phase of the Ratnapura District IRDP, which was in progress in 1997, aimed at ensuring the sustainability of the project.

Under the Moneragala District IRDP, considerable progress was made in providing infrastructure facilities such as school buildings, rural roads and rehabilitating minor irrigation facilities. Education, health and agriculture development projects had also made progress. Special emphasis was paid to strengthening the planning and implementation capacity of local institutions. The Kalutara District IRDP was completed in 1997 using government funds, as foreign aid for the project had been fully utilised. The main emphasis of the Kandy District IRDP is to promote income generating activities for a targetted group. The Gampaha District IRDP improved infrastructure facilities (bridges and roads) in the rural areas. The Government of Japan has provided technical assistance for agricultural extension improvement in the Gampaha District. Farm models have been developed at trial plots of various farmers while a model farm has been developed at Ambepussa.

The year 1997 was the seventh year of implementation of the Southern Province Rural Development Project. The largest component of expenditure, about 44 per cent of total expenditure of the IRDP in 1997, was spent on this project. The main objective of the project is to raise the income and quality of life of the people in the Province. In 1997, progress was made in the construction of rural access roads, in micro-credit projects and training programmes. The Puttalam District Integrated Basic Services Project was concluded in 1996 and Rs.6.6 million was spent in 1997 on consolidation work. The Human Resources and Institutional Development Project aimed to improve the skills of officers and institutional activities in regional development. Active beneficiary participation for project planning and implementation was the main feature in the North Western Province Dry Zone Participatory Development Project. This project aims to develop sustainable farming systems to improve the living conditions of the rural poor. The Moneragala Irrigation and Community Development Project covers eight irrigation schemes in the District. The project focuses on irrigation rehabilitation, agriculture and community development to raise the living standards of the people residing around the irrigation schemes. The North Central Province (NCP) Participatory Rural Development Project is a very recent project implemented in the Anuradhapura District benefiting 24,000 households. Activities include livestock development and construction of access roads in 350 villages, rehabilitation of 10 medium irrigation schemes and improvement of primary health care.

The NCP Rural Development Project commenced in 1997 and covers both Anuradhapura and Polonnaruwa Districts. The main objective of the project is to generate employment opportunities for youth and raise the income level of nearly 43,000 households in rural areas. According to the MPIPA, under the new concept of REAP, investment was initiated in activities such as commercial farming and rural enterprise development on a small scale in each project district during 1997.

Samurdhi Programme

The Samurdhi Programme continued during the year ensuring a minimum standard of living for the vulnerable groups of society while also implementing programmes to reduce unemployment among them. At the end of 1997, there were 2.1 million families who had benefited under the Samurdhi Programme as against an initial target of 1.2 million families. Accordingly, 55 per cent of the population was receiving benefits under the Samurdhi Programme in 1997. The growing coverage of beneficiaries in the programme should receive serious attention as it indicates a major lapse in the monitoring and screening process of the Programme. The poverty levels estimated in recent studies are much lower, around 25 to 35 per cent of the population.

The Programme is administered at the national level by 3 institutions namely, the Department of Poor Relief (DPR), the Department of the Samurdhi Commissioner General (DSCG) and the Samurdhi Authority of Sri Lanka (SASL) in addition to the Ministry of Samurdhi, Youth Affairs and Sports which is the policy formulating authority. The DPR is responsible for distribution of welfare payments among Samurdhi beneficiaries. In addition, the DPR handles distribution of dry ration cards for displaced families and the distribution of special food stamps for lactating mothers in Samurdhi families. Under the income support scheme, a monthly payment of Rs.1,000 is granted to about 2 per cent of the beneficiaries who are considered to be ultra poor. About 45 per cent of the families are receiving a monthly allowance of Rs. 500 while the rest of the families are receiving Rs.200 or Rs.100 depending on the number of dependents in the family. The total cost incurred on the income support scheme amounted to Rs.6,768 million in 1997.

With effect from August 1997, the Samurdhi subsidy scheme was extended to cover the entire Eastern Province and two Divisional Secretariat (DS) Divisions in the Vavuniya District. A total of 18,542 families in these areas were identified as suitable to receive Samurdhi benefits and initially Rs.250 was paid to them monthly. Further, the DPR continued to distribute dry ration cards to displaced families. During 1997, 159,849 displaced families benefited under this programme. The DPR also implemented a programme to distribute nutritional cards worth Rs.100 to mothers in Samurdhi households for a period of one year. Under this programme, payments were made to 56,908 mothers at a total cost of Rs.68 million during 1997. Meanwhile, the former Janasaviya recipient families, totalling 407,000, were also paid Rs.250 a month during 1997. The total cost of the Janasaviya payments and relief payments was Rs.1,700 million. The total cost of all programmes under the DPR was Rs.8,536 million in 1997.

The DSCG was established in 1994 with the objectives of development of human resources and institutions, implementation of a social insurance network, introduction of economic, social and cultural development programmes and planning, monitoring and evaluating the Samurdhi programme. The DSCG has appointed three Samurdhi Niyamakas for each of the Grama Niladhari Divisions (or Samurdhi Balakayas) to implement the Samurdhi Programme at village level. During 1997, a total of 6,108 Samurdhi Niyamakas were newly appointed. Accordingly, at end 1997, a total of 32,029 Samurdhi Niyamakas, including 6,429 'Krushi' (Agricultural) Niyamakas, had been appointed in 272 DS Divisions in 22 districts,

The DSCG is also implementing a social insurance scheme to support Samurdhi families to accommodate their urgent or essential social activities. An insurance premium of Rs.20 per month is charged on each Samurdhi beneficiary family who receive Rs. 1,000 or Rs. 500 per month as Samurdhi benefits. During 1997, a sum of Rs.197 million was collected as insurance premium from 932,193 member families, while Rs.170 million was paid in respect of 61,291 claims. The DSCG had distributed 4,990 sewing machines at a cost of Rs.16.5 million by end 1997, under the Samurdhi Families Economic Development Programme.

The SASL is implementing a number of programmes such as the Rural Community Projects (RCP), Compulsory Savings Scheme, Voluntary Savings Scheme, Samurdhi Development Credit Scheme (SASANA), Naya Niyamaka Programme, Agricultural Development Work and Human Resources Development Activities, aimed at uplifting the economic and social infrastructure of the rural and backward areas. Under the RCP, 9,454 sub-projects were completed during 1997, at a cost of Rs.467 million. Further, the SASL carried out 730 community projects at a cost of Rs.134 million with assistance from the National Development Trust Fund. The SASL also implemented a vocational training programme for young people in Samurdhi beneficiary families in 50 DS Divisions and 2,437 youths were trained in 1997 under the programme.

Deposits in the compulsory savings fund increased by 80 per cent to Rs.2,725 million in 1997. Under the voluntary savings programme, 33,450 small community groups had saved Rs.506 million as at end September 1997. Meanwhile, 261 Samurdhi Banking Societies have been established as at end 1997, with a membership of 267,784. The paid up share capital of these banking societies was Rs.83.3 million and deposits amounted to Rs.49.2 million. The SASANA is being implemented in all DS Divisions except the Northern Province and some DS Divisions in the East with funds to the amount of Rs.500 million from Bank of Ceylon and People's Bank. By end October 1997, the banks had granted a total of Rs.402 million to 68,265 borrowers in Samurdhi families. The rate of interest for loans was 10 per cent per annum while the loan recovery rate stood at 73 per cent.

5.9 Environment

The National Environmental Act No. 47 of 1980 (NEA) gives the legal basis for protection and management of the environment in the country. The NEA was amended by Act No. 56 of 1988 to incorporate regulatory provisions of the Environmental Impact Assessment (EIA) and Environmental Protection Licence (EPL) procedures. The purposes of EIA are to ensure that the development options under consideration are environmentally sound and sustainable and that the environmental consequences are recognised and taken into account early in the design of projects. In 1997, air emission standards for stationary sources were also finalised. However, these standards have not yet been gazetted. The Noise Level Regulations passed in 1996 were amended in 1997, in order to allow existing industries sufficient time to comply. Standards for colour in industrial affluents have also been developed during 1997.

During the year under review, 66 new site clearances were issued for new industries against 406 clearances issued in 1996. The number of new EPLs issued in 1997 totalled 163 when compared to 248 in 1996. Renewal of EPLs increased from 305 in 1996 to 309 in 1997. During 1997, the CEA processed 50 projects including 16 industrial projects, 9 power and energy projects and 7 forestry projects under EIA regulations. Of the total, 19 projects were approved during the year, while one project for metal quarrying was rejected. Evaluation of other projects was in progress.

The CEA conducted an islandwide survey of industries, except in the North and East, with the support of Local Authorities, during 1997 to enumerate the actual number of industries and their level of pollution. Data relating to location of industries, manufactured products, raw materials, including chemicals used in the production process, details regarding waste generation, waste quantity and quality, waste treatment methods and the number of employees were collected in the survey. Compilation of data from the survey is in progress. The programme to monitor major inland water bodies in the country continued during 1997. Under this programme the water quality in the Beira Lake, Kandy Lake, Nuwara Eliya Lake, Kelani River and the Colombo Canal System was monitored on a regular basis to detect pollution trends.

Under the Colombo Urban Transport Project, two fixed air quality monitoring stations have been installed at the Fort Railway Station and at the premises of the Meteorological Department. Parameters such as the levels of sulfur dioxide, oxides of nitrogen, carbon monoxide and particulate matter in ambient air were being monitored on a continuous basis through these two fixed stations. The mobile air quality monitoring station owned by the CEA carries out air quality monitoring studies at specific locations as and when required.