# Chapter 3







# ECONOMIC AND SOCIAL INFRASTRUCTURE

# 3.1 Overview

A n efficient network of economic and social infrastructure together with a sound regulatory framework is a pre-requisite for achieving sustained high economic growth and development.

Infrastructure network consists of communication services, energy, transport, and other public utilities and social infrastructure facilities such as education, healthcare and safety nets. Continuous improvement and maintenance of infrastructure network is vital to attain a sustained high level of economic growth. A sound regulatory framework is essential to maintain proper pricing, quality and standards and to counter ill effects of the monopolistic or oligopolistic nature of providing some infrastructure facilities.

The Ten-year Horizon Development Framework (2006-2016) of the Government (The Ten-year Vision) has recognised the importance of infrastructure to accelerate economic development. A series of large-scale infrastructure projects are to be implemented during 2006 -2016 under the Ten-year Vision. This includes power projects such as Upper Kotmale Hydropower plant, coal power plants at Norochcholai, Trincomalee and Hambantota, combined cycle power plant in Kerawalapitiya, transport development projects such as upgrading the Colombo - Matara railway line, new railway lines of Matara - Kataragama and Kurunegala – Habarana, light transit systems connecting Ratmalana - Battaramulla and Dematagoda - Battaramulla, port projects such as Colombo South Harbour, Galle Port development, Hambantota Sea Port and Oluvil Port development, new international airport at Weerawila, road projects such as the Southern Expressway, Colombo -Katunayake Expressway and Colombo Outer Circular Highway and irrigation projects such as Moragahakanda, Uma Oya, Deduru Oya, and Yan Oya. At the same time smallscale infrastructure projects are also being developed under the Maga Neguma (road development) and Gama Neguma (village development) programmes.

Faster implementation of the proposed development projects is essential to support rapid expansion of economic activities. Major development projects such as the Colombo South Harbour project, road projects and coal and hydro power projects need to be implemented without any delays as these are essential for continued economic development in Sri Lanka in the medium-term.

Public and Private Partnerships (PPP) are being encouraged in implementing planned infrastructure projects. Over the period from 2007 – 2016, the funding requirements of major infrastructure projects identified in the Ten-year Vision is around Rs 2,226 billion and is expected to be financed from both foreign and domestic sources. Given the fiscal constraints, PPP plays a vital role in implementing

| Table 3.1                                   |             | Government Investment in<br>Infrastructure |          |             |             |              |
|---|-------------|--|----------|-------------|-------------|--------------|
| Year  | Eco         | nomic                                      | Social   |             |             |              |
| 1041  | Ser         | vices                                      | Services |             | Tot         | al           |
|   | Rs.bn.      | % of<br>GDP                                | Rs.bn.   | % of<br>GDP | Rs.bn.      | % of<br>GDP  |
| 1997  | 32.5        | 3.6  | 11.6     | 1.3         | 44.0        | 4.9          |
| 1998  | 44.7        | 4.4  | 15.5     | 1.5         | 60.2        | 5.9          |
| 1999  | 44.9        | 4.1  | 17.5     | 1.6         | 62.4        | 5.6          |
| 2000  | 54.7        | 4.4  | 16.5     | 1.3         | 71.1        | 5.7          |
| 2001  | 54.9        | 3.9  | 14.6     | 1.0         | 69.5        | 4.9          |
| 2002  | 51.7        | 3.4  | 15.7     | 1.0         | 67.4        | 4.3          |
| 2003  | 58.7        | 3.3  | 19.2     | 1.1         | 77.9        | 4.4          |
| 2004  | 61.3        | 3.0  | 29.0     | 1.4         | 90.3        | 4.4          |
| 2005  | 77.5        | 3.3  | 60.4 (a) | 2.5         | 137.9       | 5.8          |
| 2006(b)                                     | 106.8       | 3.8  | 48.4     | 1.7         | 155.2       | 5.5          |
| (a) Inclusive of tsunami<br>(b) Provisional | related cap | oital expend                               | iture    | Source: C   | entral Bank | of Sri Lanka |

and managing infrastructure projects. In a PPP arrangement, the commercial risk of projects is to be borne by private investors and non-commercial risks such as political, environmental and regulatory risks are borne by the government. Funds could also be raised in the capital markets, as these infrastructure projects are commercially viable.

A sufficient return on investment needs to be assured for continuous development, modernisation and maintenance of infrastructure projects. Construction of infrastructure is costly and generally takes a longer gestation period. Hence, the service providers should be sufficiently compensated for efficient operation of services and to encourage more investments, innovations and productivity growth. Provision of government subsidies to maintain infrastructure projects, in most cases leads to various imbalances in the economy. Therefore, appropriate user charges need to be put in place to ensure continuous improvement in infrastructure services.

Infrastructure services showed mixed performance in 2006. A phenomenal growth was seen in the telecommunications sector supported by large investment, technology adoption and rapid expansion of coverage. Port services grew significantly with unprecedented growth in transhipment services. Electricity sector showed an increase in the low cost hydropower generation substantially though the institutional and financial issues continued to exist. In the petroleum sector, though oil prices increased to historically high levels in 2006, restoration of flexible pricing policy and discontinuation of fuel subsidies from mid 2006 helped eliminate certain imbalances in the economy. Further, the introduction of a hedging mechanism in oil purchases will also help maintain stability in retail prices of petroleum products. Passenger transportation continued to reflect a sluggish growth in 2006. Despite slow growth in the tourism sector, air transportation reflected a healthy growth due to increased travel by Sri Lankans. Construction of houses expanded significantly benefiting from the growing housing finance market and government intervention while health and education sectors continue to improve.

The operational efficiency of public enterprises providing infrastructure services needs to improve. Public enterprises such as Sri Lanka Transport Board (SLTB), Sri Lanka Railways (SLR) and Ceylon Electricity Board (CEB) are operating at large operating losses and producing services that are of high cost and insufficient quality, burdening the government budget and reducing the competitiveness of the country. Implementation of identified institutional changes, improving financial and operational management, eliminating waste, introducing innovative products and other relevant measures would help improve the financial position of these institutions. It is noted that the Strategic Enterprises Management Agency (SEMA) has taken initiatives to address some of the issues in the key public enterprises by guiding these institutions to become financially viable entities.

# 3.2 Economic Infrastructure Policies, Institutional Framework and Performance

#### **Communication Services**

The communications sector comprises mainly telecommunications and postal services. The telecommunications sector continued to be at the frontier of information age delivering voice, data and other products at increasing speeds. The postal sector, which is largely concentrated in providing conventional letter post, is attempting to expand its scope to offer various value added services within the current structure with private sector participation. Postal services are now used by banks to enhance access to finance and that should be pursued jointly by the Department of Posts (DOP) and banks.

The rapid growth in the telecommunications sector continued in 2006. The subscriber network of the telecommunications sector grew by 59 per cent in 2006 following the 44 per cent growth in 2005 benefiting from the introduction of advanced technology, growing competition, higher investment, increasing affordability and rapid expansion of network coverage. The fixed access network grew by 52 per cent largely due to expansion in wireless network with the Code Division Multiple Access (CDMA) technology. The phenomenal growth in the mobile telephone services continued registering 61 per cent increase in the subscriber network in 2006 after 52 per cent increase in 2005. As a result, the mobile telephone penetration (mobile connections as a per cent of total population) increased to 27 per cent from 17 per cent in 2005. These developments led to an increase in the national telephone density (telephones including cellular phones per 100 persons) to 37 by end 2006. Subscribers to Internet and e-mail services too increased by 13 per cent in 2006, though the penetration of e-mail and Internet are still relatively lower compared to competitor countries in the region.

Rapid growth in the telecommunications sector demonstrates the benefits of liberalisation and competition. The telecommunications sector presently consists of 3 fixed line operators, 4 mobile operators, 32 external gateway operators, and 23 Internet service providers. Several telecommunication projects were implemented in



2006 to further expand facilities in the country. The Bharat Lanka optical fibre submarine cable between India and Sri Lanka was inaugurated in 2006. The Dhiraagu - SLT optical fibre submarine cable system between Sri Lanka and Maldives was also inaugurated in 2006. These will be connected to domestic and international networks thereby increasing Sri Lanka's presence in the regional telecommunications. Rolling out of Metro Ethernet services was commenced in 2006, which provides integrated single port connectivity conveying multiple services such as voice, high speed data, high speed Internet and video conferencing. 3G technologies, which enable a wide range of innovative applications for users, were also introduced in 2006.

The disparity in telecommunication services in urban and rural areas is narrowing. Rapid expansion of mobile networks and CDMA based wireless network in rural areas helped reduce the communication disparity between the rural and urban areas. Unlike fixed line telephones, the CDMA technology provides easy access to rural areas at a lower fixed cost while also providing other value added services. However, further efforts are needed to provide digital opportunities to under-served areas to provide economic and social benefits of ever improving Information and Communications Technology (ICT) to the masses of Sri Lanka. Some banks have begun to use the telecommunication services to enhance banking sevices in outstations through the agency banking network.

### Table 3.2

Growth of Telecommunications and Postal Services

|   |            |                | Growt       | h Rate   |
|---|------------|----------------|-------------|----------|
| Item  | 2005       | 2006(a)        | 2005        | 2006 (a) |
|   |            |                |             |          |
| Telecommunications services                     |            |                |             |          |
| 1.1 Fixed access services                       |            |                |             |          |
| SLT telephone lines in                          |            |                |             |          |
| service (No.) ('000)                            | 954        | 1188           | 10.9        | 24.5     |
| New telephone connections                       |            |                |             |          |
| given by SLT (No.)('000)                        | 117        | 259            | 116.7       | 121.4    |
| Wireless local loop telephones ('000) (except : | SLT) 290   | 708            | 121.4       | 144.1    |
| telephone density                               |            |                |             |          |
| (Telephones per 100 persons)                    | 6.3        | 9.5            | 23.5        | 50.8     |
|   |            |                |             |          |
| 1.2 Other services                              |            |                |             |          |
| Cellular phones ('000)                          | 3,362      | 5,412          | 52.1        | 61.0     |
| Public pay phones                               | 6,285      | 7,513          | 3.1         | 19.5     |
| Internet & e-mail ('000)                        | 115        | 130            | 23.3        | 13.0     |
|   |            |                |             |          |
| Postal service                                  |            |                |             |          |
| Delivery areas (No.)                            | 6,729      | 6,729          | 0.0         | 0.0      |
| Post offices (No.)                              | 4,704      | 4,727          | -0.1        | 0.5      |
| Public  | 4,041      | 4,043          | -0.2        | 0.0      |
| Private   | 663        | 684            | 0.2         | 3.2      |
| Area served by a post office (Sq.km)            | 13.9       | 13.8           | 0.0         | -0.7     |
| Population served by a post office              | 4,100      | 4,167          | 0.0         | 1.6      |
| Letters per inhabitant                          | 25         | 24 (b)         | 4.2         | -4.0     |
| (a) Provisional                                 | Sources:Sr | i Lanka Teleco | om Ltd.     |          |
| (b) Estimated                                   | Te         | elecommunica   | tions Reg   | ratatory |
|   |            | Commission     | n of Sri La | nka      |
|   | D          | epartment of   | Posts       |          |

The government has taken several initiatives to harness significant direct and indirect economic and social benefits from the ICT development. ICT facilitates innovative applications in public service, business, education and health sector, and in many other areas. It also creates new employment opportunities. Sri Lanka has launched several ICT projects in recent years, including e-Lanka Government Network, Schoolnet, Lanka Education and Research Network, "Nanasala" knowledge centres, National **Distance Education Network and Business Process** Outsourcing (BPO) projects.

The postal service continued to operate its conventional services, while offering some value added services. The DOP is modernising post offices to provide additional services such as e-remittances, e-mail and e-money transfers. Foreign airmail rates were raised with effect from 01 October 2006 to partly cover increased costs. Over the next few years, the DOP would need to embark upon innovative strategies to minimize its losses while providing better postal services to the public.

#### Energy

High international oil prices posed a major challenge to the energy sector in 2006. Almost half the total energy consumption in the country is derived from petroleum products, while the balance includes bio-mass (47 per cent) and hydro electricity (8 per cent). Hence, the impact of the sharp rise in oil prices in 2006 was felt strongly in the economy demonstrating the need for stepping up development of alternative energy sources, including renewable energy in the country. It also emphasised the importance of hedging oil purchases to maintain the stability in domestic fuel prices.

#### Electricity

The installed capacity increased marginally (by less than 1 per cent) to 2,429 MW in 2006 in contrast to the growth in the demand for electricity of 8 - 10 per cent annually. The additional demand calls for new power plants of 200 MW annually. Hydropower generation increased significantly in 2006 due to favourable weather. The share of hydropower in the total electricity generation increased to 49 per cent in 2006 from 39 per cent in 2005. Water levels in hydroreservoirs remained above 45 per cent throughout the year and reached almost full capacity in December 2006. The increase in low cost hydropower generation by 1,185 GWh in 2006 has had a favourable impact on the financial situation of the CEB.

Total electricity consumption increased by 8 per cent in 2006. Electricity consumption in the industrial sector grew by 6 per cent, and in the domestic and general purposes sectors it decelerated, due to increased tariff. The system losses have declined further but still remain relatively high at 16.6 per cent. Deficiencies in the distribution and transmission networks and illegal connections were the main reasons for

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|    |     |     |    |

**Power Sector Performance** 

|  |          |            | Growth       | Rate       |
|--|----------|------------|--------------|------------|
| Item   | 2005     | 2006(a)    | 2005 2       | 2006 (a)   |
|  |          |            |              |            |
| Available capacity (MW)                            | 2,411    | 2,429      | 1.4          | 0.7        |
| Installed capacity                                 | 2,411    | 2,429      | 3.5          | 0.8        |
| Hydro  | 1,291    | 1,309      | 0.9          | 1.5        |
| Thermal (b)  | 1,115    | 1,115      | 8.8          | 0.0        |
| Wind   | 3        | 3          | 0.0          | 0.0        |
| Units generated (GWh)                              | 8,769    | 9,389      | 7.5          | 7.1        |
| Hydro  | 3,450    | 4,635      | 16.5         | 34.3       |
| Thermal (b)  | 5,314    | 4,751      | 16.3         | -10.6      |
| Wind   | 2        | 2          | -33.3        | 0.0        |
| Total sales by CEB (GWh)                           | 7,255    | 7,832      | 8.8          | 7.7        |
| Domestic and religious                             | 2,444    | 2,622      | 10.9         | 7.3        |
| Industrial   | 2,446    | 2,605      | 7.9          | 6.5        |
| General Purpose                                    | 1,254    | 1,395      | 10.8         | 11.2       |
| Bulk sales to LECO                                 | 1,027    | 1,111      | 4.7          | 8.2        |
| Street lighting                                    | 83       | 98         | 0.0          | 18.1       |
| LECO sales (GWh) (c)                               | 973      | 1,052      | 6.7          | 8.1        |
| Domestic and religious                             | 464      | 488        | 6.7          | 5.2        |
| Industrial   | 240      | 255        | 6.7          | 6.3        |
| General Purpose                                    | 244      | 282        | 6.6          | 15.6       |
| Street lighting                                    | 25       | 26         | 8.7          | 4.0        |
| Overall System loss of CEB (%)                     | 17.3     | 16.6       | 1.0          | -3.1       |
| Number of Consumers (d) ('000)                     | 3,807    | 4,066      | 5.8          | 6.8        |
| Domestic and religious                             | 3,361    | 3,593      | 5.6          | 6.9        |
| Industrial   | 38       | 40         | 2.7          | 5.3        |
| General Purpose                                    | 404      | 429        | 6.9          | 6.2        |
| (a) Provisional                                    | Sources: | Cevlon Ele | ctricity Boa | rd         |
| (b) Inclusive of Independent Power Producers (IPP) |          | Lanka Elec | tricity Co.  | (Pvt) Ltd. |

(c) Estimates Based on actuals up to October 2006 (d) Inclusive of LECO consumers

these losses. Therefore, CEB should urgently act to reduce the system losses to a tolerable level.

The electricity sector continued to suffer from high cost of power generation resulting from oil prices and several other structural issues. The delays in implementing planned low cost power plants, proposed improvements in management and measures to address the high system losses compounded its woes threatening the long-term sustainability. Although work on the 300 MW Norochcholai coal power plant (Phase I) and 150 MW Upper Kotmale hydropower plant were commenced in 2006, these will not be operational till 2011. Two thermal power projects, each with the capacity of 300 MW are also to be installed at Kerawalapitiya to meet the rising demand during 2008 - 2011. Proposals to construct two more coal power plants of 500 MW and 600 MW are at initial stages of negotiations. The government is also examining possibilities of importing electricity from India to meet the rising demand.

Electricity tariffs were revised in 2006 but average cost of generation is still higher than the revised tariff leading to substantial losses. The fixed charges were increased by 100 - 275 per cent in February 2006 and unit charges were increased by an average rate of 30 per cent from September 2006. In 2006, the average tariff was Rs. 9.02 per unit whereas the average cost was Rs. 11.03 per unit. The average purchased cost of private power was estimated at Rs. 12.19 per unit in 2006. The transfer of high cost to



consumers therefore, has been discouraged by the already high tariff rates in Sri Lanka, leaving very little scope for further increase in tariff rates. Hence, it is vital that measures need to be taken to rectify the existing inefficiencies in the electricity sector and undertake identified improvements aimed at reducing the cost of power generation. Despite increase in low cost hydropower generation and tariff, operating losses of CEB is estimated to have increased by 84 per cent to Rs. 13 billion mainly due to increased cost of thermal power generation resulting from high oil prices. CEB's short-term liabilities and payment arrears further increased. Short-term borrowings from commercial banks, payment arrears to the Ceylon Petroleum Corporation (CPC) and Independent Power Producers (IPP) and other short-term liabilities amounted to Rs. 66 billion at end 2006. CEB's long-term loans amounted to Rs. 54 billion by end December 2006.

Implementation of proposed restructuring of electricity sector by rationalizing its key operations along with a programme to address financial issues has been further delayed. In the meantime, a Power Sector Concept Paper has been presented to the Cabinet in July 2005, incorporating proposals made by trade unions as well.

A National Energy Policy and Strategies for Sri Lanka was introduced in 2006. The areas covered by the policy include providing basic energy needs, ensuring energy security, promoting energy efficiency and conservation, promoting indigenous resources and adopting an appropriate pricing policy. In this regard, it is noted that the government will endeavour to reach a level of 10 per cent of grid electricity using Non-conventional Renewable Energy (NCRE) by 2015.

#### Petroleum

International oil prices increased significantly in 2006. Crude oil price (Brent) reached a record high level of US dollars 78 a barrel in July 2006. The average crude oil import price of CPC increased by 22 per cent to US dollars 64 per barrel in 2006. The government decided to discontinue the provision of fuel subsidies from July 2006, allowing the oil distributing companies to adjust domestic oil prices based on costs. The delayed and inadequate adjustments in prices during January to June 2006 compelled the CPC to claim subsidies from the government amounting to Rs. 9.4 billion in the first half of 2006. While the kerosene subsidy is yet continuing, in order to reduce the unnecessary financial burden on the government, the kerosene subsidy has to be strictly targeted.

The growth in demand for major petroleum products (Petrol, Diesel and Kerosene) decelerated in 2006. The growth of petrol consumption decelerated to 7 per cent in 2006 responding to the 15 per cent increase in prices during the year. Growth of auto diesel sales was insignificantly low, mainly due to the drop in auto diesel used for power generation as hydropower generation increased, particularly during the latter part of the year. The demand for kerosene increased marginally in 2006.

**CPC initiated hedging of oil purchases against adverse price movements.** Hedging of oil purchases is vital to ensure stability in prices and other economic variables. CPC entered into two hedging arrangements for the first time in February 2007 to purchase 900,000 barrels of auto-diesel during March - May 2007, under the Zero-cost Collar mechanism.

Initial steps towards the exploration of oil in the North Western offshore area were taken in 2006. Tenders are to be called from international oil companies in 2007 and awarding of tenders is to take place in 2008 in addition to the preparation and drafting of rules and regulations to implement a formal procedure in the commercial operation of oil extraction in Sri Lanka.



Box 4

Hedging Oil Imports against Price Volatility

High oil prices in the international market since 2003, has been posing a serious challenge to the macroeconomic management in Sri Lanka. The high oil prices have arisen from supply concerns such as global geopolitical uncertainty, limited spare capacity in oil production, disruptions in some oil exporting countries and the high demand particularly from China, India and the United States. This has increased Sri Lanka's import expenditure on petroleum products from US dollars 838 million in 2003 to US dollars 2,070 million in 2006. Sri Lanka imports approximately 30 - 32 million barrels of petroleum products per annum.

The sharp rise and volatility in oil prices generate a series of macroeconomic imbalances. High import expenditure leads to a draw-down of reserves and pressure on the exchange rate. It raises domestic fuel prices impacting on aggregate supply. If domestic prices are not revised in line with international prices, there will be serious fiscal implications due to ensuing subsidy payments.

Until June 2006, the government attempted to minimise the burden of rising oil prices on consumers by subsidising domestic fuel prices. The government had to spend Rs. 17.5 billion (about 0.9 per cent of GDP) in 2004 and Rs. 26 billion (about 1.1 per cent of GDP) in 2005 on oil subsidies.During the first six months of 2006, the oil subsidy to the Ceylon Petroleum Corporation (CPC) alone amounted to Rs. 9.4 billion. Although the petroleum subsidy stabilised domestic petroleum prices to a certain extent in the short-term, the subsidy created serious macroeconomic implications through higher fiscal expenditure. Higher budget deficits emanating from huge oil subsidies in turn would either raise the government borrowings, compel it to reduce capital expenditure or increase the tax burden. In view of these adverse implications, government discontinued the provision of subsidies from July 2006.

To avoid the volatility of import prices of oil, the CPC has now decided to hedge at least a part of its oil imports against high and volatile prices. Like an insurance policy, hedging is used to protect against unexpected negative events. This does not prevent the negative event from occurring, but if it does happen and if it is properly hedged, the impact of the event is reduced. Thus, the hedging is not aimed at generating profits, but mainly protecting from losses that could arise from adverse price fluctuations.

Some of the popular major hedging instruments, which are used worldwide, could be applied in hedging oil purchases are the following. Under Crude Oil Cap, a petroleum importer sets the maximum price, which is called the Cap. If the market price rises above the Cap, the Hedging Organisation, usually a Bank will pay the difference to the oil company. If the market price drops below the Cap, the importer is free to buy from the open market. As consideration, the importer needs to pay a premium for each barrel. Under the Zero-Cost Collar arrangement, the importer sets the maximum price, the High Collar. In response, the bank sets the floor price, the Low Collar. If the market price is above the high collar price, the Bank will pay the difference between the high collar price and the market price to the the importer. If the market price is below the low collar price, the importer will pay the difference between the low collar price and the market price to the Bank. In this case no premium is involved. Under Swap, a fixed price will be agreed upon. If the market price is above the fixed price the bank will pay the difference to the the importer. If the market price is below the fixed price the the importer will have to pay the difference to the contracting party. This instrument requires a premium (similar to insurance premium) to be paid by the the importer.

The cost of hedging could come either from direct cost of hedging such as premium paid or indirect cost from lost profit due to movement of market prices on the reverse direction (e.g., significant drop in oil prices). These costs are the cost of avoiding uncertainty and ensuing stability.

The CPC has commenced hedging part of its oil purchases by entering into two hedging agreements to import diesel with Standard Chartered Bank in February 2007 using Zero Cost Collar mechanism with a ceiling price. The objective of CPC's hedging programme is to absorb price shocks and keep diesel price at a stable level. CPC expects to gradually increase amounts of imports being hedged. The favourable impact of the hedging arrangement on the country's balance of payments, official reserves and domestic price level would contribute to the price and economic stability of the country.



## Table 3.4

#### Petroleum Sector Performance

|   |             |                | Growt        | h Rate      |
|---|-------------|----------------|--------------|-------------|
| Item  | 2005        | 2006(a)        | 2005         | 2006 (a)    |
| Quantity imported (Mt (000)                         |             |                |              |             |
| Grude oil   | 2 008       | 2 1 5 2        | 00           | 79          |
| Pafinad products                                    | 2,000       | 2,133          | -0.0         | 2.2         |
| L D das   | 1,023       | 1,704          | 10.5         | -3.2        |
| L.I. gas  | 145         | 150            | 12.2         | 15 4        |
| Value of imports (o.8.f)                            | 15          | 15             | -15.5        | 15.4        |
| Crude oil (De mp)                                   | 77 606      | 06 077         | 96 5         | 977         |
| (US dollars mp)                                     | 772         | 1 020          | 20.0         | 37.7        |
| (US dollars lill)<br>Defined products (Ds. mp)      | 00 767      | 1,029          | 21.0<br>11.0 | 20.2        |
| (LIS dollars mp)                                    | 00,707      | 1 0 4 1        | 44.0         | 20.2        |
| (US dollars lill)                                   | 002         | 1,041          | 40.0         | 10.0        |
| L.F. gas (R.S. IIII.)                               | 7,373       | 9,749          | 24.3         | 20.7        |
| (US dollars min)                                    | 75          | 94             | 25.0         | 20.3        |
| (De (hormal))                                       | 5 941       | 6 701          | 975          | 20.4        |
| (RS./Dallers/hornal)                                | 59.14       | 0,701          | 37.3         | 29.4        |
| (US dollars/ barrel)                                | 32.14       | 00.00          | 39.4         | 24.8        |
| Value of exports (b) (Be mp)                        | 7 150       | 213<br>11 149  | -40.0        | 29.9        |
| (US dellars are )                                   | 7,139       | 11,145         | -29.3        | 55.7        |
| (US dollars mil.)                                   | /1          | 107            | -29.0        | 50.7<br>1.6 |
| Docar sales (IVIT 000)                              | 4,243       | 4,170          | 13.2         | -1.0        |
| Petrol (90 Octane)                                  | 320         | 203            | 20.2         | /.1         |
| Petrol (95 Octane)                                  | 23          | 31             | 15.5         | 32.9        |
| Auto diesei   | 1,802       | 1,870          | -1.0         | 0.4         |
| Super diesei  | 17          | 10             | -02.0        | -42.3       |
| Frances eil   | 1.090       | 200            | 23.3         | 3.2         |
| Furnace on  | 1,020       | 901            | 37.2         | -0.3        |
| Avtur   | 210         | 233            | 27.0         | ð./         |
|   | 181         | 87<br>170      | 00.7         | -52.0       |
| L.F. gas<br>Local Price (at period and) (Ps /litre) | 105         | 170            | -0.0         | 5.0         |
| Dotal (00 Octore)                                   | 80.00       | 02.00          | 176          | 15.0        |
| Petrol (95 Octane)                                  | 82.00       | 92.00          | 17.0         | 13.0        |
| Auto discal   | 50.00       | 90.00<br>60.00 | 10.5         | 20.0        |
| Auto diesel   | 50.00       | 65.20          | 19.0         | 20.0        |
|   | 33.30       | 49.00          | 10.9         | 10.1        |
| Kerosene<br>Europeo Oil                             | 30.50       | 48.00          | 19.0         | 57.4        |
| Fulliace Oli<br>500 Seconds                         | 22.20       | 46.30          | 26.6         | 20.0        |
| 200 Seconds   | 22.20       | 40.30          | 20.0         | 20.6        |
| 1 000 Seconds                                       | 32.00       | 45.60          | 30.2<br>97.1 | 39.0        |
| 1,000 Seconds                                       | 20.20       | 44.40          | 21.1<br>917  | 41.4        |
| 2 500 Seconds                                       | 28.00       | 43.30          | 24.1         | 42.5        |
| L D Cas (Ds /kg)                                    | 28.00       | 41.00          | 21.5         | 40.4        |
| Shall das   | 63.68       | 76.80          | 0.0          | 20.6        |
| Junit gas   | 65.60       | 70.00          | 3.0          | 10.0        |
| Laugis gas  | 05.00       | 12.12          | 5.9          | 10.9        |
| (a) Provisional                                     | Sources : C | eylon Petro    | oleum Cor    | poration    |
| (b) As reported by Ceylon Petroleum                 | L           | anka IOC       | Ltd.         |             |
| Corporation   | SI          | nell Gas La    | nka Ltd      |             |
|   | L           | augts Lank     | a Gas (Pvt   | Ltd         |

#### Transportation

An efficient transport network is a pre-requisite for sustained higher economic growth and regional development. The government's long-term plan for the transport sector envisages the development of an efficient and safe transport system responsive to the socio-economic development needs, that provide services at an affordable price.

#### **Road Transportation**

#### **Road Development**

Though the coverage of the road network in Sri Lanka is considered to be adequate by international standards, road conditions and capacities are insufficient to meet the rapidly growing demand for mobility. In terms of the road density, Sri Lanka's position stands above the neighbouring countries having 1.6 km per square km of area and 5.5 km per 1,000 persons.

The government is taking steps for early implementation of identified road projects. The construction of strategically important and economically maintainable expressways and national highways on priority basis, the encouragement of Public-Private Partnerships (PPP) to achieve higher operational efficiency, the strengthening of relevant agencies in the road sector (including provincial and local governments), the strengthening of the regulatory framework to achieve higher efficiency and supporting domestic construction industry are among the prominent strategies recognized by government.

The Ten-year Vision highlights the development of a high quality road network for the rapid and safe transportation of passengers and goods. The implementation of several major road projects has been initiated. These include, construction of expressways covering 600 km, programmes for upgrading selected national highways, rehabilitation of roads in Tsunami affected areas, rehabilitation of roads in conflict affected areas, rehabilitation of 600 km of provincial roads and rehabilitation of 20,000 km of rural roads. All these steps would be useful initiatives directed towards the reduction of traffic congestion. It is also noted that recent efforts to reduce traffc congestion in Colombo by making some key roads one way has been quite successful.

**Development of rural roads under Maga Neguma programme continued in 2006.** The 'Maga Neguma' program was commenced in 2004 with the objective of developing feeder roads in rural areas. Under the Maga Neguma programme, an estimated 2,000 km of rural roads were improved at a cost of Rs1,800 million in 2006.

During 2006, the Road Development Authority (RDA) implemented several new highway projects. The Southern Expressway, Colombo Outer Circular Highway, Colombo -Kandy Expressway and Colombo-Katunayake Expressway were some of the major road projects that were initiated or were being implemented. The construction work of the Southern Expressway (Kurundugahahethekma – Matara) was commenced in April 2003 and about one half of the construction work has already been completed by end 2006. This section of the road is to be completed by end February 2008. The construction work of the section of the Southern Expressway (Kottawa - Kurundugahahethekma) was initiated in 2005 and is to be completed by August 2009. Land acquisition for the stages I and II of the Colombo Outer Circular Highway (Kottawa- Kaduwela and Kaduwela-Kadawatha) is in progress. Negotiations are in progress to construct the Colombo - Kandy Expressway and the construction work is to be commenced under a new financial arrangement.

The RDA implemented several road rehabilitation, maintenance and improvement projects funded by foreign loans during 2006. These include the Road Sector Assistance Project and projects under Tsunami Emergency Recovery programme (TERP) funded by the World Bank, ADB funded Road Sector Development Project (RSDP), Conflict Affected Areas Rehabilitation Project (CAARP) and Tsunami Affected Areas Rehabilitation Project (TAARP), JBIC funded Pro-poor Eastern Infrastructure Development Project, Baseline Road (Phase III), Sri Lanka Tsunami Affected Areas Recovery and Takeoff Project (STRAART) and Manampitiya Bridge and Small scale Infrastructure Rehabilitation and Upgrading Project (SIRUP) undertaken by Japan International Co-operation Agency (JICA).

#### **Road Passenger Transportation**

The performance of passenger transportation in 2006 has shown a marginal improvement in terms of operated kilometres and passenger kilometres. The total operated kilometres of the state and the private sector operators increased by 2 per cent while passenger kilometres increased marginally. In 2006, the total bus fleet increased by 3 per cent to 26,372 in 2006, of which the live fleet available for operation is around 61 per cent.

**Private sector presence in the passenger transportation further increased in 2006.** Private bus operators owned 66 per cent of the bus fleet in 2006. The share of the private operators in the total operated kilometreage is around 69 per cent while that in passenger kilometres is 71 per cent in 2006.

**Despite recent increases in bus fares, the SLTB continued to operate at losses.** In keeping with the increase in bus fares and the adding of new buses to the fleet, the total revenue of the SLTB increased by 20 per cent to Rs.12,424 million in 2006. However, with expenditure rising due to increases in fuel prices and wage bills, the operating losses increased marginally to Rs 2,457 million in 2006.

The National Transport Commission (NTC) has launched several projects in 2006 in order to address the issues relating to lower quality and inadequate service. Programmes to improve night bus services, school bus services and rural bus services were launched by the NTC during the year. NTC also introduced a training programme to enhance the technical knowledge and professional skills of bus crews. Development of bus stops and preparation of new time tables to regularise the bus service and to give equal opportunity to all operators serving on a particular route were among the other development projects carried out by the NTC in 2006.

#### **Railway Transportation**

The performance of SLR did not show a noteworthy improvement. The passenger transportation is estimated to have decreased marginally by 1 per cent while goods transportation increased by 3 per cent in 2006. In the face of rapid increase in demand for passenger and goods transportation and rising fuel prices, SLR can play a vital role in mass transportation by providing services at a relatively cheaper rate and also contributing to reducing road congestion and environment pollution. However, the SLR has failed to provide the expected service mainly due to delays in implementing the necessary measures designed at improving the managerial and operational efficiencies of SLR, rapidly developing the dilapidated railway infrastructure, revamping the obsolete signalling and communication systems and dealing with the situation of shortages of sleepers, engines and coaches.

The Ten-year development plan for SLR envisages implementation of several railway projects. These include double tracking and rehabilitation of the Colombo-Matara line, operation of electric trains between Colombo and Panadura and the establishment of a container depot. In addition, construction of new railway lines connecting Panadura – Horana (18 km), Kurunegala to Habarana via Dambulla (80 km), Matara – Kataragama (113 km) and from Avissawella to Hambantota via Ratnapura (210 km) has been planned.

| Table 3.5                          | Salient F         | 'eature                             | es of 1        | the              |
|------------------------------------|-------------------|-------------------------------------|----------------|------------------|
|                                    | Trans             | port S                              | Sector         |                  |
|                                    |                   |                                     |                |                  |
|                                    |                   |                                     | Grow           | th Rate          |
| Item                               | 2005              | 2006(a)                             | 2005           | 2006 (a)         |
| 1. New registration of motor vehic | les (No.) 229,669 | 300,522                             | 2.6            | 30.9             |
| Buses                              | 2,069             | 3,346                               | -4.5           | 61.7             |
| Private cars                       | 17,283            | 27,578                              | -9.6           | 59.6             |
| Three wheelers                     | 41,085            | 64,466                              | -6.2           | 56.9             |
| Dual purpose vehicles              | 6,851             | 7,245                               | -36.2          | 5.8              |
| Motor cycles                       | 130,696           | 156,625                             | 5.0            | 19.8             |
| Goods transport vehicles           | 14,262            | 20,436                              | 33.3           | 43.3             |
| Land vehicles                      | 17,423            | 20,825                              | 35.5           | 19.5             |
| 2. Sri Lanka Railways              |                   |                                     |                |                  |
| Operated kilometers ('000)         | 7 570             | 7 800                               | -0.8           | 3.0              |
| Passenger kilometers (mn)          | 4,358             | 4.311                               | (b) -7.0       | -1.1             |
| Freight ton kilometers (mn)        | 135               | 138                                 | 0.7            | 2.2              |
| Total revenue (Rs.mn)              | 1.958             | 2.491                               | 16.7           | 27.2             |
| Current expenditure (Rs.mn)        | 5,463             | 6,473                               | 26.2           | 18.5             |
| Operating loss (Rs.mn)             | 3,505             | 3,981                               | 32.3           | 13.6             |
| 3. Sri Lanka Transport Board       |                   |                                     |                |                  |
| Operated kilometers (mn)           | 259               | 262                                 | -12.5          | 1.2              |
| Passenger kilometers (mn)          | 12,670            | 12,871                              | -12.8          | 1.6              |
| Total revenue (Rs.mn)              | 10,026            | 12,099                              | 27.1           | 20.7             |
| Operating expenditure (Rs.mn)      | 12,804            | 14,881                              | 12.3           | 16.2             |
| Operating loss (Rs.mn)             | 2,454             | 2,457                               | -30.0          | 0.1              |
| 4 SriLankan Airlines               |                   |                                     |                |                  |
| Hours flown (hrs.)                 | 63,700            | 67,255                              | 3.1            | 5.6              |
| Passenger kilometers flown (mn)    | 8,545             | 9,356                               | 2.8            | 9.5              |
| Passenger load factor (%)          | 74                | 76                                  | 1.4            | 2.7              |
| Weight load factor (%)             | 58                | 59                                  | 5.5            | 1.7              |
| Freight (Mt. '000)                 | 90                | 98                                  | 13.9           | 8.9              |
| Employment (No.)                   | 5,376             | 5,362                               | 5.3            | -0.3             |
|                                    |                   |                                     |                |                  |
| (a) Provisional                    | Sources: 1        | Department of                       | Motor Traffic  | :                |
| (b) Estimated                      |                   | Sri Lanka Raily                     | ways           |                  |
|                                    |                   | National Trans                      | port Commiss   | sion<br>wi Lonko |
|                                    |                   | Civil Aviation .<br>Sril ankan Airl | Authority of S | III LAIIKA       |

ECONOMIC AND SOCIAL INFRASTRUCTURE

Construction of a dual track from Wadduwa to Matara, restructuring of the signaling network of the coastline and renovation of the Tsunami affected Valachchenai-Batticaloa line, were in progress. It should be noted, however that the expansion of the railway network through public investments without improvements of the management of SLR as a commercially viable entity, could sometimes further aggravate the fiscal burden.

**Private sector participation is encouraged for development of railway facilities.** The SLR intends to develop 10 railway station sites along the coastline between Slave Island and Panadura with private sector participation. The proceeds generated from this project is to be used to modernize the railway network.

#### **Civil Aviation**

The civil aviation sector displayed a healthy growth in 2006 despite security concerns and slowing down of tourist arrivals. Total passenger handling at the Bandaranaike International Airport (BIA) increased by 12 per cent and total cargo handling increased by 7 per cent in 2006. Though tourist arrivals did not show a significant growth, travel of Sri Lankans has increased significantly in 2006. The share of the national carrier, SriLankan Airlines, in passenger and freight operations, increased further to 65 per cent and 58 per cent, respectively, in 2006. During 2006, there were 31 international airlines, including 4 cargo airlines, operating in Sri Lanka compared to 33 airlines in the previous year. The performance of domestic air transportation slowed down mainly due to restriction of services to the North on security reasons.

The services provided by SriLankan Airlines further expanded in 2006. SriLankan Airlines operated services to 50 destinations in 28 countries during 2006. Online travel offers and e- ticketing were introduced in 2006, with the view of enhancing the quality of the customer service and facilitating better holiday opportunities at more destinations.

Sri Lanka continued to strengthen its bilateral cooperation in air transportation with the view to attracting a larger number of passengers. By end 2006, Sri Lanka has successfully concluded 59 bilateral air transport agreements. Sri Lanka continued bilateral negotiations with Kuwait, Nepal and India and entered into an open skies arrangement with Kuwait. Sri Lanka has signed Open Skies agreements with six countries by end 2006. Bilateral negotiations with India progressed well indicating the possibility of reaching the ultimate target of an open skies policy in the near future. Bilateral negotiations with Russia and Kenya were also in progress.

"Ruhunu Open Skies Project" was launched in November 2006 with a view of proposing freedom of operation to a variety of commercial, recreational, and educational aviation activities. Planned operations include setting up of flying schools, general aviation activities, gliding, sky diving, ballooning, float plane operations, micro light and ultra light aircraft flying, model aircraft (radio controlled) flying, kite operations and shipping lane operations. Construction work of the second International airport at Weerawila was initiated in November 2006.

Several initiatives have been taken to cater to the needs of emerging demand for professional training in the aviation sector. Skyline Aviation Ltd and Asian Academy of Aeronautics have been granted approval to function as Flying Training organizations.

#### **Port Services**

**Port services showed a significant growth in 2006.** The total cargo handling grew by 14 per cent in 2006. The sharp increase in transshipments by 36 per cent, healthy increase in export and import trade and productivity improvements supported this growth. The total container handling including transshipments, increased by 25 per cent to 3 million Twenty-foot Equivalent Container Units (TEUs) in 2006. The productivity of container handling at the Port of Colombo has also improved due to adoption of better technology and equipment and improved human resources management.

The Port of Colombo attracted several main shipping lines in 2006. The number of mainline vessels carrying containers calling at the port of Colombo increased by 10 per cent. Reputed main vessels such as SINA, ANWC, CSI and CIX commenced calling at the Port of Colombo in 2006. Conventional ships arriving at Sri Lankan ports further decreased in 2006 as conventional cargo transportation is increasingly diverted to containerised form, as the latter is more economical, faster and safer.

Several measures were introduced to further increase port productivity and efficiency. These include actions towards introducing a new terminal management system, traffic management as well as improving labour relations and performance based incentive schemes.



Volume of Container Handling and Transshipments



The new Colombo South Harbour is to be developed on a priority basis. Urgent implementation of this project is needed to meet the increasing demand as the Port of Colombo is at the threshold of its full capacity and it would also not be able to serve new generation vessels that are expected to be put in service in the coming years. The initial cost of constructing the new breakwater of three-kilometre length at the new port has been estimated at US\$ 300 million, part of which will be financed from a loan of US dollars 225 million from Asian Development Bank (ADB). The Colombo South Harbour is expected to accommodate bigger container vessels with a draft of 16 metres and is to have three terminals, each of 1,200 metre length to be developed by the private sector. The first terminal is expected to be operational by 2010 and have a capacity of 2.4 million TEUs.

The government has paid special attention to develop Regional ports as a part of its effort to reduce regional disparities. Under the regional port development programme, the Galle Port would be developed with a 12 metre deep mult-purpose berth and developing the outer port to facilitate tourism with financial loan assistance from Japan Bank for International Co-operation (JBIC).Trincomalee will be developed as a 'port city' focusing on the development of tourism, as well as providing services to regional industries. Construction work of the proposed Hambantota Port as a bunkering centre is to be commenced in 2007 with financial loan assistance from China. Construction work of the Oluvil Harbour and development of Kankasanthurai and Point Pedro Harbours were at various stages of implementation.

#### Table 3.6

## **Performance of Port Services**

|    |                                     |                  |             | Grow    | th Rate  |
|----|-------------------------------------|------------------|-------------|---------|----------|
|    | Item                                | 2005             | 2006(a)     | 2005    | 2006 (a) |
| 1  | Vessels arrived (No.)               | 4,139            | 4,469       | 6.6     | 8.0      |
|    | Colombo                             | 3,929            | 4,228       | 6.5     | 7.6      |
|    | Galle                               | 114              | 100         | 29.5    | -12.3    |
|    | Trincomalee                         | 96               | 141         | -10.3   | 46.9     |
|    |                                     |                  |             |         |          |
| 2  | Total cargo handled (Mt '000)       | 37,300           | 42,661      | 9.8     | 14.4     |
|    | Colombo                             | 34,522           | 39,428      | 10.3    | 14.2     |
|    | Galle                               | 655              | 735         | 13.3    | 12.2     |
|    | Trincomalee                         | 2,123            | 2,498       | 2.0     | 17.7     |
|    |                                     |                  |             |         |          |
| 3  | Total container traffic (TEUs '000) | 2,455            | 3,079       | 10.5    | 25.4     |
|    |                                     |                  |             |         |          |
| 4  | Transshipment container (TEUs '000) | 1,716            | 2,330       | 12.1    | 35.8     |
| _  |                                     |                  |             |         |          |
| 5  | Employment (No.) (b)                | 13,527           | 13,660      | 2.2     | 1.0      |
|    | Colombo                             | 12,217           | 12,382      | 2.8     | 1.4      |
|    | Galle                               | 622              | 615         | -1.9    | -1.1     |
|    | Trincomalee                         | 688              | 663         | -3.2    | -3.6     |
|    |                                     |                  |             |         |          |
| (a | ) Provisional                       | Sources: Sri Lan | ka Ports Au | thority |          |

(b) Only for Sri Lanka Ports Authority TEUs = Twenty-foot equivalent container units South Asia Gateway Terminals Ltd

#### Water Supply and Irrigation

Improving access to safe drinking water and irrigation facilities have been national priorities. All levels of government, Central, Provincial and Local, are involved in improving the supply of drinking water and irrigation facilities. At the national level, the National Water Supply & Drainage Board (NWSDB) and Department of Irrigation play a leading role in the respective sectors. Sustainable use of water sources, regional disparities in access to safe drinking water, pollution of surface and ground water, lack of awareness on low cost technologies and solutions such as rain water harvesting, high rate of unaccounted water and lack of proper pricing policy aimed at conservation of water remain as major issues in these services.

In respect of improving access to safe drinking water, the Millennium Development Goals (MDGs) declared by the United Nations in year 2000, envisages all citizens having access to improved water sources for domestic purposes by 2015. In Sri Lanka, 92 per cent of the population already have access to safe drinking water, of which 39 per cent had access to pipe borne water. The NWSDB has estimated an investment need of Rs 136 billion during the period 2006 – 2016 to finance ongoing water projects and planned new projects. Further investments are needed to meet the goals set under the MDGs. Hence, public private partnerships for investments and maintenance of water projects, introduction of cost recovery tariff, establishment of regulatory framework and demand side management will be important in achieving the MDGs.

The NWSDB implemented several water supply projects during 2006 to improve water supply facilities. The Third Water Supply & Sanitation Sector Project funded via a loan from the ADB was at the final stage of completion at end 2006 providing benefits to 1.4 million people. The Kalu Ganga Water Supply Project, Greater Kandy Water Supply Augmentation Project, Towns North of Colombo Water Supply Project were some of the other projects in progress which were funded by foreign sources. The government has accordingly invested Rs.17,420 million for the implementation of water supply and sewerage projects in 2006 alone. The NWSDB has provided 81,773 new water connections in 2006 increasing its consumer network to 989,385 at end 2006. Total water supply by NWSDB increased by 3 per cent to 396 million cubic metres in 2006.

The water supply sector suffers from several constraints. The high level of non-revenue earning water of around 34 per cent which is due to leakages, illegal connections, metering errors, un-metered wayside stand posts, lack of flexible pricing policies and the existence of cross subsidies continue to reduce the potential revenues to NWSDB quite substantially. Table 3.7

#### Water Supply by National Water Supply & **Drainage Board**

|                                       |                  |              | Grow     | th Rate  |
|---------------------------------------|------------------|--------------|----------|----------|
| Item                                  | 2005             | 2006         | 2005     | 2006     |
|                                       |                  | (a)          |          | (a)      |
|                                       |                  |              |          |          |
| Total number of water supply schemes  | 288              | 291          | 0.3      | 1.0      |
| Total number of new connections       |                  |              |          |          |
| given during the period               | 66,117           | 81,773       | 12.5     | 23.7     |
| Total number of connections           |                  |              |          |          |
| (as at end year)                      | 907,622          | 989,385      | 7.9      | 9.0      |
| Total water production (Mn. Cu. Mtr.) | 383              | 396          | 4.1      | 3.4      |
| Unaccounted water (%)                 |                  |              |          |          |
| Greater Colombo                       | 35.9             | 37.1         | -1.7     | 3.5      |
| Regions                               | 30.9             | 29.9         | 4.3      | -3.3     |
| 0                                     |                  |              |          |          |
| (a) Provisional                       | Source: National | Water Supply | & Draina | ge Board |

Source: National Water Supply & Drainage Board

The Department of Irrigation launched several projects in 2006, with the aim of addressing the issues relating to water supply for agricultural and drinking purposes. In 2006, the major phases of the Weheragala reservoir project, one of the largest water development projects of recent times was implemented, utilizing local resources only. Currently, all new major irrigation development schemes are financed from funds allocated through the consolidated fund. High level of investments has also been proposed for several new schemes such as Moragahakanda and Udawalawe Left Bank extensions. The performance of the irrigation system has not resulted in economic returns due to certain issues such as inadequate water availability, inequitable distribution and inefficient use of water etc.

#### Social Infrastructure Policies, 3.3 Institutional Framework and Performance

Sri Lanka's achievements in the area of social infrastructure have been well recognised. Sri Lanka's health indicators such as maternal and infant mortality rates and life expectancy have shown a steady improvement over the years and have reached the comparable levels of those in high-income countries. Sri Lanka's education system is renowned for having achieved near universal primary education and high level of literacy. Intervention of successive governments to maintain universal access to free healthcare and education and to implement generous social welfare programmes as well as availability of indigenous knowledge on medicine at every corner of the country have helped realise these achievements. However, both health and education sectors face new challenges arising from demographic transition, changing life styles, deteriorating environment, and labour market developments in a knowledge based globalised economy.

#### Health

The Health sector Master Plan covering 2007 - 2016 highlights the policy and strategic framework for developing an innovative healthcare system in the country. Due consideration has also been given to the

programmes in the *Mahinda Chintana* and MDGs as priorities. The policy ensures easy access to quality and modern healthcare services for all with emphasis on needs of the lower income groups and those most vulnerable in the society. The policy also emphasises the need for dealing with inequality in the healthcare delivery system.

The government continues to play a leading role in the country's healthcare system. In 2006, the total health budget increased by 29 per cent to Rs.58 billion, about 2 per cent of the GDP. There are 606 government hospitals with 61,835 beds in the country, which accounts to 3.1 beds per 1,000 persons. There were 9,648 qualified doctors in the state health sector, a doctor for every 2,061 persons and 20,549 qualified nurses, a nurse for every 968 persons.

The health policy framework also recognizes the role of the private sector for providing an efficient an cost effective healthcare service. The private sector participation in curative healthcare services at all levels, is responsible for almost half the healthcare market in the country. Increasing private sector participation in the healthcare sector has helped to meet the growing demand for quality healthcare services and better use of resources available within the country such as the services of health specialists. It is necessary to move further by permitting the private sector to train required health personnel under a strict standard setting framework of the government. At the same time, in order to ensure that patients are protected and receive value for money at both state and private health institutions, a market based sound regulatory mechanism needs to be established.

Re-emergence of certain communicable diseases and rising trend of non - communicable diseases threatens the achievements in the health sector. Sri Lanka has been successful in controlling communicable diseases such as malaria, encephalitis, measles, polio, leprosy, etc. However, special attention is now needed to combat rabies, Dengue Haemorrhagic Fever (DHF), Tuberculosis (TB) and HIV/AIDS in order to be free from those diseases. There were 11,976 reported cases of DHF and 47 deaths in 2006. Noncommunicable diseases such as diabetes, hypertension, heart disease, cancer, thalaseamia, kidney disease, injuries and mental illness as well as the growing health needs of an ageing population challenge the health status of the country. While increased awareness and preventive healthcare services will play a greater role in controlling these diseases, institutional arrangements such as the establishment of a National Authority on Tobacco and Alcohol and intended legislation and policies such as Prevention of Breeding of Mosquito Act, Mental Health Policy, National Policy on Rabies Control, etc will help control the increasing trend of noncommunicable diseases.

Several health projects were in progress in 2006. A modern blood bank was set up at a cost of Rs. 311 million with loan assistance from the Japanese government. An ultra

| Table 3.8 Salient Fo                          | Salient Features of Health<br>Services |        |  |  |  |
|---|--|--------|--|--|--|
| Item  | 2005                                   | 2006   |  |  |  |
|   |  | (a)    |  |  |  |
| Government                                    |  |        |  |  |  |
| Hospitals (practising Western medicine) (No.) | 606                                    | 606    |  |  |  |
| No. of beds                                   | 61,937                                 | 61,835 |  |  |  |
| Central dispensaries (No.)                    | 397                                    | 397    |  |  |  |
| Total No. of doctors                          | 9,070                                  | 9,648  |  |  |  |
| Total No. of Assistant Medical Practitioners  | 1,260                                  | 1,245  |  |  |  |
| Total No. of nurses                           | 20,332                                 | 20,549 |  |  |  |
| Total No. of attendants                       | 6,701                                  | 7,091  |  |  |  |
| Private                                       |  |        |  |  |  |
| Hospitals (practising Western medicine) (No.) | 190                                    | 195    |  |  |  |
| No. of beds                                   | 9,000                                  | n.a.   |  |  |  |
| Total No. of Ayurvedic Physicians (b)         | 17,503                                 | 18,503 |  |  |  |
|   |  |        |  |  |  |
| Total health expenditure (Rs.bn)              | 44.9                                   | 58.0   |  |  |  |
| Current expenditure (Rs.bn)                   | 34.1                                   | 44.1   |  |  |  |
| Capital expenditure (Rs.bn)                   | 10.7                                   | 14.0   |  |  |  |
|   |  |        |  |  |  |

(a) Provisional Sources: Ministry of Healthcare and Nutritution (b) Registered with the Department of Central Bank of Sri Lanka.

modern Neuro Trauma Treatment unit is under construction at the national hospital, Colombo at a cost of Rs. 1,200 million. A "Linear Accelerator" for cancer treatment has been established at a cost of Rs. 62 million at Maharagama. Under the post-tsunami reconstruction programme 285 projects have been identified for development. A total of 97 projects had been completed by end 2006. In the budget 2007, it has been proposed to upgrade all health centres in the estate sector as a special project. Under the Suwa Udana programme, mobile health clinics as well as health promotion and educational programmes, were conducted at divisional levels. Further, action has been taken to upgrade 17 hospitals located in rural areas.

#### Education

The development of the education system to explore new frontiers of knowledge and match it with dynamic needs of the labour market is vital to achieve sustainable high economic growth and development. The education sector of the country mainly consists of general education, vocational education and university education. Though Sri Lanka has excelled in general education, its achievements in the other two areas have been insufficient. Key issues in the education system are related to equity, quality, efficiency and effectiveness. The Ten-year Vision addresses these issues and plans transforming the education system into one that will promote the technological skills required for rapid economic growth and development. It also aims at promoting knowledge, values, and attitudes needed by individuals to live in peace and harmony, while raising the intellectual and skills level of the people.

Several measures have been taken to reduce the regional disparity in general education. In addition to availability of

infrastructure facilities, a considerable shortage of qualified and competent teachers exists in regional schools. To address this issue a policy decision has been taken to recruit teachers at school level. Steps have also been taken to set up Teacher Villages (Guru Gammana) in 25 selected areas in the country as a solution to the shortage of teachers in schools in remote areas. A three-month teacher education certificate course has commenced for newly recruited graduates in local universities. Steps have also been taken to upgrade the Peradeniya Teachers' College as a "Centre of Excellence in English" for conducting degree courses and other certificate courses in English from 2007 onwards. Steps have also been taken to develop 325 regional schools under the Isuru Schools Improvement Project.

**Government continued to improve the infrastructure facilities of schools in rural and semi urban areas.** Educational Sector Development Framework Programme (ESDFP) 2006 –2010 was commenced with loan assistance of World Bank to promote equitable access to basic and secondary education, improve the quality of education, enhance the efficiency and equity of resource allocation and distribution within the education system and develop the institutional abilities and statesmanship in central and provisional level educational institutions. Further, steps have been taken to develop 326 national schools located throughout the country with required facilities.

In relation to the higher education, significant gaps between demand and supply, quality and relevancy continue to exist. The capacity in the state controlled university system is acutely limited, and there is no rational expansion programme to increase the intake to accommodate qualifying students. In 2006, a total of 118,770 students were eligible for admission but only 16,622 (14 per cent) could be admitted to universities. Increasing number of unemployed graduates seeking ordinary employment opportunities in the government sector indicates mismatches between teaching programmes and labour market requirement. Due to limited access to higher education, a large number of students seek university admissions abroad and various

### Chart 3.5 Government Expenditure on Health and Education



institutions affiliated to foreign organisations are also present in the country to attract students. This has also led for substantial outflows of foreign exchange for education purposes annually. Hence, there is an urgent need of recognising the operation of degree granting non-state higher education institutions to broaden the access to university education in the country and the establishment of accompanied accreditation and monitoring system to maintain standards.

Several universities have introduced new educational programmes in a limited scale to meet the demand for such courses despite certain constraints. The University of Peradeniya has established a new faculty of Allied Health Sciences, with departments of Nursing, Physiotherapy, Pharmacy and Medical Laboratory Sciences fulfilling a long felt need. Rajarata University of Sri Lanka established a faculty of Medical and Allied Sciences in 2006. The Sabaragamuwa University set up a Tourism Management department. Eastern University and University of Jaffna have also introduced new study courses. However, the scope of expansion and upgrading of courses to required levels has been constrained by limited availability of financial and other resources, as universities are entirely dependent on government funds for conducting undergraduate courses. However, studies show that private rate of return is greater than social rate of return from tertiary education, indicating that individuals are willing to share the cost of conducting such courses. Hence, fee-levying courses could be conducted for those who can afford, while providing assistance to low income groups to enrol for the same courses to increase the intake, maintain the quality of education and to reduce the fiscal burden.

Distance education is gaining popularity across the globe with the improvement of Information and Communication Technology (ICT). In the wake of serious deficiencies in the access to higher education in the country, further alternative means of higher education opportunities need to be explored making use of rapidly expanding ICT facilities, to produce required manpower. It is reported that Sri Lanka might need 5,000 professionals in ICT sector alone during the next 3 – 4 years. In this respect, the Institute of Computing of the University of Colombo and the Sri Lanka Institute of Information Technology (SLIIT) have commenced several internal and external courses to train students in ICT. The University of Moratuwa has also proposed to commence an innovative e-learning course to produce IT professionals from 2007 onwards.

There are several public and private institutions engaged in providing professional and vocational training. Professional training is available in the fields of accountancy, law, management, marketing, banking, etc. provided by independent institutions with international accreditation. In respect of Technical and Vocational Education and Training

# Table 3.9

and Un

# Salient Features of General and University Education

| Item  | 2005   | 2006   |
|---|--------|--------|
|   | (a)    | (a)    |
|   |        | <br>   |
| 1. General education                                |        |        |
| a. Total number of schools                          | 10,461 | 10,455 |
| Government schools                                  | 9,723  | 9,709  |
| o/w National schools                                | 324    | 324    |
| Other schools                                       | 738    | 746    |
| Private   | 85     | 93     |
| Pirivena  | 653    | 653    |
| b. Students ('000)                                  | 4,104  | 3,999  |
| c. New admissions ('000) (b)                        | 319    | 328    |
| d. Teachers ('000)                                  | 200    | 216    |
| e. Student/Teacher ratio (government schools)       | 21     | 19     |
| f. Total govt.expenditure on education (Rs. bn) (d) | 63.6   | 78.3   |
| Current   | 50.7   | 61.1   |
| Capital   | 12.9   | 17.2   |
| 2. University education                             |        |        |
| a. Universities                                     | 15     | 15     |
| b. Students (e)                                     | 66,386 | 65,206 |
| c. Lecturers  | 3,875  | 4,016  |
| d. Number Graduating (e)                            | 7,154  | n.a.   |
| Arts and Oriental studies                           | 1,652  | n.a.   |
| Commerce & Management studies                       | 1,436  | n.a.   |
| Law   | 345    | n.a.   |
| Engineering   | 755    | n.a.   |
| Medicine  | 805    | n.a.   |
| Science   | 1,250  | n.a.   |
| Other   | 911    | n.a.   |
| e. New admissions for first degrees (e)             | 14,520 | 16,622 |

a) Provisional

(b) Government schools only(c) This includes 1,935 teachers paid by other than the government

(d) Includes government expenditure on higher education

(e) In all Universities, excluding the Open University of Sri Lanka

(TVET), public institutions such as Department of Technical Education and Training, Vocational Training Authority of Sri Lanka, National Apprentice and National Institute of Technical Education are active under the directions provided by the Tertiary and Vocational Education Commission and the Ministry of Vocational and Technical Training. These institutions together provided training to around 61,112 individuals in 2006.

#### Housing and Urban Development

The demand for houses and urban infrastructure is expanding rapidly with the population growth and urbanisation. The population is growing at 1.1 per cent annually, whereas the urban population is growing at a higher rate of 3 per cent. Trends indicate that more than half the population of the country would live in urban areas by 2016, requiring rapid development of urban infrastructure. The annual new demand for houses in Sri Lanka is estimated to be around 100,000. In addition, there is an estimated housing shortage of 350,000. Further, about 30 per cent (about 1.3 million) of the existing houses are semi-permanent or improvised or unclassified needing substantial improvements. Of the total number of about 114,000 houses destroyed or damaged from the tsunami, construction of 61,000 houses has been completed by end 2006 and construction of balance houses was in progress.

The long-term housing development policy, as indicated in the Ten-year Vision, envisages meeting a large part of the backlog and growing demand for houses. The policy aims at ensuring planned human settlements taking into consideration the population density, land suitability and environmental sustainability. Adoption of vertical development approaches in high and medium density areas, implementation of participatory approaches wherever possible, developing housing finance market with primary and secondary mortgage financing facilities and providing government assistance for needy groups also constitutes the housing policy. In addition to individual housing, government supported programmes and private sector investments are expected to provide 645,000 housing units during the ten year period up to 2016.

There are several government institutions engaged in facilitating housing development for targeted groups. The National Housing Development Authority (NHDA), the main public sector institution that implements housing programmes especially targeting low-income households, has introduced several new housing programmes. NHDA completed 46,021 housing units under various housing development programmes in 2006. Real Estate Exchange Ltd. (REEL) is planning to uplift the living standards of shanty dwellers of about 66,000 in urban centres within the next 10 years by providing them with better housing and other infrastructure facilities. The REEL has initiated construction of 910 housing units during 2006. It has so far liberated 666 perches of prime lands in Colombo by providing better housing facilities for settlers in those areas.

Private sector continued to play a vital role in the housing sector. Condominium housing development backed by

corporate property developers has become one of the promising areas of investment. Construction of condominium housing is in increasing trend with corporate property developers being encouraged with various direct and indirect fiscal incentives, mostly under BOI status, and the growing interest of expatriate Sri Lankans to invest in the real estate sector. Housing loans granted by financial institutions too increased in 2006 for individual construction of housing. Major commercial banks have granted 97,983 housing loans to the value of Rs. 34,227 million during 2006. The housing banks namely, the State Mortgage and Investment Bank (SMIB), Housing Development Finance Corporation Bank (HDFC Bank), and National Savings Bank (NSB) have granted 35,137 housing loans to the value of Rs. 12,187 million in 2006, in comparison to 22,501 loans in 2005.

Rapid development of the housing sector is challenged by certain impediments. Exorbitant land prices in urban areas, problems in land titles preventing primary mortgages, lack of long-term funds for lending by financial institutions, lack of a secondary mortgage market, scarcity of skilled labour in the construction sector and rising prices of building material remain as major challenges.

#### **Safety Nets**

Sri Lanka enjoys the most extensive social protection coverage in the South Asian region. Safety net programmes are vital in the social protection system in Sri Lanka. Safety net programmes are aimed at helping the low income families to cope with poverty. The Samurdhi programme is the main safety net program implemented by the government to support the poor to maintain their living standards, while also helping them to emerge from poverty.

The Samurdhi programme was further strengthened in 2 biggest capital allocation for the poverty alleviation es was utilised in 2006. The Samurdhi Authority of p

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# Number of Beneficiary Families and Value of Grants 2005 - 2006

| Cash Grants                              | 2005            | 2005          |   | 2006(a)                                   |
|--|-----------------|---------------|---|---|
| Amount (Rs.)                             | No. of Families | Value (Rs.mn) | No. of Families   | Value (Rs.mn)                             |
| Samurdhi Income Supplementary Programme  |                 |               |   |   |
| Rs.1,000 (Rs. 1,000 - Rs. 1,500 in 2006) | 7,115           | 85            | 7,902   | 106                                       |
| Rs. 600 (Rs. 600 - Rs. 1,000 in 2006)    | 655,092         | 4,717         | 645,354   | 5,517                                     |
| Rs. 400 (Rs. 400 - Rs. 600 in 2006)      | 330,725         | 1,587         | 449,646   | 2,407                                     |
| Rs. 350 (Rs. 350 - Rs. 400 in 2006)      | 347,323         | 1,459         | 308,866   | 1,324                                     |
| Rs. 250 (Rs. 250 - Rs. 350 in 2006)      | 267,843         | 804           | 180,550   | 542                                       |
| Rs. 140 (Rs. 55 - Rs. 250 in 2006)       | 352,566         | 592           | 321,250   | 690                                       |
| Total                                    | 1,960,664       | 9,244         | 1,913,568   | 10,586                                    |
| Nutrition Programme                      |                 |               |   |   |
| Rs. 200 (With effect from June 2004)     | 112,960         | 271           | 119,184   | 148                                       |
| (a) Provisional                          |                 |               | Sources: Department of the Com<br>Samurdhi Authority of S | missioner Genaral of Samurdh<br>Sri Lanka |



Sri Lanka (SASL) launched various income generation programmes, community development programmes as well as capacity building programmes during the year to support the Samurdhi beneficiaries to escape from poverty and low standard of living. The *Janapubudu* programme issued 97,068 loans amounting to Rs. 1,369 million to finance small scale enterprises. The *Gampubudu* programme aimed at upgrading infrastructure facilities of villages, the *Diriya Piyasa* to address the shelter problem of the beneficiaries and the agricultural development programmes to increase the income levels of beneficiaries were implemented by the SASL in 2006.

**Direct benefits of Samurdhi were increased in 2006.** The cash grants to Samurdhi beneficiaries were increased by 50 per cent in 2006. The value of nutrition pack given to pregnant women was increased to Rs. 500 and a special nutrition programme was launched for children of Samurdhi and other under-privileged families through the supply of a glass of fresh milk daily to each child aged between 2 to 5 years.

Safety net programmes need to be further streamlined aiming at empowering the poor to extend their contribution to the development of the economy. Various studies show that Samurdhi benefits are enjoyed by around 46 per cent of the population though the poverty level was 23 per cent. This highlights the need for improving the targeting of Samurdhi benefits. Establishment of a transparent exit and entry mechanism, strengthening human capital development, skills development and access to micro-finance would help improve the empowering programmes. Population in conflict affected areas also has to be protected by providing effective relief, rehabilitation and reconstruction services.

#### Environment

Achieving development targets without ensuring the protection of the environment would expose the country to unpredictable disasters. Therefore, the development processes should always be accompanied by programmes to protect the environment and to maintain the equilibrium between rapid economic development and natural resources. The Ten - year vision has given top priority for the protection of the environment and has highlighted the policy framework covering forest, wildlife and biodiversity, water resources, mineral resources, air resources, land resources, waste management and marine pollution prevention.

The Ministry of Environment and Natural Resources (MENR) introduced several new policies and implemented several environmental projects in 2006. New regulations were issued by the MENR under the Fauna and Flora Protection Ordinance and National Environment Act. These regulations addressed the issues relating to prohibition of the use of equipment for exploration, mining and extraction of sand and gems and prohibition of cultivation of annual crops in high gradient area. The National Cleaner Production Policy and Strategy has also been approved by the Cabinet.

In 2006, several Orders have been issued under the National Environmental Act. A Gazette Notification has been published by the Central Environment Authority (CEA) to prohibit manufacture of polythene or any polythene product of 20 microns or below in thickness for use and sale or use of polythene or any polythene product which is 20 microns or below in thickness.

**MENR implemented several other projects for the well being of the society.** A National Sustainable Development Strategy (NSDS) was prepared and a National Council for Sustainable Development (NCSD) was established aiming at strengthening the capacity of relevant stakeholders in the decision making process. A project, funded by the United Nations Environmental Programme (UNEP) has been started to develop Market Based Instruments (MBIs) to secure financial resources in environment management. A medium term action plan for the disposal of municipal solid waste has been developed with the objective of facilitating a land fill for a cluster of local authorities. In addition, MENR has conducted various environment promotion activities during the year.