3.0 Introduction
3.1. Investment in education is one of the central pillars of government policy in Sri Lanka. The objectives of investing public resources in education are to promote equity and social mobility, contribute to high and sustained economic growth, and enhance human development. In addition, private households invest resources in education to improve employment prospects, earnings and social status. Three key factors determining the quantity and quality of education outputs are the level, composition and distribution of education expenditures, the internal efficiency of the education system and the effectiveness of education service delivery mechanisms. This chapter analyzes education investment in Sri Lanka, with a special focus on public investment, internal efficiency and the quality of service delivery. The magnitude and pattern of private investment in education is also examined.

3.1 Public Investment in Education

3.2. Government education expenditure in Sri Lanka currently amounts to about LKR 40,000 million (USD 415 million) annually [see Table 3.1]. In recent years, the education budget has accounted for approximately 3% of national income and 7%-9% of government spending. This represents a comparatively modest level of public education investment by developing country standards [see Table 3.2]. Sri Lanka devotes the lowest share of the public budget to education of the entire set of countries, shown in Table 3.2, mostly high performing East Asian countries or neighboring South Asian nations. The group of lower middle-income countries, to which Sri Lanka is expected to belong in the near future, allocate about 4% of their national income to public education. Countries such as South Korea, Malaysia, Thailand and Singapore, which act as models for Sri Lankan policy makers, devote 18%-31% of government expenditures to education. South Asian countries and low income nations allocate, on average, about 3.2% of national income and 11% of government
expenditures to education. Further, in South Asia, only Pakistan and Bangladesh spend a lower proportion of national income on public education. There are five main reasons for the relatively modest level of public education investment in Sri Lanka: (i) the broad range of

Table 3.1. Public Investment in Education as a Proportion of National Income and Government Expenditure, 1998-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Public education expenditure (nominal prices) (rupees million)</th>
<th>Education expenditure as a percentage of GDP</th>
<th>Education expenditure as a percentage of government expenditure</th>
<th>Education recurrent expenditure as a percentage of government recurrent expenditure</th>
<th>Education capital expenditure as a percentage of government capital expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>28,689</td>
<td>3.1</td>
<td>8.4</td>
<td>11.5</td>
<td>4.1</td>
</tr>
<tr>
<td>1999</td>
<td>29,368</td>
<td>2.9</td>
<td>8.9</td>
<td>11.2</td>
<td>5.0</td>
</tr>
<tr>
<td>2000</td>
<td>35,348</td>
<td>3.1</td>
<td>7.8</td>
<td>11.4</td>
<td>3.5</td>
</tr>
<tr>
<td>2001</td>
<td>39,995</td>
<td>3.2</td>
<td>8.2</td>
<td>11.7</td>
<td>3.3</td>
</tr>
<tr>
<td>2002</td>
<td>40,017</td>
<td>2.9</td>
<td>6.8</td>
<td>10.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: Calculated from Revenue and Expenditure Statements and Budget Estimates, Government of Sri Lanka and Provincial Councils, and Annual Reports, Central Bank of Sri Lanka.

Table 3.2. Education Expenditure as a Share of National Income and Government Expenditures, Sri Lanka and Selected Other Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Education Expenditure as a Proportion of National Income</th>
<th>Education Expenditure as a Proportion of Government Expenditure</th>
<th>Education Recurrent Expenditure per Student as a Proportion of National Income per capita</th>
<th>Average Teacher Salaries as a Proportion of National Income per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>2.9</td>
<td>6.8</td>
<td>9.7</td>
<td>1.5</td>
</tr>
<tr>
<td>India</td>
<td>4.1</td>
<td>12.7</td>
<td>16.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2.5</td>
<td>15.7</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.8</td>
<td>7.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>3.7</td>
<td>14.1</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.2</td>
<td>26.7</td>
<td>20.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Maldives</td>
<td>3.9</td>
<td>11.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bhutan</td>
<td>5.2</td>
<td>12.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>5.4</td>
<td>31.0</td>
<td>25.3</td>
<td>3.1</td>
</tr>
<tr>
<td>South Korea</td>
<td>3.8</td>
<td>17.4</td>
<td></td>
<td>4.1</td>
</tr>
<tr>
<td>Singapore</td>
<td>3.7</td>
<td>23.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phillipines</td>
<td>4.2</td>
<td>20.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>4.4</td>
<td>22.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Asia</td>
<td>3.2</td>
<td>11.2</td>
<td>14.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Low Income Countries</td>
<td>3.2</td>
<td>16.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Middle Income Countries</td>
<td>4.1</td>
<td>18.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Middle Income Countries</td>
<td>5.0</td>
<td>23.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Sri Lanka, calculations from Government of Sri Lanka Budget Estimates, Central Bank of Ceylon Annual Reports, various issues; Other Countries, World Development Indicators (World Bank) and UNESCO Statistics, various issues. The information above for Sri Lanka is computed from 2002 data. Other countries and regions are from the closest available year in the late 1990s and early 2000s.
public services, such as universal free health care and wide-ranging access to poverty oriented safety nets, such as the Samurdhi program, which are generally not available in most other developing countries, and compete for government resources; (ii) high defense expenditure, which absorbs over 5% of GDP and crowds out other investments; (iii) low public revenue, which has contributed to large budget deficits and constrained government expenditures; (iv) comparatively low teacher salaries, with Sri Lankan teachers receiving salaries about half or less, as a proportion of national income per capita, than teachers in countries such as India, Bangladesh, Malaysia, Thailand and South Korea; and (v) the fact that Sri Lanka built up its capital stock of schools during the 1950s-1970s, so that there is now no need for major investment in the construction of classrooms and new school buildings.

3.3. The tight budget constraint in recent years has fallen especially heavily on the capital budget. The education capital budget declined steeply from 5% of government capital spending in 1999 to 2.5% in 2002. In terms of shares of the education budget, the capital budget decreased from about 20% in 1998-2000 to 16% in 2001-02 [see Figure 3.1]. This fall in capital investment constrained expansion and development of the education system. In particular, it restricted investment in physical facilities to expand and increase urban schools; supply basic services, such as water supply and sanitation, to rural schools; and invest in quality inputs, such as IT centers, science laboratories, libraries, activity rooms and multi-purpose rooms. As a result of the decline in government capital resources to education, a high proportion of investment expenditure has been financed through donor funded projects. For instance, in 2002, the contribution of donor assistance to the Ministry of Human Resources, Education and Cultural affairs was equal to approximately 68% of the capital budget. When government counterpart funding to donor projects is included, this share rises to about 81%.

Figure 3.1. Shares of Public Capital and Recurrent Education Spending, 1998-2002.

The trend and composition of public education expenditure

3.4. The recent trend of public education expenditure shows considerable fluctuation in real spending [see Table 3.3]. Overall, public education spending per student declined in 2002 by about 4 percent in comparison to the level in 2001. Further, both recurrent and capital spending per student decreased between 2001 and 2002. However, education expenditure per student increased sharply in 2000 and 2001 in relation to the levels in 1998 and 1999, mainly due to investment in new public universities. As such, the level of expenditure in 2002 was above the spending levels in 1998-99, despite the decline relative to 2001. The decline in per student public education spending in 2002 can partly be attributed to the fiscal
difficulties of the period, which forced a tight budgetary policy. Such major fluctuations within a short span of time make it difficult for education policy makers, managers and administrators to develop long-term investment decisions and plans.

3.5. The recurrent education budget accounts for about 79%-84% of public education expenditure. The chief component of recurrent education expenditure, accounting for about 85%-90% of the combined central and provincial recurrent education budgets, is salaries and wages. The major share of the salary bill is on teacher salaries, followed by the salaries of principals, education administrators and other grades. After salaries, the next highest shares of recurrent education spending are on textbooks, which receive about 3% of the total recurrent budget, and school uniforms, which account for about 2% of the total recurrent education budget. The balance funds are mainly used for administrative and operating costs such as electricity, communications, water and postal charges, and staff travel. The main challenge faced by the recurrent education budget is to allocate sufficient funds, once salaries and administrative costs have been met, to support education quality processes, such as professional development of teachers and principals and delivery of on-site academic and administrative support to schools, and meet the operating costs of capital education investment.

3.6. The main share of capital or investment expenditure in the school system, accounting for over 80% of capital education investment, is on construction activities, mainly building of classroom blocks. Only a relatively small proportion of resources, less than 20%, are invested in quality inputs, such as equipment, technology, furniture and tools. The classroom construction activities in the school system also appear ad hoc, without sound forward planning based on enrolment needs. In consequence, many rural schools carry excess capacity with empty classrooms, while urban schools are heavily congested and over-crowded. Construction activities in the university system, too, appear uncoordinated, with heavy expenditure on buildings without a clear plan based on needs assessments of universities. As a result of the low investment in quality inputs, such as equipment and technology, the country could find itself on the wrong side of the digital divide and be seriously constrained in equipping future generations with the knowledge, skills and competencies required in the modern global knowledge economy. The main challenges facing the education capital budget are to rationalize construction activities in the

<table>
<thead>
<tr>
<th>Year</th>
<th>Real Public Education Expenditure per Student (1996 = 100)</th>
<th>Real Public Recurrent Education Expenditure per Student (1996 = 100)</th>
<th>Real Public Capital Education Expenditure per Student (1996 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>5,747</td>
<td>4,631</td>
<td>1,116</td>
</tr>
<tr>
<td>1999</td>
<td>5,626</td>
<td>4,467</td>
<td>1,159</td>
</tr>
<tr>
<td>2000</td>
<td>6,241</td>
<td>4,963</td>
<td>1,277</td>
</tr>
<tr>
<td>2001</td>
<td>6,286</td>
<td>5,284</td>
<td>1,002</td>
</tr>
<tr>
<td>2002</td>
<td>6,032</td>
<td>5,046</td>
<td>987</td>
</tr>
</tbody>
</table>

school system and universities, allocate greater resources to expanding and increasing urban schools, and devote more funds to high level quality inputs, such as IT centers, science laboratories, libraries, activity rooms, equipment and technology.

**Distribution of public education expenditure by education level and international comparisons**

3.7. Total public education spending is about LKR 40,000 million. Out of this sum, approximately 32% (13,000 million rupees) is spent on primary education, 50% (20,000 million rupees) on secondary education, 14% (5,600 million rupees) on tertiary education, and 3% (1,400 million rupees) on technical education [see Table 3.4].

3.8. Unit recurrent costs per student are lowest for primary schooling, about 6,500 rupees per student, followed by secondary schooling, approximately 7,500 rupees per student. Technical education, at 15,000 rupees per student, is more expensive than primary and secondary education.

Unit recurrent costs are highest, by a long way, for university education, costing around 66,000 rupees per student. As a proportion of GDP per capita, primary and secondary schooling cost 8% - 9% per student and technical education about double that at 18% per student. University education is considerably more expensive, costing 79% of national income per capita per student.

3.9. This pattern of costs is fairly typical for education systems, with primary education being the least costly and university education the most expensive. These expenditure levels, unit costs and proportions reflect enrolment numbers and shares, and variations in production costs across education cycles.

University education is normally the most expensive level of education, requiring highly qualified staff, sophisticated technology and advanced equipment and material, resulting in higher human capital and physical resource costs. Technical education also tends to be expensive, as it requires highly specialized equipment and staff resources. Primary and secondary education are less expensive than university or technical education as they afford greater scope for economies of scale and require less sophisticated technology and capital inputs. However, secondary education is normally more expensive than primary education, as secondary teachers tend to be better qualified and paid, and the production technology is more capital intensive, especially at the senior secondary level.

3.10. By international standards, average recurrent education expenditures per

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Total Expenditure (Rupees million)</th>
<th>Recurrent Expenditure (Rupees million)</th>
<th>Capital Expenditure (Rupees million)</th>
<th>Share of Education Expenditure by Level %</th>
<th>Unit Recurrent Costs (Rupees)</th>
<th>Unit Recurrent Costs as a Proportion of GDP per capita %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>12,904</td>
<td>11,001</td>
<td>1,903</td>
<td>32</td>
<td>6,471</td>
<td>8</td>
</tr>
<tr>
<td>Secondary</td>
<td>20,184</td>
<td>17,207</td>
<td>2,977</td>
<td>50</td>
<td>7,481</td>
<td>9</td>
</tr>
<tr>
<td>University</td>
<td>5,577</td>
<td>4,416</td>
<td>1,161</td>
<td>14</td>
<td>65,697</td>
<td>79</td>
</tr>
<tr>
<td>Technical</td>
<td>1,352</td>
<td>848</td>
<td>503</td>
<td>3</td>
<td>14,834</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>40,016</td>
<td>33,472</td>
<td>6,545</td>
<td>100</td>
<td>8,064</td>
<td>10</td>
</tr>
</tbody>
</table>

student in Sri Lanka are modest at primary and secondary education levels, but high at the tertiary education level [see Table 3.5]. Average recurrent education expenditure per student as a share of national income per capita on primary and secondary education, at about 9% and 11% respectively, are among the lowest in South Asia and East Asia. In contrast, average tertiary education expenditure per student as a share of national income per capita, at 100%, is slightly higher than India, and substantially above the level in East Asian countries such as South Korea, Singapore, Malaysia, Thailand, Indonesia and the Philippines. The main reason for the high share of public recurrent spending on tertiary education is the large unit cost of government universities. Overall, the pattern of average recurrent expenditure across education levels suggests that, in contrast to high performing East Asian countries, the balance of public resources in Sri Lanka may be tilted unduly in favor of tertiary education, at the expense of primary and secondary schooling.

### 3.2 Private Investment in Education

3.11. Households invest considerable resources on education. In 1995/96, the most recent date for which information on household education expenditure is currently available, private
expenditure in seven provinces was about 4,688 million rupees [see Table 3.6]. At 1995/96 public education investment levels, this was equal to about 23% of government education expenditure. It was also greater than public capital education expenditure by about 13%.  

3.12. The major proportion of household education spending is by the richest consumption quintile, which accounts for about 52% of total household education expenditure. The share of private education investment then progressively declines as the consumption quintiles become less affluent, with the poorest quintile accounting for only about 6% of total private education expenditure. The poor, who were 25% of the population in 1995/96, account for 7% of household education spending, while the non-poor spend the balance 93%. These findings can be attributed to several factors, including: (i) the higher discretionary income available to prosperous households to invest in child quality through education; (ii) the survival of students from wealthy homes to higher levels of the education system, which require greater expenditure and, at the tertiary level, is comparatively open to private investment, especially outside the university system; and (iii) the normally higher education levels of affluent parents, which induces them to invest more heavily in the education of their children.

3.13. The largest component of annual private education expenditure, about 590 rupees per student (45% of total unit private education expenditure), is on tuition fees [see Figure 3.2]. This is followed by equipment and stationary, 360 rupees per student (28%) and school fees, 103 rupees per student (8%). Other types of expenditure, such as textbooks, boarding fees, facility fees, donations and miscellaneous expenses, account for about 246 rupees per student or 19% of total private education spending. The dominance of tuition in private household education spending is the outcome of several factors, such as: (i) extreme competition to enter university; (ii) the high stakes grade 5 scholarship examination; (iii) perceived inadequacies in teaching and

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Table 3.6. Household Education Expenditure, 1995/96

<table>
<thead>
<tr>
<th>Consumption Quintile</th>
<th>Annual Household Expenditures (Rupees '000)</th>
<th>Share of Expenditures Across Economic Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quintile 1-20</td>
<td>290,400</td>
<td>6</td>
</tr>
<tr>
<td>Quintile 21-40</td>
<td>400,800</td>
<td>9</td>
</tr>
<tr>
<td>Quintile 41-60</td>
<td>602,400</td>
<td>13</td>
</tr>
<tr>
<td>Quintile 61-80</td>
<td>925,200</td>
<td>20</td>
</tr>
<tr>
<td>Quintile 81-100</td>
<td>2,448,000</td>
<td>52</td>
</tr>
<tr>
<td>Poor</td>
<td>331,200</td>
<td>7</td>
</tr>
<tr>
<td>Non-poor</td>
<td>4,344,000</td>
<td>93</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>4,668,000</td>
<td>100</td>
</tr>
</tbody>
</table>


---

12. Information for the conflict affected North-Eastern Province was not collected in the 1995/96 household income and expenditure survey, due to the armed secessionist conflict in the area.

13. Note that these estimates underestimate total private education spending, as information for the North-Eastern Province is not available. This is the poorest province, with about 72% of the per capita income of the next poorest province, North-Central. On the assumption that household education spending in the North-Eastern Province is equal to 72% of the North-Central Province, private education expenditure in the former would be about 162 million rupees. This would have raised total household education expenditure to 4,830 million rupees in 1995/96.
examination preparation by schools, especially for major public examinations such as the GCE O/L and GCE A/L; and (iv) a culture of attending tuition classes, which has now become virtually institutionalized [see NEC (2003)]. The problem of low teacher salaries, too, has forced many teachers to search for secondary income sources, and private tuition is an obvious second job for school teachers.

Current Levels of Private Education Expenditure

3.14. The present level of household education investment can be estimated based on certain assumptions about the income elasticity of demand for education. A conservative assumption is that household education spending per student increases at the same rate as per capita consumption. Based on this assumption, and that households in the North-Eastern Province spend 72% of the level in the North-Central Province14, total private household education expenditure in 2002 can be estimated to be about 10,600 million rupees in 2002 prices. This would be equal to about 26% of total public education expenditure, and is 62% higher than the public capital education budget. In fact, private household education spending is likely to be greater than this conservative estimate, as the income elasticity of demand for education is typically higher than unitary. Hence, at present, it is likely that private household education spending may be nearer 30%-35% of public education spending and about double the government capital budget for education. This level

![Figure 3.2. Shares of Private Education Expenditure per Student by Spending Category.](image)


![Figure 3.3. Shares of Education Financing by Source, 2002.](image)


14. The North-Central Province is the poorest province, next to the North-Eastern Province. The per capita income of the North-Eastern Province was about 72% of the per capita income of the North-Central Province in 2002.
of private investment could be increased if the NEC (2003) proposals are implemented and the legal restriction on private schools is lifted.

3.3 Sources of Education Financing

3.15. The central government finances the major share of education expenditure in the country, accounting for about 65% of total public and private education investment [see Figure 3.3]. Slightly more than half these resources, about 53%, are spent directly by central government education institutions. The balance, about 47%, is awarded as grants to the provincial councils. After the central government, households finance the second highest share of education investment, about 21%. This is followed by provincial councils through their own revenues, 8%, and donor funds, 6%. Credits from the World Bank and the Asian Development Bank constitute the main sources of donor funds. JICA is the chief source of grant aid, followed by UN institutions such as UNICEF, and countries such as the U.K., Germany and Sweden.

3.4 Internal Efficiency of Investment in Education

3.16. The internal efficiency of primary schooling (grades 1-5) and junior secondary schooling (grades 6-9), measured in terms of flow rates, are high [see Table 3.7]. Repetition rates and drop out rates range from 2%-7%, with slightly higher repetition and drop out among boys than girls. The high student flow rates can be attributed to several policy measures: (i) the supply of sufficient school places, through the island-wide network of primary and secondary schools, to meet the demand for education from parents and students; (ii) incentive schemes, such as free textbooks, school uniforms and subsidized transport, to enroll and continue through the school system; and (iii) automatic promotion from grades 1-11, with no formal mechanisms to fail pupils, unless students voluntarily repeat grades. In addition to public policy measures, the demand for education from parents is also strong, and makes an important contribution to the high student flow rates through the compulsory education cycle. The marginally higher repetition and drop out rates among boys compared to girls, observed mainly at grades 8-9, can be attributed chiefly to the higher opportunity cost of schooling for

### Table 3.7. Compulsory Education Cycle: Repetition Rates and Drop Out Rates, by Gender, 2001

<table>
<thead>
<tr>
<th>Grade</th>
<th>Boys Repetition Rate</th>
<th>Girls Repetition Rate</th>
<th>Both Sexes Repetition Rate</th>
<th>Boys Drop Out Rate</th>
<th>Girls Drop Out Rate</th>
<th>Both Sexes Drop Out Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1</td>
<td>2.2</td>
<td>1.6</td>
<td>1.9</td>
<td>-0.7</td>
<td>-0.7</td>
<td>-0.8</td>
</tr>
<tr>
<td>Grade 2</td>
<td>4.5</td>
<td>3.7</td>
<td>3.9</td>
<td>0.01</td>
<td>0.01</td>
<td>0.07</td>
</tr>
<tr>
<td>Grade 3</td>
<td>4.8</td>
<td>3.2</td>
<td>4.0</td>
<td>-0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Grade 4</td>
<td>4.3</td>
<td>2.9</td>
<td>3.6</td>
<td>1.1</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Grade 5</td>
<td>3.7</td>
<td>2.5</td>
<td>3.2</td>
<td>1.8</td>
<td>0.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Grade 6</td>
<td>5.5</td>
<td>5.2</td>
<td>5.4</td>
<td>3.2</td>
<td>2.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Grade 7</td>
<td>3.1</td>
<td>2.0</td>
<td>2.6</td>
<td>2.5</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Grade 8</td>
<td>2.6</td>
<td>1.8</td>
<td>2.2</td>
<td>3.8</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>Grade 9</td>
<td>1.8</td>
<td>1.5</td>
<td>1.6</td>
<td>7.1</td>
<td>4.9</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: School Census, Ministry of Education.
teen-aged boys, who are able to obtain jobs as unskilled workers in the informal labor market.

3.17. Repetition rates at the key examination grades in the senior secondary education cycle, grades 11 and 13, however, are high [see Table 3.8]. In grade 11, about 27% of students are repeaters, with the proportion of repeating boys and girls close to even. This is a high percentage, as it implies that about one in four students in grade 11 is in the class for the second time. In grade 13, the proportion of students repeating rises further. Among GCE A/L science students, 35% of students are repeaters, among GCE A/L arts students, 37% of students take the class for the second time; and among GCE A/L commerce students, 35% of students are repeaters. The repetition rates of boys and girls are very similar across grades 11 and 13, and among types of subjects. The GCE A/L repetition rates show that about 1 in 3 students in grade 13 is taking the class for the second time. The high repetition rates at grade 11 and grade 13 suggest the existence of considerable cost inefficiencies in the education system at these levels. The main reason for these high repetition rates at grade 11 and grade 13 are the low learning levels of students through the primary and secondary cycle up to grade 11, which is exposed at the public examinations.

**Size and distribution of schools**

3.18. Sri Lanka maintains a large and geographically widely dispersed network of public schools. This school network was established, over successive past generations, to serve a population residing largely in rural areas. However, with economic development and expansion of the service and industrial sectors, the proportion of population living in cities and towns has been increasing in

### Table 3.8. Proportion of Repeaters in the GCE O/L and GCE A/L Grades, 2002

<table>
<thead>
<tr>
<th>Grade Cycle</th>
<th>Proportion of Students Repeating %</th>
<th>Proportion of Boys Repeating %</th>
<th>Proportion of Girls Repeating %</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCE O/L</td>
<td>27</td>
<td>27</td>
<td>26</td>
</tr>
<tr>
<td>GCE A/L Science</td>
<td>35</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>GCE A/L Arts</td>
<td>37</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>GCE A/L Commerce</td>
<td>35</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

*Source: School Census, Ministry of Education.*

![Figure 3.4. Cumulative Number of Schools by Student Teacher Ratio](image)
recent years. In addition, better transport and communications networks have placed rural villages in touch with schools in urban centers. In consequence, there has been sharply increasing demand for popular, prestigious urban schools and decreasing demand for rural and less prestigious semi-urban schools. This shift in demand has led to the existence of a large number of very small schools. About 5,900 schools (60% of schools) have less than 300 students. Further, about 2,700 schools (27% of schools) have under 100 students, and 1,360 schools (14% of schools) have less than 50 students. This network of small schools is expensive to maintain and operate. In particular, student-teacher ratios in small schools tend to be low, resulting in high unit recurrent costs. About 1,000 schools (10%) of schools) have student-teacher ratios as low as 7:1 or less [see Figure 3.4]. Around 1,700 schools (17%) have student-teacher ratios less than 10:1, and about 6,000 schools (60%) have student-teacher ratios of 15:1 or less.

3.19. Schools with such small student-teacher ratios are far more expensive to operate [see Figure 3.5], and typically have unit recurrent costs about 100% greater than large schools with student-teacher ratios of about 25:1.

3.20. Schools with such small unit recurrent costs are expensive to maintain [see Figure 3.5]. The annual unit cost per teacher ranges from about 295 rupees in small primary schools and 290 rupees in small schools with GCE O/L classes to about 150 rupees in larger schools with high enrolment numbers.

3.21. Government strategy to enhance the cost effectiveness of the school system contains two principal components.

a. Attempts to provide facilities and equipment to small schools to make them sufficiently attractive to prevent students from leaving for other, more popular schools. This strategy has been largely ineffective, as urbanization has generated strong countervailing power. In addition, small rural schools do not have reputations that can match schools in cities and towns, and the provision of facilities and equipment alone is not adequate to stem the flow of students to prestigious schools. However, this strategy remains popular with many educationists [see NEC (2003)].

b. Efforts to limit the growth of schools in cities and towns by imposing constraints on enrolment numbers, combined with very slow establishment of new urban schools. This strategy to force students to attend less prestigious schools through administrative fiat has also largely been ineffective, and existing

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Figure 3.5. Unit Recurrent Cost of a Teacher by School Type

![Figure 3.5](image)

3.22. The government had a third strategy to address the problem of high cost small schools which was effective, but has recently been suspended due to social pressure. This was a school rationalization strategy, where small schools were amalgamated and consolidated with larger schools in their neighborhoods. This strategy worked well in all parts of the country except the North-Eastern Province, where it was hardly tried. However, the benefits of this strategy, both in terms of providing students from small schools with a superior learning environment in larger schools and increasing the cost-efficiency of the system was not widely understood by local communities. In consequence, it drew widespread criticism, compelling the government to suspend the process. However, it is an important education strategy which needs to be reintroduced, in combination with an effective media campaign to explain the objectives and benefits of the school rationalization program to local communities and pressure groups. Care should also be taken to ensure that the school rationalization process does not damage access to education to any students. In addition, new schools need to be established in urban areas, to absorb student demand as population migrates from villages to towns and cities.

**Internal efficiency and unit costs of university education**

3.23. Public university education in Sri Lanka is expensive, with high unit operating costs in comparison to other developing countries. In addition, there are wide differences in unit costs among public universities, ranging from about 40,000-120,000 rupees per student per year [see Figure 3.6]. Generally, unit costs are related to student enrolment size, with smaller universities experiencing high costs and larger universities, which can reap economies of scale, enjoying low unit costs. The most expensive universities tend to be small, new institutions such as the Wayamba, Eastern and South-Eastern Universities. Larger, older universities such as Kelaniya, Sri Jayewardenapura, Colombo and Jaffna have the lowest unit costs, apart from the special case of the Open University, which only offers distance education courses and has high enrolment numbers and very low unit costs. The exception to the general rule above of an inverse relationship between unit costs and enrolment size is Peradeniya University, which is the second largest university in terms of student numbers, but has unit costs comparable to the small South-Eastern University. The main reason for the high unit operating cost of Peradeniya
University appears to be its small student-teacher ratio (9:1) and student-employee ratio (6:1), and the high maintenance cost of its spacious, widely spread campus and large residential facilities.

3.24. The principal component of university average recurrent expenditure is the student-teacher ratio [see Figure 3.7]. Universities such as Wayamba, Eastern, South-Eastern and Peradeniya, which have low student-teacher ratios, have high unit costs; while universities such as Kelaniya, Jayewardenapura, Colombo and Jaffna which have high student-teacher ratios have low unit costs. Overall, the negative relationship between student-teacher ratios and unit recurrent costs is strong through the entire university system. This relationship is the result of university salary costs, which are largely dependant on the level of academic salaries. Universities with high student teacher ratios have comparatively lower average salary expenditure, and hence smaller unit recurrent costs, than universities with low student teacher ratios. The second most important determinant of unit recurrent costs is the ratio of students to non-academic staff, as the latter strongly affects the university wage bill and hence recurrent expenditures. The public universities have extremely low student-non-academic staff ratios: ranging from 3:1 in universities such as Wayamba, Eastern, South-Eastern and Peradeniya to 8:1 in Sri Jayewardenapura. The average for student-non-academic staff ratio for the 12 public universities which offer on-site degree courses is only 4:1. In terms of academic staff to non-academic staff, too, the ratio is 1:4. This suggests a cost inefficient system, with an unduly large proportion of resources devoted to non-academic staff salaries.

3.25. Capital investment in the public university sector is also heavily weighted, in per student terms, towards the new, small universities such as Wayamba, Rajarata, Eastern, South-Eastern and Sabaragamuwa. This is necessary as the basic infrastructure of these universities, such as lecture theatres, libraries, laboratories and offices, needs to be constructed. However, the investment in construction for the new universities has diverted resources away from quality inputs, such as equipment, technology and tools, for the university system as a whole. As the basic construction activities diminish, resources need to be invested in quality inputs and quality processes.

**Government strategy to enhance budget management of the education sector**

3.26. The government has commenced a medium-term budget framework to increase predictability of resource flows and enable education planning over a longer horizon than is possible with annual budgeting. In the first stage, the medium term budget framework will largely focus on implementing policies to increase the internal efficiency of public education spending, reallocate resources
from low priority to higher priority investments within the existing resource envelope, and increase transparency and accountability of financial processes. Additional resources for education will mainly be possible only if private investment can be encouraged. This first budget stage is designed over a three year planning horizon. The second stage, over a further three year cycle, can also focus on increasing public resources for education, as the overall macroeconomic balances stabilize and greater resources become available for public spending.

3.5 Education Service Delivery: Organizational and Operational Challenges

3.27. The quantity and pattern of public expenditure on education is an extremely important determinant of education attainment and learning in a country. Equally important, however, is the quality and effectiveness of service delivery. In this context, Sri Lanka enjoys important positive features. A network of education institutions already exists to formulate policy; staff, plan and administer the school and university system; develop curricula and syllabi for schools and degree programs in universities; provide professional development opportunities for school principals, section heads and teachers, and university academics; and conduct examinations and provide certification that enjoys public confidence. Legally defined cadres exist for important services, such as the teachers' service, teacher educators' service and education administrators' service. The government also has reasonable financial management procedures, with double entry bookkeeping and cash accounting, although not yet accrual accounting. Further, there is both a supreme audit institution, the Auditor General's Department and an internal audit within the education system. Hence, the service delivery network of the education system is built on a strong foundation.

3.28. However, Sri Lanka also faces a set of important policy challenges as its education system seeks to take off beyond the first stage of development, providing universal access to basic education to a largely rural population, to the second stage of development, establishing a high quality education system in the context of a rapidly growing urban population. In this context, the education service delivery network faces a set of major structural challenges that it needs to overcome.

3.29. Weak teacher deployment. Teachers prefer to reside in cities, towns and prosperous rural areas, while avoiding disadvantaged rural areas. Schools in congenial locations tend to be overstaffed and schools in uncongenial locations understaffed. Education administrators complain that teacher transfers from surplus schools to deficit schools are hindered by political interference, with widespread political intervention to countermand transfer orders. Weak teacher deployment chiefly hurts poor children, as the highest rates of teacher understaffing occur in economically disadvantaged rural communities. However, such communities typically have less voice and power, and are unable to act as a countervailing force to teacher deployment patterns which place them at a disadvantage.

3.30. High teacher absenteeism. Teacher absenteeism poses a major problem, especially in schools located in difficult areas. Administrative records show that teachers take about 7 million days of legitimate leave per year. The average leave taken per teacher in an academic year ranges from 33 days in the North-Western Province to 42 days and 43 days in the Uva and North-Central Provinces, respectively [see Figure 3.8]. As a proportion of the school year, the incidence of teacher absenteeism varies from 15% in the North-Western Province to 20% in the North-Central and Uva Provinces. This amounts, across the 192,000 strong teaching force, to around 18% of
the academic year for the country as a whole. Further, these are absenteeism rates based on leave days taken. Anecdotal evidence and casual empiricism suggest that leave regulations are not strictly enforced, and that de facto teacher absenteeism may actually be higher.

Government policy to improve teacher deployment and reduce teacher absenteeism

3.31. Recent government thinking to improve teacher deployment and reduce teacher absenteeism contains three policy measures: (a) providing incentives, such as extra salary increments, swifter promotion, preferential access to popular schools for children and construction of teachers' quarters, to teachers taking up appointments in disadvantaged areas; (b) allowing teachers to encash unutilized leave; and (c) recruiting teachers directly to schools, rather than a centralized, transferable service. The first two measures have not been implemented effectively in the past due to a shortage of finances. The last measure requires amendments to the legislation governing teacher recruitment, and needs to be considered by parliament.

3.32. Low teacher salaries and poor teacher motivation. Education policy makers have argued that teacher status, motivation and work attitudes have been deteriorating over the years and stressed the importance of re-motivating and improving the attitudes of teachers [see NEC (2003)].

Teacher salaries have been declining in real terms over the past 25 years [see Figure 3.9], which supports the notion that teacher status has been falling. Teachers in 2002 earned only about 85% of the salary, in real terms, that teachers received in 1978. Other government servants currently earn somewhat more, in real terms, than in 1978, although real wage increases have not kept pace with economic growth. But teachers have not shared in the fruits of economic growth at all over the past generation or so. On the positive side, low teacher salaries have enabled the Sri Lankan education system to deliver basic education services at a fairly low cost to the government budget. On the negative side, however, low teacher salaries is likely to have hurt teacher morale and performance, and weakened the quality of new entrants into the teaching service.

3.33. Inadequate managerial and academic empowerment of key education service delivery institutions, such as schools, National Colleges of Education (NCOEs) and Teacher Centers (TCs). Schools, NCOEs and TCs, which are the key education service delivery institutions within the school system, have limited managerial and academic responsibilities. In particular, managerial functions such as staff recruitment, financing and resource utilization, and administration,
tend to be concentrated at central or intermediate government levels. For instance, employment of teachers and teacher educators are to centralized, transferable services. Similarly, purchases of equipment, material and consumables for schools were highly centralized until recently. TCs do not have accounts and TC managers lack authority to purchase equipment or material for their centers. Academic functions of NCOEs and TCs, too, are heavily centralized. The curricula for teacher education courses, examinations and certification for the 17 NCOEs are all provided by the center. As such, the NCOEs and TCs possess limited scope for academic and managerial leadership, and institutional growth and development. Similarly, school leadership and dynamism are inhibited by the managerial restrictions on schools.

**Government policy to devolve management and empower education institutions**

3.34. Government policy thinking for the future is to devolve greater managerial powers and responsibilities to schools and teacher education institutions. As a first step, schools have been empowered to purchase quality inputs, such as equipment, books, tools and consumables, through capital and recurrent education budgets, up to fairly generous thresholds. This measure has been highly popular, with quality input purchases becoming more sensitive to local school needs, and purchased more swiftly and efficiently than through centralized methods of procurement. As further steps to devolve school management, the government proposes to establish school boards, encourage community participation in school affairs, raise school quality input purchase thresholds even higher, and eventually allow school based recruitment of teachers. These measures are intended to improve the quality of service delivery at the school level by providing greater scope for dynamic school leadership, better community support, and higher proximity and accountability of service providers to beneficiaries. The last measure is also intended to solve the problem of teacher deployment in disadvantaged schools, as teachers would not belong to a centralized transferable service but be appointed directly to schools.

3.35. Policy interest in decentralizing management to teacher education institutions, such as NCOEs and TCs, have not yet evolved into concrete plans. The long-term objective is to develop NCOEs to a level where they prepare teachers for degree level teacher education programs. However, the changes required to the managerial and academic roles and responsibilities of key agents in the system, such as the Office of the Chief Commissioner for the Colleges of Education, the National Institute of Education, and the Presidents of the National Colleges of Education, and the new structure of responsibility and...
accountability, need to be studied further to advance the policy agenda in this area.

3.36. Administrative capacity constraints. The education administrative system as a whole experiences technical and operational capacity constraints. In consequence, even routine and day-to-day administrative functions can take considerable time. For instance, recruitment of teachers to fill vacancies in conflict affected areas take about 2 years from advertisement to appointment. The administrative processes for the promotion of university academics can take considerable periods of time, sometimes one year from application to appointment. Claims for loans by teachers and principals, too, can take years before they are granted. Similarly, activities such as processing teacher transfers, and delivering textbooks and school uniforms, have sometimes been delayed over the past few years. Three key problems hampering efficient administration are: (i) excessive reliance on manual operations instead of automated and computerized systems; (ii) the absence of basic internal mechanisms, such as organized filing systems and inventory control methods; and (iii) insufficient forward planning.

3.37. External interference in administration. Education policy makers highlight interference by external forces in education administration as a major impediment to efficient service delivery [see NEC (2003)]. Further, this interference can arise even in simple, basic administrative functions, such as school admissions, the appointment of minor staff to universities and teacher transfers. This hinders service delivery by weakening rule compliance. Further, it hampers decision making, which becomes vulnerable to forces outside the formal executive framework of government.

3.38. Procurement weaknesses. An important area where government technical capacity is severely limited is procurement. Procurement implementation is weak for several reasons, such as: (i) difficulties in drawing up technical specifications; (ii) problems in preparing tender and bidding documents; (iii) slow execution of technical evaluations; and (iv) weaknesses in producing clear and accurate technical evaluation and tender board reports and minutes. Further, these weaknesses apply at all levels of the education system, including universities and central government education agencies. For instance, procurement of university wide tenders for computers are known to have taken up to two years. Similarly, tenders for school computer equipment have sometimes taken more than a year in recent times. Other major civil works and equipment tenders of high value, too, can take well in excess of a year.

Specific factors constraining service delivery in public universities

3.39. The public universities enjoy a high degree of academic autonomy. Curriculum development, standards setting, examinations, certification, and employment and promotion of academic staff, are within the discretion of each university. Central government functions, exercised chiefly through the University Grants Commission, are overall policy formulation, rationalization of universities and degree programs, financing, student admissions and recruitment of non-academic staff. In principle, the academic autonomy enjoyed by universities should ease problems of service delivery and enable the production of high quality teaching and research. However, service delivery within the university system is constrained by several factors.

3.40. Low academic salaries, leading to staffing difficulties. A Ph.D qualified senior lecturer or professor earns in the range of about USD 200-350 per month. This is a competitive salary in the public sector, although modest by private sector standards. However, the competition for highly qualified human capital, such as Ph.D qualified individuals, is mainly from overseas universities and research institutions. Such
individuals, if employed in a developed country university, can earn more in a month than he/she could earn in a year in Sri Lanka. This salary differential has made it difficult to attract and retain highly qualified academic staff in Sri Lankan universities. The problem has been compounded, in the case of universities located outside the principal urban centers of Colombo and Kandy, by the difficulty of attracting qualified individuals to reside in subsidiary towns or semi-urban locations. Hence, while in Colombo or Kandy based universities, such as Moratuwa, Colombo, Kelaniya, Jayewardenapura and Peradeniya, the ratio of academic staff with postgraduate qualifications (such as Professors and Senior Lecturers) to academic staff without postgraduate qualifications (such as Lecturers) averages about 1.5 to 1, in the universities located in subsidiary towns or semi-urban locations such as Rajarata, Eastern, South Eastern, Wayamba and Sabaragamuwa, this ratio is only about 0.25 to 1. The inability of the latter set of universities to attract highly qualified staff clearly hampers their quality of research and teaching.

3.41. Rigid administrative and management structures. The public university system was largely laid to provide undergraduate teaching, and the administrative and management arrangements of universities reflect this focus. However, modern universities produce a range of outputs in addition to undergraduate teaching, such as research, postgraduate teaching, consultancy services and community activities. The administrative and managerial procedures and practices in universities have not evolved to support the production of this full range of outputs, although some universities have advanced further than others. One of the consequences is that about 95% of university income comes from the central government, with only 5% of income coming from other sources. An important structural feature hindering entrepreneurial income generating activity in universities, for instance, is that money earned by a public university legally belongs to the Ministry of Finance, and there is no guarantee that this money will be reinvested in the university.

3.42. Student unrest. The public university system is vulnerable to periodic bouts of student unrest, with certain universities worse affected than others. During periods of student unrest universities can even be closed down, disrupting academic work and delaying course completion durations. In addition, the extent of violence has sometimes been so severe that there have been episodes of physical violence. Attempts to introduce fee paying courses in public universities have met with particularly virulent opposition from certain student groups, who perceive these as efforts to privatize university education.

3.43. Government strategy to increase internal efficiency and raise the quality of service delivery in the university system contains four major strands.

a. Controlling expansion of the public university system and encouraging private degree awarding institutions, professional associations and overseas tertiary education institutions, including distance mode institutions, to meet the demand for tertiary courses. Further, as private degree awarding institutions charge fees, student unrest hardly exists.

b. Further devolving administrative and managerial power to universities. In particular, the government envisages granting powers to set academic salaries, admit students and recruit non-academic staff to universities. These measure could improve the ability of universities to attract and retain high quality academic staff,
compete to obtain good students and develop institutional loyalty among non-academic staff. Also, if a gradual reduction of the quantity of non-academic staff could be introduced, more resources would become available for investment in measures to enhance academic quality.

c. Building institutional capacity by strengthening national planning, monitoring and evaluation capacity in the university system and establishing a Board of Quality Assurance to take responsibility for policy development and monitoring on quality criteria.

d. Introducing performance based funding into the public university system. Linking financing to performance is expected to provide incentives for quality enhancement of degree programs. In addition, it is expected to increase the labor market relevance of university courses.

3.44. Overall, these are useful measures. In particular, the rapid growth of enrolment in private tertiary level institutions is a favorable trend. In addition, the devolution of greater autonomy to universities is a promising initiative.

3.6 Conclusions and Options for the Future

3.45. The government faces several key challenges to increase the quality of education, enhance equity of public spending, strengthen service delivery within the system, and improve the economic and social relevance of schools, universities and technical education institutions. These challenges exist at a time when public investment in education is low by developing country standards, government education spending has been declining in real terms and the state experiences a heavy fiscal deficit which compels it to adopt a conservative fiscal policy. In this context, the government can consider four sets of measures to increase education investment and enhance the efficiency and equity of public education spending.

Options for education investment

Increase private sector investment and participation in education

3.46. Promoting private sector participation in education, especially at tertiary level. Relaxing legal obstacles and introducing strategic initiatives to counter the adverse political economy environment to private sector participation in education could produce several benefits. First, it would increase the overall volume of resources invested in the education sector. Second, since the students attending private schools and education institutions are likely to be drawn from upper income families, it would release more public resources, on a per student basis, for students from poorer families. Third, it would stimulate economic activity in a sector where investment has been artificially restricted and contribute to higher growth. Fourth, it would provide an alternative mode of service delivery, with considerable power and responsibility at the level of the individual education institutions, such as private schools and institutes. These private education institutions would be compelled to offer high quality services to remain viable in an economic context where they are in competition with free public education institutions.

3.47. The National Education Commission has recognized the importance of creating a favorable environment for private investment in education and recommends three types of private schools (NEC 2003): (i) fee-levying private schools, which finance their entire expenses, teach the national curriculum and prepare students for national examinations; (ii) fee-levying international schools, which finance all their expenses, teach foreign curricula and prepare students for overseas examinations, but within an accreditation framework set by the education
authorities; and (iii) non-fee levying assisted schools, which teach the national curriculum and prepare students for national examinations, but where there is cost-sharing between the state and the schools, with the government typically paying teacher salaries and the schools bearing capital expenditures and recurrent costs net of teacher salaries. Creating a favorable environment for private investment in school education requires developing a new education act and repealing the legislation, passed in the early 1960s, which acts as a major barrier to the establishment of private schools.

3.48. The establishment of private universities has been an extremely contentious issue, with several past attempts resulting in student violence and social unrest. Hence, it is highly unlikely that private universities can be established in Sri Lanka in the medium-term. GOSL has responded to the opposition to private universities by encouraging the private sector to participate in non-contentious areas. These have mainly been the establishment of private degree awarding institutions, usually linked to foreign universities, and investment in tertiary level programs such as professional and technical courses. GOSL needs to explore options to expand private participation in tertiary level non-university education, especially in professional and technical fields where the demand for labor, both within and outside the country, is strong.

Protect and gradually increase public investment in education

3.49. Government policy to improve education quality envisages important measures to modernize curricula; expand child-friendly, activity based education; promote child-centered pedagogical methods; strengthen school leadership by principals; enhance the professional development of teachers; and increase the use of equipment and technology in schools and other education institutions. These policy initiatives to improve the quality of education would require considerable investment of resources in the education system. Given the low level and decreasing trend of real public education spending, and the major challenges Sri Lanka faces in improving the quality and economic and social relevance of the education system, it is important that the government preserve the current level of real expenditure in the short-term and increase public investment in education gradually over the medium-term. The government needs to consider the possibility of at least maintaining the real value of the education budget from 2005 onwards, and gradually raising public education investment, especially in the compulsory basic education and senior secondary education cycles, as the tight overall fiscal constraint eases over the years.

Enhance the equity of public education spending

3.50. The pattern of student enrolment over major grade cycles, and the unit costs of education by grade level, show that investment in primary education and secondary education are relatively progressive and benefit students from low and middle income households, while investment in tertiary education tends to benefit students from upper-income households. In consequence, there is a strong case for allocating the major share of any increase in public resources for the education sector to primary and secondary schooling, while carefully controlling the expansion of the public university system and allowing enrolment expansion in tertiary education take place mainly in the private sector. Opportunities for poorer students to access tertiary education could be expanded through schemes such as student vouchers and student loans, rather than through direct provision.

Increase cost-effectiveness of the education system

3.51. The tight resource constraint faced by the government makes it extremely important that the education system generates internal savings to reduce costs. In this
In this context, three important policy measures are available.

a. **School rationalization.** The cost-effectiveness of operating the school system can be enhanced by consolidating and amalgamating small, uneconomical schools, where this can be accomplished without reducing access to schooling and damaging enrolment and attendance. The public school network is such that a sizable proportion of small schools are located close to other, larger government schools. MHRECA and the provincial councils designed and implemented a successful school rationalization program, during 1998-2002, which consolidated and amalgamated small, unviable schools. This program was temporarily suspended due to intense political pressure. However, the government could consider re-opening this school rationalization program, but with careful safeguards to protect access for poor and vulnerable groups.

b. **Increasing the student-teacher ratio in schools and tertiary education institutions.** Currently, the student teacher ratio in schools, at 21:1, is low. Countries with outstanding education systems and far higher income levels, such as South Korea, Singapore and Hong Kong, have higher student-teacher ratios and more cost-effective systems. The current teacher employment and deployment policy is based on a target student-teacher ratio of 22:1 for secondary grades and 26:1 for primary grades. The government could consider increasing the target student-teacher ratio to about 23:1 for secondary grades and 28:1 for primary grades in the medium term. In addition, the student-teacher ratio in the public university system tends to be very low, at 14:1. The government could consider increasing this student-teacher ratio to about 18:1, so that cost savings can be generated within the system.

c. **Rationalization of administrative staffing.** The roles, functions and responsibilities of staff within the complex, multi-tiered education administrative system tend to be rather unclear. A careful analysis of work loads, and *de jure* and *de facto* roles, functions and responsibilities of staff in the various education ministries, provincial councils, zonal education offices, division education offices and tertiary education institutions is likely to identify both duplication of roles and functions, and gaps and shortages of staff. Overall, there may be an excess of staff, which a carefully designed voluntary retirement scheme could decrease, reducing pressure on the budget and releasing more resources for investment. A study of roles, functions and responsibilities of staff within the education system, as first step, would be extremely useful.

3.52. In order to increase resources for quality enhancing education policy initiatives through the implementation of cost saving measures within the education system, it is vitally important that the Ministry of Finance permits funds saved to be channeled back into the education system for investment. If the funds saved through cost-reducing measures are not re-invested in the education system the objective of enhancing education quality would be defeated. Further, the education system would lose the incentive to implement difficult measures such as school rationalization and higher student-teacher ratios.
Shift resource allocation in favor of equipment and technology

3.53. Over time, the balance of capital and recurrent spending within the education budget needs to shift to allocate a greater share of resources to capital expenditure. Within the capital budget, a higher proportion of resources needs to be invested in quality inputs such as IT centers, science laboratories, libraries, activity rooms, multi-purpose rooms, equipment, technology and tools. The construction and expansion of buildings, which absorbs the highest share of the capital budget, needs to be rationalized, prioritizing the urban school system which is experiencing rising demand. Within the recurrent budget, too, resources need to be reallocated from salaries and administrative expenses to quality processes, such as teacher education and training, management and academic training of school principals, and the purchase of teaching material and learning resources.

Options to Improve the Quality and Efficiency of Education Service Delivery

3.54. Development initiatives and strategies to widen education access to the poorest and most disadvantaged economic groups, improve education quality and learning outcomes, and orient the education system to the world of work, also requires strengthening the efficiency and quality of service delivery in the education system. Several important initiatives are available to the government to improve and strengthen the delivery of education services.

Empowering frontline service delivery institutions, such as schools and universities

3.55. A key government policy initiative under consideration is to devolve managerial power to frontline service delivery institutions, such as schools and universities. In the school system, the aim of devolving managerial authority is to empower principals, headmasters and headmistresses, and teachers; enable schools to forge links with local communities to improve resource mobilization and public accountability; and improve the speed and sensitivity of decision making by decreasing administrative layers. In devolving managerial autonomy to schools, it is important that different models of school development boards be pilot tested, as the governance capacity of schools varies significantly, depending on such factors as location, size and history. For instance, the main public schools in cities and towns are likely to possess vastly greater managerial capabilities and sophisticated community support than small rural schools in remote villages.

3.56. Universities already enjoy considerable autonomy, but further powers to recruit administrative staff, tailor academic salaries to individual staff members, and decide on student admissions, could increase the motivation, responsibility and accountability of university staff and authorities. These measures, however, may be controversial from a political economy perspective. For instance, providing universities freedom to tailor academic salaries to individual staff members can be highly controversial in a context where academics are accustomed to a uniform salary scale. Similarly, devolving responsibility for student admissions to individual universities has to be made consistent with the policy of allocating student quotas to disadvantaged districts.

3.57. The government could also consider applying the principle of devolving governance to other education institutions, such as National Colleges of Education (NCOEs) and Teacher Centers (TCs). Currently, the NCOEs have little managerial responsibility and autonomy. Curriculum design, assessment and certification of teacher education courses offered by NCOEs are undertaken by the National Institute of Education (NIE). Recruitment of academic staff is to a centralized teacher educators' service, and NCOEs rarely have a voice in the choice of academic staff allocated to them. TCs operate in an
inefficient administrative structure. The NIE designs the curricula of continuing teacher education programs offered by TCs. The NCOEs act as academic advisors to TCs. For administrative purposes, including finances, the TCs come under the zonal education offices. This complex administrative and academic structure has badly hampered the development of TCs. Devolving a greater degree of managerial autonomy and responsibility to NCOEs and TCs could increase the operational efficiency of the institutions and enhance the quality of service delivery.

3.58. The strengthening of performance appraisal systems could contribute strongly to higher quality service delivery. Within the university system, performance appraisal has commenced, especially for academic staff. However, measures to introduce performance appraisal to the school system have proved controversial, and left undeveloped. Three key initiatives are required to develop performance appraisal within the school system:

a. the value of performance appraisal systems as feedback mechanisms to strengthen service delivery and reward good performance, rather than as punitive measures for poor performance, needs to be communicated to stakeholders, especially education unions;
b. performance appraisal systems need to be designed for the various education services, such as the teachers' service, education administrators' service, principals' service and the teacher educators' service, in close consultation with stakeholders, including the relevant unions; and
c. the technical capacity of education institutions and education administrators to manage and utilize performance appraisal systems needs to be strengthened.

3.59. Introducing financial incentives for performance, especially for key services, can be a promising initiative. For instance, poor teacher deployment and high teacher absenteeism in difficult areas is a key constraint on effective service delivery within the education system. Further, the impact of weak teacher deployment falls disproportionately on poor students, as the most unpopular regions, where teacher absenteeism is highest, are typically remote, economically disadvantaged, rural locations. To improve teacher deployment and attendance, the government could implement the NEC (2003) proposals to offer financial incentives to teachers locating in schools in difficult areas. In addition, to reduce teacher absenteeism, teachers could be entitled to encash unutilized leave. The main constraint to introducing fiscal incentives for performance is the tight budget situation, which precludes expensive new policy measures. However, if cost savings could be generated within the education system, some of the resources obtained could be allocated to introduce such performance incentives measures.

Streamlining roles, responsibilities and accountability within the education system

3.60. Many of the measures suggested to improve education service delivery would require government officials in the central ministry, provincial councils and zonal offices to assume new and additional roles and responsibilities, while devolving some of their current powers to frontline service delivery institutions, such as schools, national colleges of education and teacher centers. During this process of decentralization and empowerment of local institutions, the current pattern of responsibility and accountability and the future models required need to be analyzed carefully.
Human resource development of central, provincial and zonal education authorities

3.61. The complex system of education governance, with multiple tiers of administration at the central, provincial and zonal levels, requires a wide range of administrative, technical and operations skills and competencies from staff working at each tier. An overall human resource strategy needs to be developed and implemented, across the different tiers of the education system, to equip central, provincial and zonal education staff with the necessary administrative, technical and operations skills and competencies. In addition, this strategy needs to provide for regular and continuous updating of skills and competencies as technical and operations skills advance and develop.

Institutional strengthening of central, provincial and zonal education authorities

3.62. Strengthening the operational procedures, capabilities and performance of central, provincial and zonal education authorities can contribute significantly to the quality and efficiency of education planning, administration and service delivery in the future. Lessons from recent policy measures and development initiatives, including reforms supported by donors such as the World Bank and Asian Development Bank, suggest some key areas where institutional strengthening is urgently required.

Administrative processing

3.63. The administrative processes in central, provincial and zonal offices tend to be long and cumbersome, resulting in considerable delays in operational activities. One major reason for these delays are the use of outdated manual systems for important administrative tasks, including correspondence, filing, record keeping and inventory control. Developing computerized operating systems for normal and routine administrative tasks would substantially increase the efficiency of government operations.

Strengthening procurement capabilities

3.64. The ability of government officials to draft bidding documents, prepare technical specifications, appraise proposals, and draw up technical evaluation reports and tender board recommendations to international standards is limited, resulting in lengthy procurement processes. Strengthening the procurement capabilities of government officials, hence, is an important area for future institutional development.

Addressing political economy constraints

3.65. Communicating the rationale for controversial but important policy measures to stakeholders and beneficiaries and building stakeholder participation in reforms is an important area where government capacity is weak. For instance, the government implemented a school rationalization program over 1998-2002, which achieved over 75% of its target. In numerical terms, this was a successful rationalization program. However, it generated intense controversy, central and provincial education authorities were unable to explain the rationale for the program clearly to local communities, resulting in its temporary suspension in 2003. Similarly, the government commenced a multiple textbook policy, to widen choice and improve quality, which generated intense controversy and delayed implementation for several years. Again, central and provincial education authorities lacked the capability to communicate the policy effectively. The country also has, in the aggregate, a surplus of school teachers, although there are deficiencies in certain subjects, especially English, and in the Tamil medium. However, there is intense pressure to employ more teachers, inter alia to reduce the pressure of unemployed educated young people. Again, government agencies have often found it nearly impossible to withstand this pressure. Hence, strengthening the ability of government education agencies,
at each level of the administrative tier, to communicate the rationale for potentially controversial policy measures and build stakeholder support is a vitally important area for future institutional strengthening.

**Capacity development to undertake education research and analysis, policy formulation and planning**

3.66 There are three key initiatives that would contribute to the development of a high performing education system, especially at the level of analysis, policy formulation and planning.

**Medium-term budgeting and a multi-year planning horizon**

3.67 A priority initiative to improve education planning and resource management is the development of a medium-term budget framework to facilitate multi-year planning. The medium term budget could cover a period of about three years, with provision for annual updating to take into account fresh information and needs. The medium-term budget could also be embedded in a long-term rolling plan for education development. It would facilitate education planning and management by improving the predictability of resources and providing a longer-term development horizon than is permitted by the current annual budgets.

**Public expenditure tracking**

3.68 A public expenditure tracking system would constitute an important management tool for education policy makers and finance officials and complement the medium-term budgeting system. It would provide the central government and the provinces information on the flow of funds through the education system and the actual level of resources reaching various service delivery points, such as schools, universities, national colleges of education and teacher centers. It would also increase the transparency of resource flows through the system. Such information could then feed back into policy formulation and resource allocation as education development needs evolve, and central government and provincial plans are refined.

**Promoting education research, monitoring and evaluation**

3.69 Sound research, monitoring and evaluation, based on statistically valid procedures and measurable indicators, is extremely valuable for policy makers. In advanced education systems analytically rigorous education research and evaluation constitutes the foundation for policy formulation. The Sri Lankan education system currently has several promising initiatives, such as the annual school census, the assessment of grade 4 learning outcomes by NEREC, and the NEREC qualitative study of education management practices, that provide a basis for a rich and informative monitoring and evaluation framework. This education monitoring and evaluation system could be developed with special emphasis on the analysis of education performance and causal factors useful for policy making. Education monitoring and evaluation activities can be encouraged to utilize both quantitative and qualitative methods, and use modern research techniques such as experimental designs, randomized trials and longitudinal surveys.