



INNOVATIVE STRATEGIES IN
HIGHER EDUCATION
FOR ACCELERATED HUMAN RESOURCE
DEVELOPMENT IN SOUTH ASIA
SRI LANKA

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Foreword

South Asia's contributions to the Asian economy and the global labor force are substantial and will continue to grow. The priority of the Asian Development Bank (ADB) in the region is to complement infrastructure investments with strategic support to human resource development to help people move up the value chain. The objective of the Innovative Strategies for Accelerated Human Resource Development in South Asia (Subproject 11) under the Development Partnership Program for South Asia (RETA 6337) is to support emerging opportunities in priority human resource development through targeted policy dialogue grounded on relevant analytical work on technical and vocational education and training (TVET) and higher education. Financial support from the Government of Australia's Department of Foreign Affairs and Trade (formerly the Australian Agency for International Development) has helped to prepare six country-level reports on TVET and higher education for Bangladesh, Nepal, and Sri Lanka. The reports identify each country's human resource development priorities, examine issues and constraints, and recommend possible interventions to realize the full potential of their respective labor force. Overall, common issues revolve around equitable access, quality and relevance, and financing. Increasing the number of graduates with relevant skills has been a persistent challenge rooted in systemic quality assurance policies and practices such as the actual provision of market-responsive training and credible assessment and certification. Equitable access does not only depend on availability of funds to provide education and training but equally on efficient use of available resources and effective mobilization of and synergy between public and private institutions in each country.

South Asia's huge opportunities arising from demographic dividend could be harnessed fully only if it is able to skill a large number of new entrants to the labor market every year and upskill the expanding labor force that is still undereducated and inadequately trained compared with their counterparts in other regions. South Asia must capitalize on innovations, knowledge, and skills anchored on high-quality TVET and higher education. Investments in high-quality TVET and selectively in higher education will be crucial for South Asian countries to transition from low-skilled labor to higher productivity and globally competitive labor. There are ample reasons to be optimistic since all countries in South Asia consider investments in human capital development a critical pillar of overall sustainable development.

Hun Kim
Director General
South Asia Department

Preface

The reports herein provide in-depth analyses of the state of technical and vocational education and training (TVET) and higher education in Bangladesh, Nepal, and Sri Lanka. Each country has two reports covering TVET and higher education which were presented in the three country-level workshops during the first week of December 2012: Sri Lanka (1 December), Nepal (3 December), and Bangladesh (5 December). Participants from government, the private sector, academe, and development partners discussed and validated the findings and supported the recommendations as well as identified additional next steps.

In TVET, issues range from insufficient teachers and trainers in Bangladesh to lack of quality monitoring system in Nepal, and to inadequate industry participation in Sri Lanka. Among the common issues identified are weak quality assurance mechanisms, low employment rate of graduates, lack of information about demand (leading to a mismatch between training and available jobs), expensive and long-term training that excludes the poor and marginalized, weak institutional arrangements, and inadequate provision of high-quality TVET to manage and scale up training programs.

Higher education is equally affected by various constraints ranging from lack of accountability for performance among institutions in Bangladesh to high politicization in Nepal, and to weak quality assurance mechanisms in Sri Lanka. Common issues identified are regional disparities in access, high cost in private higher education institutions, and poor quality and relevance as well as lack of emphasis on courses that promote entrepreneurship.

Key recommendations of the reports include implementation of a national quality assurance system, establishing a reliable skills data and labor market information system, effective financing schemes, encouraging public-private partnerships, and international benchmarking and mutual recognition for global competitiveness. In TVET, the key priorities are strengthening private training provision with clearly identified and mandated apex agency to effectively coordinate and scale up training programs, development of national competency standards, and building the capacity of TVET institutions. In higher education, the key priorities are developing research capacity, improved targeting of financial assistance to students, adopting formula funding in allocating public funding to universities, promoting accountability and autonomy among higher education institutions, and depoliticization of the higher education system.

The reports were prepared by a group of national consultants: Md. Mohiuzzaman for TVET and M.A. Mannan for higher education in Bangladesh, Devi Dahal for TVET and Hridaya

Bajracharya for higher education in Nepal, and Sunil Chandrasiri for TVET and higher education, with initial inputs from Dayantha Wijeyesekara, on TVET in Sri Lanka. Richard Johanson, the international consultant and main author of the regional report on TVET, reviewed and guided the TVET national reports. William Saint, the international consultant and main author of the regional report on higher education, reviewed and guided the national reports on higher education. The country reports should be read in conjunction with the two regional reports (Innovative Strategies in Technical and Vocational Education and Training for Accelerated Human Resource Development in South Asia, and Innovative Strategies in Higher Education for Accelerated Human Resource Development in South Asia), which were published earlier in 2014.

The reports also benefited from comments from Brian Chin, Gi-Soon Song, and Karina Veal of South Asia Human and Social Development Division (SAHS), as well as from David Ablett and Sofia Shakil who at that time were also from SAHS; Rudi Van Dael from Bangladesh Resident Mission; Smita Gyawali from Nepal Resident Mission; and K.M. Tilakaratne and Nelun Gunasekara from Sri Lanka Resident Mission. Brajesh Panth, lead education specialist from SAHS, managed and coordinated the studies with support from Rhona Caoli-Rodriguez, the national coordinator who replaced Nicholas Tenazas. Brajesh Panth and Brian Chin also made presentations at the country-level workshops. Administrative assistance was provided by Criselda Rufino, Erwin Salaveria, and Rosalia Baeza.

Sungsup Ra

Director, Human and Social Development Division
South Asia Department

Abbreviations

ADB	Asian Development Bank
BOI	Board of Investment
EDP	external degree program
GCE (A/L)	General Certificate of Education–Advanced Level
GCE (O/L)	General Certificate of Education–Ordinary Level
GDP	gross domestic product
CGU	career guidance unit
HEMIS	Higher Education Management Information System
ICT	information and communication technology
IRQUE	Improving Relevance and Quality of Undergraduate Education (World Bank project)
IT	information technology
MOHE	Ministry of Higher Education
N-HEMIS	National Higher Education Management Information System
NPD	national planning department
OUSL	Open University of Sri Lanka
PDN	University of Peradeniya
NEC	National Education Commission
QAA	quality assurance and accreditation
QAAC	Quality Assurance and Accreditation Council
R&D	research and development
SLIATE	Sri Lanka Institute of Advanced Technological Education
SLRs	Sri Lankan rupees
TVET	technical vocational education and training
U-HEMIS	University Higher Education Management Information System
UCSC	University of Colombo School of Computing
UGC	University Grants Commission
UNDP	United Nations Development Programme
UVPA	University of the Visual & Performing Arts
UWU	Uva Wellassa University

\$1.00 = 131.45 Sri Lanka rupees (1 July 2013).

The university academic year runs from October to June, while the secondary school year runs from January to December.

Executive Summary

Sri Lanka has a population of 20.3 million, which is expected to reach 21.9 million in 2031. However, the projected population of the age group 20–24 is in a downward trend, after having reached 1.8 million in 2006. Sri Lanka is one of the fastest-growing economies in the world. It is transitioning from a factor-driven to an efficiency-driven stage; hence, the efficiency of the higher education system is vital for maintaining the country's momentum and for the country's move to the next stage of development. In 2010, after the end of a 30-year-old conflict and achieving political stability, Sri Lanka entered the middle-income group of nations, and it is now poised to realize faster economic growth and to rise to upper-middle-income status.

Despite the liberal policy reforms that have been implemented since 1977, higher education in Sri Lanka continues to be provided largely by the public sector. The Universities Act No. 16 of 1978 empowers the University Grants Commission (UGC) of Sri Lanka to make all the decisions regarding student enrollment, budgetary allocations, financial transactions, and key personnel appointments. As a result, the dominant state university system has been unable to keep pace with developments in the labor market. It is confronted with challenges including limited accessibility, low quality and weak relevance, poor governance and managerial capacity, and inadequate resources.

The government's national development policy framework very clearly indicates the policy directions and development targets for the higher education sector: increasing access; enhancing quality; fostering a culture of research and innovation; and ensuring accountability, sound performance, and financial sustainability. Accordingly, universities are expected to become centers for economic development, agents of innovation, and incubators of entrepreneurship. The specific targets set by the government for the higher education sector include doubling the student intake from 21,000 in 2010 to 40,000 in 2020. Similarly, as part of the government's strategy to promote Sri Lanka as a knowledge hub, foreign student intake is projected to increase from 307 to 50,000 during the same period.

The government also implemented several higher education reform programs for the past 2 decades (1993–2013). However, there is still a need for a clear-cut policy direction with regard to promoting private sector participation in higher education as a strategy for enhancing access, increasing investment, and improving the quality of graduate output. Such a policy direction should take full advantage of the willingness of students and their families to pay for higher education. It should also exploit the market potential for exporting higher education services (i.e., attracting foreign students to Sri Lanka).

This report highlights several issues relating to the overall efficiency of the higher education system in Sri Lanka: (i) the lack of management autonomy, (ii) lack of accountability, (iii) lack of internationalization, (iv) lack of institutional and policy support, (v) low quality of graduate output, (vi) low quantity of research output, (vii) heavy dependence on public funds, (viii) slow expansion of postgraduate (i.e., graduate) education, (ix) poor learning environment, and (x) the absence of entrepreneurial spirit.

In order to maximize the full development potential of the higher education system, strategic interventions will be needed at both the national, such as creation of appropriate economic and institutional regimes, as well as an efficient national policy for fostering innovation, and university levels. University-level interventions would include capacity building, improvements in the learning environment, exposure of students to the world of work, and promoting international best practices. In this regard, the following could be identified as priority areas for immediate attention, with a view to taking Sri Lankan higher education to a more competitive level internationally: (i) promoting equitable access, (ii) improving the quality and relevance of undergraduate programs, (iii) strengthening research and development capabilities, (iv) strengthening graduate programs and external degree programs, (v) promoting better governance, (vi) building management capacity, and (vii) diversifying the sources of financing.

Access and equity. Despite having improved access to higher education considerably between 2008 and 2013, Sri Lanka still needs to address the issue of equity. This means that efforts to expand access to higher education must continue. Equitable access and inclusiveness are key factors in establishing a broad and diversified human resource base. Moreover, policy makers need to act fast in order to get the full benefit of the demographic bonus the country is currently experiencing. Policy options have to strike a balance among costs, sustainability, and equitable access. In view of these challenges, there is a need to explore creative ways to improve access to financing and to manage the higher education system with the participation of both public and private providers. Promoting equitable access to higher education for the underserved segments of society would require offering incentives to service providers and giving additional support to students from the lagging geographic areas, specifically, Northern, Eastern, and other outlying provinces.

Quality and relevance of graduate output. The quality of tertiary education in Sri Lanka and its relevance to the economy are issues that require further interventions over the next decade (2013–2023) or so with a special focus on the arts, social sciences, and related disciplines. The graduates of these faculties still find it difficult to join, in particular, the private sector due to serious problems in the quality and relevance of their education and training. Universities need to provide the country with graduates capable of contributing to Sri Lankan businesses operating in domestic and foreign markets. The recommended strategies include strengthening university–industry linkages, promoting career guidance services, and improving the learning environment and student welfare facilities.

Research and development capabilities. Increasing the research output of higher education institutions should aim at promoting growth, strengthening national competitiveness, and supporting Sri Lanka in reaching the efficiency-driven stage of development. Aside from higher education's main goal to produce enough proficient and innovative graduates to meet market demand, higher education institutions, especially the

universities, are the main hubs of both basic and applied research, and they play a critical role in training professionals, as well as scientists and other researchers, that are needed in the economy. They also generate new knowledge and technology. In Sri Lanka, investment in research and development (R&D) is very low (0.14% of gross domestic product [GDP]), and R&D is dominated by public sector institutions (95%), including the state universities (34%). In addition to requiring more investment, R&D at tertiary institutions must be aligned with the R&D being conducted in industry. However, only about 5%–20% of academics are engaged in research at all. This is partly due to insufficient research budgets, the lack of qualified researchers, and an inadequate support system. In this respect, the recently introduced research allowance scheme for university faculty is a step in the right direction.

Graduate programs. Academic programs at the master's degree and doctoral levels must be strengthened in order to promote R&D, generate income-earning opportunities, and earn international recognition. Graduate enrollment in Sri Lanka is equivalent in numbers to 25% of undergraduate enrollment, compared with the 35%–65% at world-class universities. Of the total graduate enrollment, about 70% are in social sciences and related fields. The development of graduate programs would result in an expansion of higher education facilities, making it possible to attract more foreign students. Similarly, the external degree programs (distance education) have the potential for enhancing access, applying delivery modes using information and communication technology (ICT), and promoting cost-sharing mechanisms. Both graduate and external degree programs also provide opportunities for establishing partnerships with overseas universities, and for Sri Lankan higher education institutions to become active participants in the global higher education community.

Governance. Good governance includes providing the right incentives to public universities through an appropriate balance between autonomy and accountability. It requires a strategic vision, innovation, and flexibility; and it should enable institutions to make decisions and manage resources without being encumbered by government bureaucracy. In the case of Sri Lanka, the higher education system has grown and become highly complex in terms of systems and procedures. Thus, it has become increasingly difficult for any single government agency to centrally manage the various administrative and performance monitoring functions of the system. The strategic interventions needed to promote good governance involve policy support at the national level and training in the development of professional systems of management and governance at the institutional level. Two key steps would be to (i) revise the Universities Act 1978 to reflect recent changes in institutional structures and development in the labor market, and (ii) provide policy and institutional support for monitoring the quality of the entire higher education system.

Management capacity building. Building management capacity entails developing the management skills of university academic and administrative staff in order to improve the organizational and managerial efficiency of the higher education system. Capacity building of faculty is urgently needed. Doctoral degree holders account for only 40% of the total academic staff at the public universities, and that figure is 22% for the arts and social science faculties. Many academics also perform poorly in the areas of human resource management, financial management, progress monitoring, and marketing. Similarly, most

of the nonacademic staff are not experienced administrators. To enhance their capacity, it will be crucial to establish benchmarks based on international good practices to ensure measurable improvements. Focused interventions should include strengthening the administrative skills of university administrators and senior academics, strengthening the administrative skills of nonacademic administrative and nonexecutive staff, and establishing an efficient institution- or university-level management information system.

Financing. Adequate resources are necessary for creating an environment conducive to learning and research; for this reason, they are one of the key determinants of world-class status. The current financial situation in Sri Lanka does not allow adequate funding for research, laboratories, libraries, ICT infrastructure, competitive salaries, or for an improved learning environment. The government has laid out dynamic plans for improving the higher education system and for fostering an important role for higher education institutions in Sri Lanka's economic development; and these plans will require considerable additional funding. Among necessary major reform in financing would be to provide greater leeway for universities to engage in income-generating activities and establish incentives. Other interventions would be to implement a sound mechanisms for cost-sharing and tax incentives for donations.

The priority areas given above are in line with the policy directions and objectives of the government over the period 2014–2024. Higher education in Sri Lanka has the capacity to utilize further investments to meet the development targets set out by the government. One should note, however, that reforms in higher education must take into account the political economy and broader development issues when determining the appropriate content, sequencing, and pace of development programs.

CHAPTER 1

Socioeconomic Background

A. Economic Growth

The promarket policy reforms of the post-1977 period have transformed what had been a traditional export-import economy into a more outward-looking service-oriented economy with the potential to become a major exporter.¹ Sri Lanka averaged 5% in annual GDP growth during 1989–2009, and then became one of the region’s most dynamic economies, with impressive growth rates since 2010—for instance, 8.0% in 2010, 8.2% in 2011, and 6.4% in 2012.

With per capita income estimated at \$2,923, Sri Lanka ranked 92nd out of 186 countries in the United Nations Development Programme (UNDP) Human Development Index for 2012.² In the World Economic Forum’s 2012–2013 Global Competitiveness Index, Sri Lanka was 68th out of 144 economies, the second-highest among the economies of South Asia, just after India (although this was a significant drop from Sri Lanka’s position of 52nd out of 142 economies in the 2011–2012 index).³ Sri Lanka also ranked 101st out of 146 countries in the World Bank’s Knowledge Economy Index (KEI) for 2012, the highest in South Asia.⁴

The country is now transiting from a factor-driven to an efficiency-driven stage of economic development. For this reason, the efficiency of its higher education system is vital for maintaining the country’s momentum and for moving the country to the next development stage. After the end of a 30-year conflict and then the emergence of political stability, Sri Lanka joined the middle-income group of countries in 2010. It is now poised to achieve even faster economic growth and to move into the upper middle-income category.

The major subsectors of the economy that recorded the highest growth rates during 1989–2009 were manufacturing; gas; water; trade and transport; real estate; business services; community, social, and personal services; and finance and insurance.

¹ The new government that came to power in 1977 introduced promarket reforms, in contrast to the inward-looking closed-economy policy regime that had existed since the mid-1950s.

² UNDP. 2013. *Human Development Report 2013: The Rise of the South; Human Progress in a Diverse World*. New York. p. 145.

³ K. Schwab. 2012. *The Global Competitiveness Report 2012–2013*. Geneva: World Economic Forum. pp. 12–15. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

⁴ World Bank. 2012. *Knowledge Economy Index (KEI) 2012 Rankings*. Washington, D.C. p. 2. <http://siteresources.worldbank.org/INTUNIKAM/Resources/2012.pdf>

B. Population and Employment

Based on the results of its Census of Population and Housing 2012, Sri Lanka's population stood at almost 20.3 million, and that number is expected to reach 21.2 million in 2016 and 21.9 million by 2031. The annual population growth rate between 1982 and 2012 was about 1%; however, the size of the 20–24 age group has been declining since 2006, when it reached 1.8 million. About 18.3% of Sri Lankans live in the urban areas.

Sri Lanka's literacy rate for citizens aged 10 and older is 95.6%.⁵ Of the population at the prescribed age for starting secondary education, about 86% enter secondary schools each year, and the rate is even higher for girls. The percentage of the adult population (18 years old and above) with secondary education is 65%. The gross enrollment rate in higher education in Sri Lanka increased from 10% in 1990 to 22% in 2007.⁶ The policy of providing free education from grade 1 to university level, along with other welfare programs such as free books and uniforms, has contributed to Sri Lanka's high achievements in education.

The proportion of population living in poverty declined from 26% in 1990 to 8.9% in 2010. A closer look at the Sri Lankan economy reveals increases in private sector investment and in the size of the educated labor force. The Government of Sri Lanka understands that to realize the country's potential for high growth and to sustain the ongoing economic transformation, it must capitalize on the country's human resources by ensuring the education of the younger generation.

The government's labor force survey annual report for 2011 found that the service sector accounted for the highest proportion of employment, 42.8%. It was followed by agriculture, at 33.0%, and then by industry, at 24.1%.⁷ According to the report, manufacturing accounted for about 71% of employment in the industrial sector and 18% of total employment. The formal sector's share of employment was 38%, and the informal sector's was 62%.⁸ The private sector, which plays a vital role in providing employment in Sri Lanka, accounted for about 41% of total employment, about 49% of nonagricultural jobs and 28% of agricultural jobs.

⁵ Government of Sri Lanka, Ministry of Finance and Planning, Department of Census and Statistics, Population Census and Demography Division. 2012. *Census of Population and Housing 2012: Provisional information based on 5% sample*. Colombo. pp. iii, xi, 5.

⁶ The World Bank. 2009. *The Towers of Learning: Performance, Peril and Promise of Higher Education in Sri Lanka*. Colombo. The gross enrollment rate is the number of students enrolled at a specific level of education in a given academic year, regardless of age, expressed as a percentage of the officially prescribed age group for that level of education.

⁷ Government of Sri Lanka, Ministry of Finance and Planning, Department of Census and Statistics. 2012. *Sri Lanka Labour Force Survey: Annual Report—2011 (With Provincial and District level data)*. Colombo. pp. 14–15. This survey covered 12 subsectors of the economy, including hotels and restaurants, transport, storage and communications, financial intermediation and real estate, education, and health and social work.

⁸ S. Chandrasiri. 2008. The Higher Education Sector in a Paradox. *SAARC Journal Human Resource Development*. 4 (1). pp.129–144. This article provides more details on employment in the informal sector.

Sri Lanka's unemployment rate declined from 15.5% in 1986 to 4.3% in 2011 (first quarter). However, the unemployment rate for the 15–24 age group was 15.7% in 2012.⁹ This figure reflects the fact that unemployment among educated youth is still a challenge.

Overseas job opportunities continue to be a vital source of employment for Sri Lankans, and the total number working abroad in 2012 was estimated at about 1.9 million. The total departures in 2012 were at 279,482, compared with 247,119 in 2009. Total foreign remittances for 2009 were \$3.3 billion, accounting for about 7.9% of the gross domestic product (GDP). In 2012 they went up to \$6 billion, or about 10% of GDP. The majority of migrant workers are low-skilled laborers; in 2012, for instance, those in professional and middle-level occupations accounted for only 4.8% of the total departures for foreign employment. The demand for labor in foreign markets continues to increase, and both the government and private sector organizations have been negotiating with the industrialized countries to provide more jobs for Sri Lankans, particularly in the skilled-worker categories. Education planners in Sri Lanka thus need to recognize the emerging skills requirements in the foreign labor markets and ensure that the ongoing reform programs pay attention to both cognitive and noncognitive learning outcomes.

Although the country's achievements in boosting employment have been remarkable, there are several weaknesses that need to be addressed through a coordinated and sustained reform agenda. Sri Lanka is currently experiencing a demographic bonus,¹⁰ but this window of opportunity is expected to last only until 2017. The prospect of larger numbers of people with an upper secondary or tertiary level education seeking productive employment is a major challenge, one that requires the immediate attention of policy makers. Education must be reformed so as to better prepare students for the job market. For example, Sri Lanka needs to improve the quality of its educational system, especially in primary education and in math and science instruction. Moreover, the demographic changes the country is currently experiencing will have a direct bearing on its higher education system, so policy makers and planners need to design strategies to obtain the maximum benefits from the university-age population, especially in the context of the government's development targets and the emerging knowledge-based economy. The deficit in productive employment for Sri Lanka was at about 10.3% of the labor force in 2011, but it is expected to be 6.1% in 2020.¹¹

C. National Development Agenda

Sri Lanka's development policy framework, as articulated in *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future*, is to achieve a growth rate of above 8% per year, with the aim of doubling per capita income to \$4,000 by 2016. In order to reach

⁹ In 2012, the unemployment rate for individuals with at least a General Certificate of Education–Advanced Level (GCE [A/L]) was 8.6%, and for individuals with a General Certificate of Education–Ordinary Level (GCE [O/L]) it was 6.1%.

¹⁰ A “demographic bonus,” or “demographic dividend,” occurs when lower fertility rates lead to a population structure in which the labor force grows in comparison to the proportion of the population dependent on it.

¹¹ S. Chandrasiri. Decent Work Policy Analysis of Sri Lanka. Unpublished paper submitted to the International Labour Organization (ILO), Geneva.

this target, the country needs to increase private investment to around 26%–29% and public investment to 6%–7% of GDP over the next 10 years.¹² This is being done by offering incentives to priority areas of the economy as a way to encourage more export-oriented and import-substitution activities.¹³ The government has identified six priority subsectors of the economy based on its overall development strategy: (i) tourism; (ii) infrastructure; (iii) agriculture, fisheries, and the dairy industry; (iv) education and training; (v) ICT and business process outsourcing; and (vi) ports and aviation.

Sri Lanka's economy is now transitioning from the factor-driven to the efficiency-driven stage, and it has the potential to evolve from a low-skill industrial economy into a knowledge-based economy. Enhancing the efficiency and effectiveness of the higher education system is vital for Sri Lanka's goal of moving up the value chain to become an efficiency-driven, knowledge-based economy.

¹² Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2010. *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future; The Development Policy Framework*. Colombo. <http://www.adb.org/sites/default/files/linked-documents/cps-sri-2012-2016-oth-01.pdf>

¹³ Government of Sri Lanka, Ministry of Finance and Planning. 2011. *Budget Speech 2012*. Colombo. pp. 28–29 (para. 72). <http://www.treasury.gov.lk/depts/fpd/budgetspeech/2012/bgtspeech2012-eng.pdf>

CHAPTER 2

The Higher Education System

After independence in 1948, Sri Lanka adopted the welfare state model, characterized by free education and health care and the provision of subsidized food. The free education system, which was established in 1944, laid the foundation for a new political culture in Sri Lanka. In the 1950s, the medium of instruction at the University of Ceylon was English, whereas the general education provided at the vast majority of primary and secondary schools was in Sinhala or Tamil. As a result, higher education was limited to only a very small number of elite students who had attended the few urban schools in which the classes were conducted in English; and the course offerings were limited to a few traditional fields. Moreover, professional science-based streams (e.g., engineering and medicine) were exclusively for students from a very few schools in the main cities because all the other schools lacked science laboratories for practicums, which were (and still are) a prerequisite for university entrance examinations.

In the 1960s, Swabasha streams (Sinhala and Tamil) were introduced at the universities, resulting in increased enrollment from the rural areas and disadvantaged districts. Most students from these areas had to enroll in general arts programs due to the limited range of courses at their higher secondary schools. The university programs in the arts, humanities, and social sciences were traditional, uninfluenced by new developments in their disciplines and the labor market. The academic programs leading to the professions most in demand remained accessible primarily to students from the elite schools, which were located in the major urban areas. Overall, the supply of graduates grew irrespective of the demand in the labor market.

University admissions offices in the 1970s adopted the “district quota system,” which also helped increase the proportion of students admitted from remote regions, where general education facilities were relatively poor. At present, there are no assessment data available to determine the reliability and effectiveness of this policy, but it has addressed some of the equity considerations to an extent. However, the majority of students admitted under the district quota system opted for general arts and social sciences programs. After graduation, many of these graduates had difficulty finding jobs, particularly in the private sector. The reasons why many of them did not end up with private sector jobs were poor proficiency in English, lack of soft skills, attitudinal deficiencies, and a tendency to seek government jobs.¹⁴ Professional programs in medicine, engineering, and management offered good job prospects, but university facilities in these areas were limited.

¹⁴ During this period (1970–1977), when Sri Lankan policy was a closed economy, the country was experiencing low economic growth. In fact, the average annual growth at that time was only 2%.

After the 1970s, various external forces contributed to undergraduate unrest that interfered with the normal operations of the universities. As a result, the entire university system was destabilized, with a profound impact on the learning environment and the quality of graduate output. There were also conflicts among student groups that occurred for various reasons, including political differences and friction between elite students from the cities and those from low-income rural backgrounds.

In the 1980s and 1990s, larger numbers of students entered the senior secondary level, so the demand for university education increased. The lack of an adequate number of seats at state universities, particularly in the professional disciplines, led to the emergence of private higher education institutions, which offered both degree and professional programs. The continuation of promarket economic reform during the post-1977 period has provided additional policy support for these new institutions.¹⁵ Most private higher education providers function as affiliated colleges, offering degree programs associated with foreign universities. So far, the Sri Lankan University Grants Commission (UGC) has granted degree-awarding status to only seven such institutions, which offer a total of 23 degree programs on a fee-paying basis. The subject areas include information technology (IT), management, social sciences, surveying, and nautical engineering.

Access to public universities has been increasing slowly in terms of absolute numbers.¹⁶ The high demand for university education in Sri Lanka is the combined result of free education, in place since 1945; the improved participation in secondary education; and the growth and expansion of economic activity under a liberalized policy regime. As a result, the state higher education institutions, which dominate the higher education system in Sri Lanka have been under pressure with respect to issues related to access, quality, and market relevance.¹⁷

For the overall structure of the education system in Sri Lanka, see Appendix 1.

A. Higher Education Policies

The government's development policy framework reflects its goal of developing a knowledge-based economy, as well as its recognition of the need to improve the skills of Sri Lanka's workforce to enhance the country's productivity and competitiveness. The framework identifies several priority areas for training, including telecommunications, ICT and software; transport management; naval studies and shipping; aviation engineering;

¹⁵ These policy supports have included tax concessions under the Board of Investments and the deregulation of some economic sectors (e.g., telecommunications).

¹⁶ In terms of absolute numbers, access to public universities has been improving slowly, but has remained limited to 2% of the university-age cohort since the 1970s. These are the author's estimates based on enrollment at public universities (including on-campus and distant-learning students); foreign-affiliated private higher education institutions; and at professional schools in such areas as law, accounting, and marketing. At the end of 2011, there were 49 private higher education institutions, offering programs in commerce, computer science and information technology (IT), engineering, and other subjects. About 75% of them were 3-year programs, and 19% had a foreign study component.

¹⁷ Other issues have also included private provider participation in higher education, quality standards of private higher education institutions, and equity issues.

international business management; knowledge management; corporate governance; insurance and banking; and tourism, sports, and leisure. It also aims for a gradual increase in the number of students admitted into demand-driven programs and the addition of new areas of study, such as marketing, human resource management, accounting, IT, creative writing, and hospitality management.¹⁸ New programs related to these disciplines will have to be introduced to enhance the employability of graduates. The activity–outcome matrix prepared by the government’s National Planning Department, shown in Table 1, lays out the expected targets and outcomes of Sri Lanka’s higher education system for the next 10 years (2011–2020).

Table 1: Activity–Outcome Matrix for Higher Education in Sri Lanka

Strategy	Period	Target–Outcome 2020
Provide necessary infrastructure and cutting-edge technology for the universities and other higher education institutions to improve the quality and relevance of degree programs	2011–2020	<ul style="list-style-type: none"> • Interconnected and modernized network of universities with all the necessary facilities for accreditation • Increased enrollment rates of local universities by up to 60% by 2020 • At least 3 local universities ranking among the top 250 universities in the world • Improved quality and relevance of academic programs • Improved library and dormitory facilities at the universities
Implement a quality assurance and accreditation system, covering the entire higher education system	2012 onward	<ul style="list-style-type: none"> • Standardized higher education programs across institutions
Develop and offer internationally recognized and market-oriented degree programs required by global employers	2011 onward	<ul style="list-style-type: none"> • Employable graduates with relevant skills • Improved entrepreneurial ability of trainees in the workplace
Establish a new, cutting-edge science and technology university as a partnership project	2012–2014	<ul style="list-style-type: none"> • Increased world-class education opportunities within the broad sphere of telecommunications, multimedia, computers, digital art, animation, ICT, software development, other areas of technology, and the sciences
Facilitate the establishment of academic programs in Sri Lanka by world-renowned universities	2011 onward	<ul style="list-style-type: none"> • Expanded opportunities for higher education
Establish Market Intelligence Units in each university	2012–2015	<ul style="list-style-type: none"> • Developed and/or strengthened linkages between universities and industry
Designate and establish a “knowledge city”	2011–2014	<ul style="list-style-type: none"> • Improved facilities for international research and educational institutions to set up affiliated institutions in Sri Lanka • Increased opportunities for higher education
Enhance the research and innovation capacity of universities	2011 onward	<ul style="list-style-type: none"> • Enhanced research and innovation capacity of universities, as well as improved creativity

ICT = information and communication technology.

Source: Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2010. *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future; The Development Policy Framework*. Colombo.

¹⁸ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p.123.

The government's development strategy to develop Sri Lanka as a naval, aviation, commercial, energy, and knowledge hub to serve as a key link between East and West will require applied research and knowledge generation in a wide range of disciplines. The government expects both public and private sector participation in the efforts to realize these objectives. From the private sector, research and development (R&D) investments are expected in nanotechnology, mechatronics, biotechnology, ICT, and satellite technology. Government R&D is expected to concentrate mainly on preserving soil fertility, controlling pests, reducing food production costs, increasing nutritional value, and enhancing productivity. Water, air quality, and new medications have also been identified as priority areas for research, with a view to improving public health.

The development of science and technology in relation to process engineering, mining, electronics, computer modelling, machinery, metal products, ICT and telecommunications, and other manufacturing sectors are expected to be led, not by the government per se, but by public sector institutions such as state universities. In this regard, universities are expected to play a major role in developing adequate human capital for R&D and innovation in high-tech areas through the following strategies: (i) meeting the demand for research and innovation in the private and state sectors, (ii) encouraging more young graduates to pursue research careers, (iii) recognizing the difference between researchers and university faculty (about 5%–10% of university faculty are engaged in research), and (iv) reversing the brain drain by attracting senior researchers and innovators back to Sri Lanka by means of appropriate incentive schemes.¹⁹

The science and technology policy adopted by the Cabinet of Ministers on 2 June 2009 identified capability in technology and the pure sciences as a necessary precondition for Sri Lanka's meeting its projected development targets in the next 5 years (2013–2018). More specifically, the direction outlined in the science-and-technology policy involves four major goals:

- (i) an efficient system for actively harnessing innovations and technologies to generate and improve products and services, and for contributing toward doubling the per capita GDP in an equitable manner by increasing high-tech, value-added exports, and production for the domestic market;
- (ii) a well-established, dynamic, and well-funded world-class national research and innovation ecosystem;
- (iii) an effective framework to prepare the people of Sri Lanka for a knowledge-based society; and
- (iv) sustainability principles entrenched in all spheres of scientific activities.²⁰

The Ministry of Finance and Planning's 2012 budget speech proposed measures to promote applied research.²¹ Accordingly, allowances were granted to academics as an incentive to conduct research. Another proposed measure was to reduce the taxes on

¹⁹ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p.141.

²⁰ Government of Sri Lanka, Ministry of Science and Technology, National Science and Technology Commission. 2008. *National Science and Technology Policy*. Colombo. http://www.motr.gov.lk/web/pdf/national_science_and_technology_policy_of_sri_lanka_english.pdf

²¹ Government of Sri Lanka. Ministry of Finance and Planning. 2011. *Budget Speech 2012*. Colombo. <http://www.treasury.gov.lk/depts/fpd/budgetspeech/2012/bgtspeech2012-eng.pdf>

research income (from 24% to 16%) and personal income (from 24% to 16%) for anyone involved in research and technology, also to encourage such work. This proposal was further highlighted in the 2013 budget speech.²²

B. The Structure of Higher Education

Sri Lanka's higher education system comprises three major types of institutions:

(i) universities and other higher education institutions functioning under the Ministry of Higher Education, (ii) universities and other higher education institutions functioning under other government ministries, and (iii) private universities and other private higher education institutions.

The Ministry of Higher Education (MOHE) is responsible for most of the higher education system in Sri Lanka. Under the MOHE is the University Grants Commission (UGC), which oversees 38 higher education institutions around the country (Appendix 2).²³ However, the Sri Lanka Institute of Advanced Technological Education (SLIATE), the Buddhist & Pali University of Sri Lanka, and Buddhasrawaka Bhiksu University are directly administered and managed by the MOHE, and are not subject to UGC regulation. SLIATE is the main provider of advanced technological education under the MOHE, offering programs at 11 advanced technological institutes throughout the country in seven advanced technological fields, including engineering and ICT.

Other ministries provide higher education at institutions established directly under their supervision. For example, the Kothalawala Defence Academy is one of the higher education institutions operating under the Ministry of Defence. Upgraded to university status in 2007, it offers both undergraduate and graduate studies for armed forces personnel. Similarly, the Sri Lanka Institute of Development Administration is supervised by the Ministry of Public Administration, and offers graduate diploma and master's degree programs in public administration.²⁴ The National Institute of Business Management offers bachelor's degree programs and diploma programs on a fee-paying basis, and functions as a semigovernmental institution under the supervision of the Ministry of Youth Affairs and Skills Development (MYASD). The newly established University of Technology (UNIVOTEC) also functions under the MYASD.

Private higher education providers fall into one of three categories: (i) degree-awarding institutes, (ii) professional institutions, and (iii) cross-border institutions.

²² Government of Sri Lanka, Ministry of Finance and Planning. 2012. *Budget Speech 2013*. Colombo. <http://www.treasury.gov.lk/depts/fpd/budgetspeech/2013/budgetSpeech2013-eng.pdf>

²³ The 38 higher education institutions overseen by the University Grants Commission (UGC) include 15 universities, 4 affiliated universities, 8 degree-awarding institutes affiliated with universities, 4 degree-awarding institutes not affiliated with universities, and 7 institutes of graduate studies affiliated with universities.

²⁴ In Sri Lanka, there are three levels of degrees on the undergraduate and graduate levels: certificate, diploma, and degree. Some examples of these qualifications would be; certificate, advanced certificate, diploma, higher diploma, advanced diploma, bachelors, honors bachelors, postgraduate (meaning graduate) certificate, postgraduate diploma, masters, and doctorate. (The bachelors, masters, and doctorate are degrees). For more background, see: Government of Sri Lanka, Ministry of Higher Education. 2012. *Sri Lanka Qualifications Framework*. Colombo. http://www.ugc.ac.lk/attachments/1156_Sri_Lanka_Qualifications_Framework.pdf

The degree-awarding institutes are private entities established under the Companies Act No. 17 of 1982.²⁵ Some of them are also registered with the Board of Investment (BOI) and enjoy investment incentives offered by the BOI.²⁶ They offer both undergraduate and postgraduate programs on a fee-paying basis.²⁷

The professional associations comprise nonprofit training institutes and professional bodies established under separate parliamentary acts.²⁸ The curricula and standards of these institutions are determined under the supervision of the relevant professional association or society. Their faculty members are generally part-time, and come from various professions and industries. They charge reasonable rates and provide certificates to students who successfully complete their programs, which take from 3 to 5 years. These institutions receive government incentives and grants, such as free land, civil works, and equipment.

Cross-border institutions offer foreign university degree programs in Sri Lanka. At present, there are about 46 such institutions offering higher education at the professional, diploma, undergraduate, and graduate levels. They are registered under the Companies Act 1982, and hence function as independent entities, without any intervention from the MOHE or the UGC. Others operate as local affiliates of foreign universities. Some of them use British curricular content and methodologies and import some faculty, in addition to the largely part-time local faculty recruited from the industrial or business sectors. Students pay high tuitions, averaging a total of SLRs 500,000 to SLRs 1,200,000 (\$3,804 to \$9,129), and they endure tough schedules and heavy workloads.

Because of high demand and profitable returns, many private higher education providers have already expanded their campuses and facilities to near-university status. They currently operate as “institutes.”²⁹

C. Organization and Management

University Grants Commission. The UGC was established by the Universities Act No. 16 of 1978, which was later amended on several occasions. It consists of a chair, a vice chair, and five other members, all appointed by the President of Sri Lanka for a term of 5 years.³⁰ Its main functions are:

²⁵ Private higher education institutions are not covered by the Universities Act No. 16 of 1978. Like business entities, they derive legal authority from the Companies Act No. 17 of 1982 to carry out their operations.

²⁶ Under BOI rules, firms are allowed tax holidays for 10 years, during which time equipment imports are untaxed.

²⁷ Note that “postgraduate” in this context refers to tertiary degrees earned after the bachelor’s degree, and thus is synonymous with “graduate.”

²⁸ The professional training institutes include the Institute of Engineering Technology, Institute of Chartered Accountants of Sri Lanka, Institute of Chemistry Ceylon, Sri Lanka Law College, and Sri Lanka Institute of Architects.

²⁹ In the case of public sector, the term “institute” refers to organizations established under a separate act of Parliament and in the case of the private sector it refers to higher education providers registered under the Companies Act 1982 or BOI, such as Asia Pacific Institute of Information Technology and Royal Institute of Colombo.

³⁰ The members of the UGC include senior academics and a representative from the Central Treasury.

- (i) planning and coordination of university education so as to align it with national policy;
- (ii) allocations to higher education institutions of the funds voted by Parliament for university education, and the control of expenditure by each institution;
- (iii) maintenance of academic standards in higher education institutions;
- (iv) regulation of the administration of higher education institutions; and
- (v) regulation of student admissions at each higher education institution.

In addition, the UGC has power over other matters related to the financial needs of its universities, such as staff and faculty salaries, and over the formulation of faculty recruitment and appointment procedures. The UGC regulates university administration through a series of circulars sent to the universities from time to time. Some circulars are tailor-made for individual universities, depending on their specific needs, while others are issued by the Ministry of Public Administration and Home Affairs and are applicable to all public universities.³¹

The UGC also has the authority to determine the courses to be offered; the degrees, diplomas, and academic distinctions to be awarded; and the external degree programs (distance education) to be conducted by higher education institutions. This is done in consultation with the governing authority of the relevant institution. And institutional functions are carried out through standing committees, other boards, and committees responsible for specific programs or issues.³² In addition, these committees are responsible for reporting and making recommendations to the UGC on matters pertaining to their respective areas.

Ministry of Higher Education. The MOHE is entrusted with the responsibility of formulating policies and strategies for universities, graduate level higher education institutions, advanced technological institutes, and other affiliated institutions. Its head, the minister of higher education, is responsible for the general direction of higher education and for the implementation of the Universities Act 1978. The minister has the power to issue written directions necessary for the implementation of national policy in matters such as finance, university enrollment, and the medium of instruction; and to order the investigation of the activities or administration of any higher education institution.

Institutional development activities—such as the establishment of new faculties, departments, schools, and centers—have to be carried out by the minister of higher education on the recommendation of the UGC. The universities do not have the freedom to create faculty or nonacademic staff positions. It is the UGC that has the power of creating such posts, based on requests and justifications offered by the individual universities. Such requests also need to be approved by the central treasury's management

³¹ The UGC circulars are applicable to public sector universities, while the circulars issued by the Ministry of Finance and Planning and the Ministry of Public Administration and Home Affairs are applicable to all public sector organizations, including public universities.

³² The UGC standing committees are (i) Agriculture, Veterinary Medicine, and Animal Sciences; (ii) Libraries and Information Sciences; (iii) English Instruction; (iv) Career Guidance and Student Welfare at Universities; (v) Sciences; (vi) Graduate Studies and Research; (vii) Staff Development at Universities; (viii) Education and Distance Education; (ix) Management Studies; (x) Engineering and Architecture; (xi) Medical and Dental Sciences; (xii) Information Technology Development; (xiii) Humanities and Social Sciences; (xiv) Quality Assurance and Accreditation; and (xv) Indigenous Medicine.

committee, even if the resulting costs would be financed from the university's self-generated income.

University administrative bodies. In line with the formula of representation stipulated in the Universities Act 1978, appointments to the councils of public universities are carried out by the UGC. Each council comprises the university's vice-chancellor,³³ deputy vice-chancellor (if any), rector, deans of the faculties, two members from the university senate, and UGC-appointed members exceeding the number of university officials on the council by one. The UGC-appointed members are selected from among those who have rendered distinguished services in the educational, professional, commercial, industrial, scientific, or administrative spheres. Faculty members elect the deans, and the council appoints the heads of departments upon the recommendations of the vice-chancellor and the relevant dean.

Private degree-awarding institutions. As previously stated, there are several private educational institutions that are authorized to award degrees. The UGC has recognized 11 such institutions, which offer a total of 27 academic programs at the undergraduate and graduate levels (Table 2). Before granting degree-awarding status to an institution, attempts are made to ensure that it (i) is financially stable, (ii) adopts best practices in management, (iii) is committed to upholding high educational standards, (iv) conducts regular internal and external quality assurance assessments, and (v) has adequate physical and human resources. In short, the institutions are expected to sufficiently demonstrate their willingness and capacity to uphold the values of higher education and to achieve the objectives specified in their respective corporate plans. The UGC conducts an assessment of each institution and makes its recommendations to the MOHE.

Table 2: The Numbers of Institutions, and of Undergraduate and Graduate Programs, Recognized by the University Grants Commission, 2011

Type of Institution	Number of Institutions	Number of Undergraduate Programs	Number of Graduate Programs
Government	1	0	2
Semigovernmental ^a	5	7	1
Private	4	8	6
Nongovernment (NPD)	1	3	...
Total	11	18	9

... = no data available, NPD = national planning department.

^a This refers to autonomous institutions that operate under the supervision of a government ministry.

Source: Government of Sri Lanka, University Grants Commission.

³³ According to the Universities Act 1978, the vice-chancellor of a public university is appointed by the President of Sri Lanka from a list of three names provided by the university council. The process of forming the search committee is guided by the Procedure of the Election of Vice-Chancellor (Amendment) Ordinance No.1 of 1981.

D. Budget and Other Administrative Matters

Funding for public higher education institutions is allocated mainly on a historical basis, with the previous year's expenditures serving as the basis for calculating the current year's allocations. The budget estimates are prepared by the bursar of each institution and forwarded to the Ministry of Finance and Planning through the UGC and MOHE. It is essentially a centralized process, and the unit cost per student is not considered. The estimates for recurrent expenditures are based on historical budgets, while those for capital expenditures are based on both historical budgets and new development projects.

With the exception of the Open University of Sri Lanka (OUSL), all public universities in Sri Lanka offer undergraduate programs without charging tuition. Almost all the funds required by these universities are provided by the state. Therefore, as is the case with other state institutions, the use of these funds must be in accordance with the government's financial regulations. In addition, certain provisions of the Finance Act No. 38 of 1971 are applicable in auditing the accounts of public universities. On the other hand, the universities have the freedom to set tuition fees for external-degree and graduate programs. Tuition fees vary quite significantly from program to program and across universities. Each public institution has a University Provident Fund, to which both the employees and the institution contribute; that fund is managed by the UGC.

Public universities are allowed to recruit and promote faculty members, as well as the library staff, registrar, and bursar, in adherence with the UGC's recruitment and promotion regulations. A selection committee is formed to nominate the candidates. It is composed of the university's vice-chancellor, registrar, dean of the relevant faculty, head of the relevant department, one or two members from the university senate, and two representatives of the UGC. The members from the UGC are there to ensure that UGC procedures are followed. Other administrative staff are centrally appointed by the UGC, and can be transferred to other higher education institutions that are under its purview.

The academic content of the degree programs of public universities are subject to UGC regulation. A proposal by a university for a new degree program (whether undergraduate or graduate), including a curriculum outline and examination criteria, is examined by the relevant standing committee of the UGC. The program can be started only after the UGC's approval. However, public universities have the freedom to choose their teaching methodologies, as well as their textbooks and other teaching materials. Student admissions to undergraduate programs at public universities are carried out by the UGC, based on the national admissions policy. However, universities are allowed to conduct special tests and select suitable students for some of their undergraduate programs, such as those in computing. Universities have complete control over student admissions for their graduate programs, based on the criteria approved by their own senates.

Strong administrative support is a prerequisite for the efficient functioning of the university system. This refers to the administrative services rendered by the 23.5% of university staff that is nonacademic, including registrars, bursars, deputy registrars, senior assistant registrars, senior assistant bursars, and other categories of support staff. Over the years,

however, the administrative efficiency of these officials has deteriorated for several reasons: (i) inadequate training opportunities, (ii) low quality, (iii) lack of commitment, (iv) low salaries, and (v) the protective character of the service (i.e., positions are secure until retirement). The university administrative system in Sri Lanka is also less exposed to modern management techniques and office management procedures.

E. Main Stakeholders

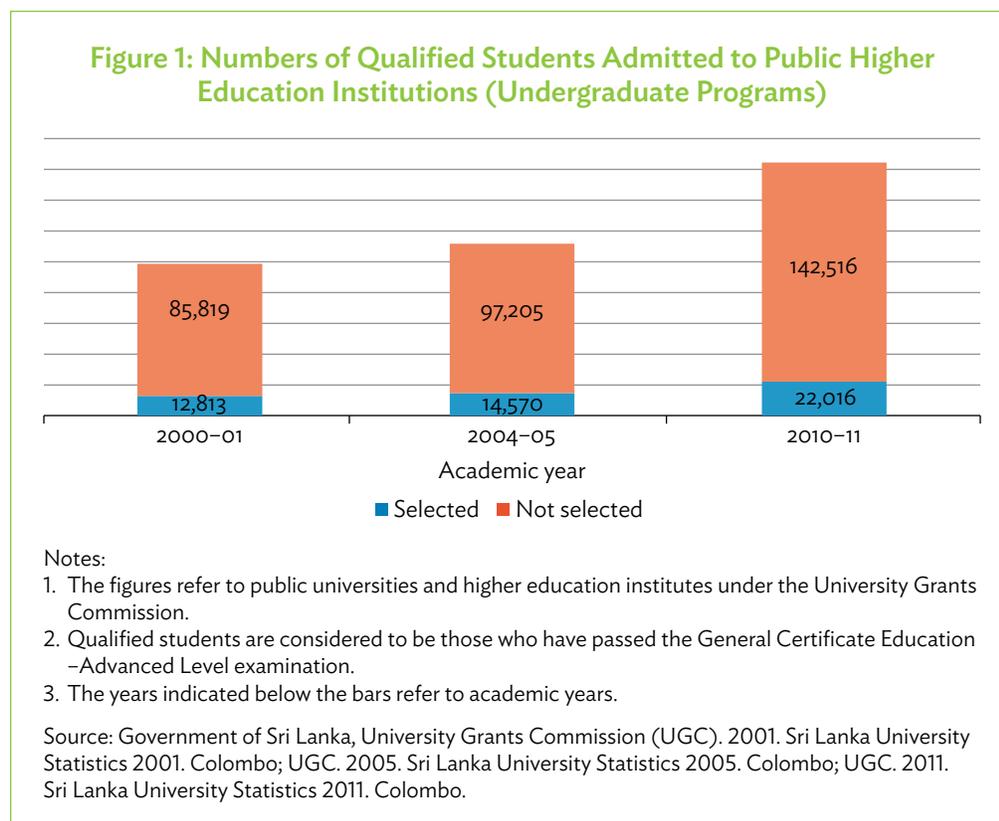
Among the stakeholders of the higher education system are several organizations and groups, including government ministries, the chambers of commerce and industry, professional associations, student unions, nonacademic staff unions, alumni, national planning departments (NPDs), and the general public. The influence of these institutions over higher education can be seen both at the national and institutional levels, depending on social, political, and economic implications of the issues and challenges faced by the higher education system. For example, the government ministries (including the ministries of higher education, education, youth affairs and skills development, and finance) are directly involved in financing, staffing, staff development, student admissions, and in promoting NGO participation in higher education activities. The Committee of Vice-Chancellors and Directors is also actively engaged in the higher education policy reform process.

The chambers of commerce and industry are concerned about the equity of access to higher education, the quality of graduate output, and the employability of university graduates. In addition to providing private sector representation on university councils and faculty boards, they are actively engaged in curriculum development, career guidance, internship programs, and higher-education-policy reform. Similarly, professional associations are actively engaged in promoting policy dialogue regarding private sector participation in higher education, limited access, and the quality and relevance of graduate output, among other issues. Faculty unions address reform issues relating to the autonomy of the university system and the salaries of academics. The nonacademic staff trade unions are concerned with staff welfare, career development, and other areas for higher education reform. The student unions, by and large, take up matters relating to student rights, student welfare, and graduate unemployment. Some student groups, however, are politically motivated, and thus strongly opposed to policy initiatives that would enhance access to higher education through private sector participation.³⁴

³⁴ British universities address the concerns of stakeholders through a university court. Each Sri Lankan university also had a university court, but these courts were abolished by the Universities Amendment Act No. 7 of 1985. Many of the functions of these courts were assigned to the university councils.

F. Performance of the Higher Education System

Enrollment. Since the early 1970s, access to universities has been expanding, but the higher education system has still failed to accommodate all qualified students.³⁵ During the 2010/11 academic year, only 22,016 out of 142,516, or 15.5% of those eligible for university, were able to enter universities and institutes under the UGC.³⁶ This total represented about 9.4% of all students who had just taken the General Certificate of Education–Advanced Level (GCE [A/L]) examination. However, this enrolment rate was already an improvement over the rate of 13% in the 2000/01 and 2004/05 academic years (Figure 1).³⁷ The proportion of students qualified to pursue higher education is very high in Sri Lanka, so the problem of inadequate access should be addressed immediately if the country is to make optimal use of its human resources for development.³⁸ The choices available to the rest of the qualified students include the Sri Lanka Institute of Advanced Technological Education (SLIATE), non-UGC-affiliated professional institutes,



³⁵ “Qualified students” refers to those students who have passed the GCE (A/L) exams.

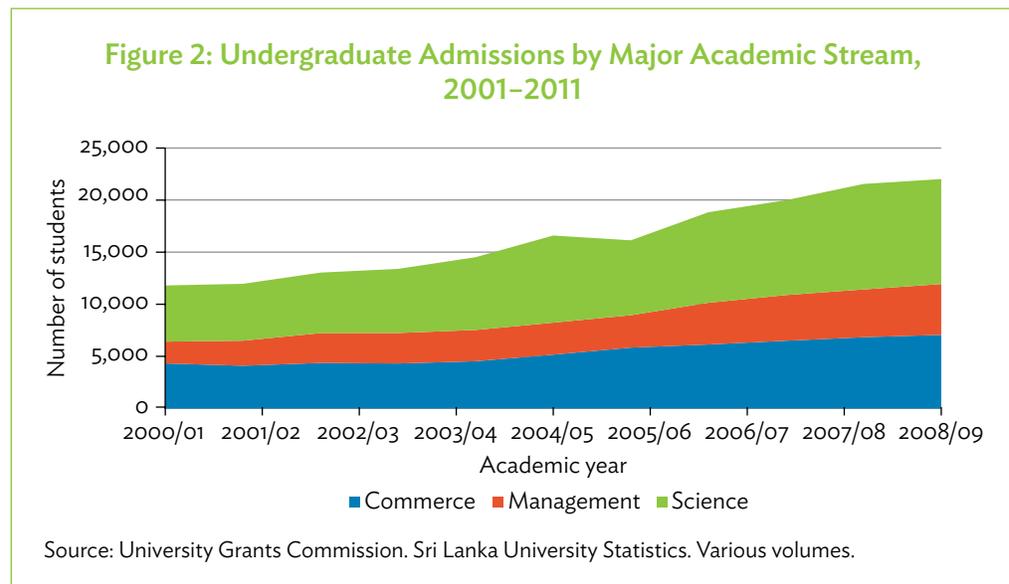
³⁶ Government of Sri Lanka, University Grants Commission. 2011. *Sri Lanka University Statistics 2011*. Colombo. p. 17 (Table 02-01).

³⁷ Government of Sri Lanka, UGC. 2001. *Sri Lanka University Statistics 2001*. Colombo; UGC. 2005. *Sri Lanka University Statistics 2005*. Colombo.

³⁸ S. Chandrasiri. 2008. The Higher Education Sector in a Paradox. *SAARC Journal Human Resource Development*. 4 (1). p. 140.

private institutions, and overseas higher education institutions—all of which require the payment of tuition and other expenses. Hence, these options are effectively open only to the high-income segment of the population.

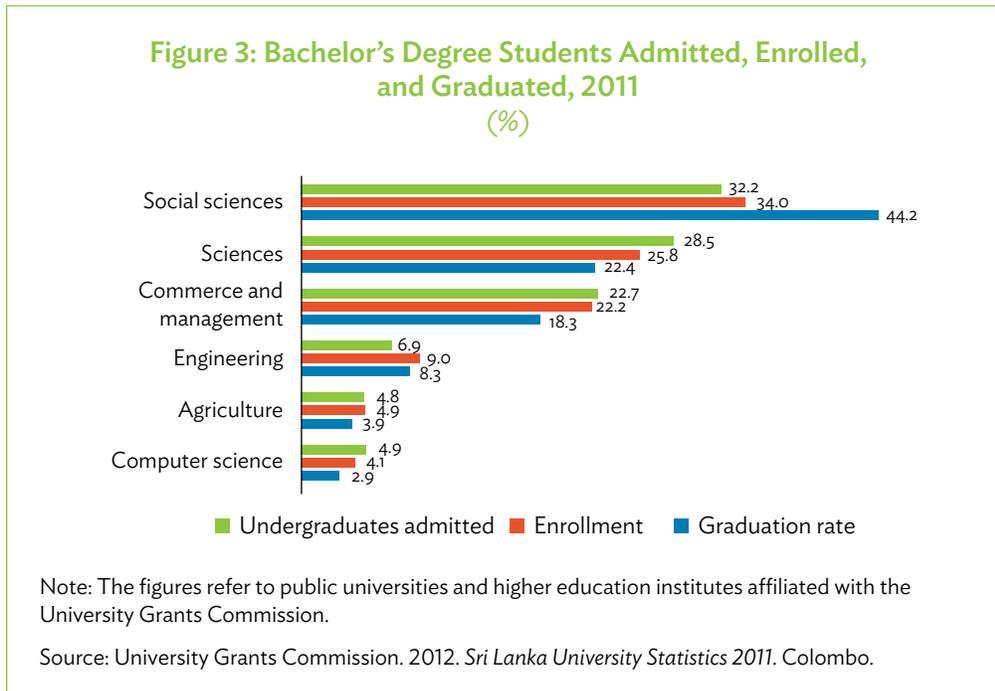
Figure 2 shows undergraduate admissions by three major academic streams: science, management, and commerce. There has been an increase in student intake since 2004/05, but this has been mainly in the science programs, which include new subject areas such as computing, food science, and paramedical studies.



Based on the numbers of undergraduates admitted, and on the total enrollment and graduation rates at public universities (by major discipline) in 2011, social science programs dominate over emerging high-market-demand disciplines such as computer science (Figure 3).

Enrollment and graduation data for private providers are not available. At present, there are 80 private institutions registered under the Companies Act No. 17 of 1982 that offer programs leading to foreign degrees, local diplomas, or certificates. Of these institutions, only 26 offer degree programs and another 20 offer only certificate and diploma programs. The programs at these institutions include business administration, information and communication technology (ICT), law, computing, engineering, construction, banking, finance, information systems management, and sociology. Of the 46 active institutions,³⁹ 36.6% offer more than three degree programs at the undergraduate level, while 24.4% offer two or three degree programs, and about 39% offer just one degree program. About 46% of

³⁹ The inactive institutions—those least responsive to labor market changes and opportunities for foreign partnerships—concentrate mainly on diploma and certificate programs, instead of offering degree programs in such areas as computing, accounting, and management.



the private providers offer undergraduate programs only, 15% offer graduate programs only, and the rest (39%) offer both undergraduate and graduate programs.⁴⁰

Students who fail to obtain a place at a public university often go abroad for their higher education. For example, in the 2006/07 academic year, about 7,000 Sri Lankan students enrolled at universities overseas: 2,400 in Australia; 1,800 in the United Kingdom (UK); 1,200 in the United States (US); and the remainder (1,600) at universities in Bangladesh, the People's Republic of China (PRC), India, Japan, Malaysia, and Pakistan, among other countries.⁴¹ Also in 2007, a total of 302 students were given foreign scholarships, of which 205 were awarded by the MOHE and 97 by other ministries. These scholarships were funded by foreign donor agencies and the Sri Lankan government. In addition, the Central Bank of Sri Lanka also awards five to six scholarships to its employees each year for graduate studies in foreign countries such as Australia and the UK.

Academic staff. The faculty members at Sri Lanka's higher education system are predominantly male (61%). The majority of academics are in the 31–40 age bracket (36%), followed by 41–50 (33%) and 51–60 (18%). Only 9% are younger than 30, and only 5% are over 60 years of age.⁴²

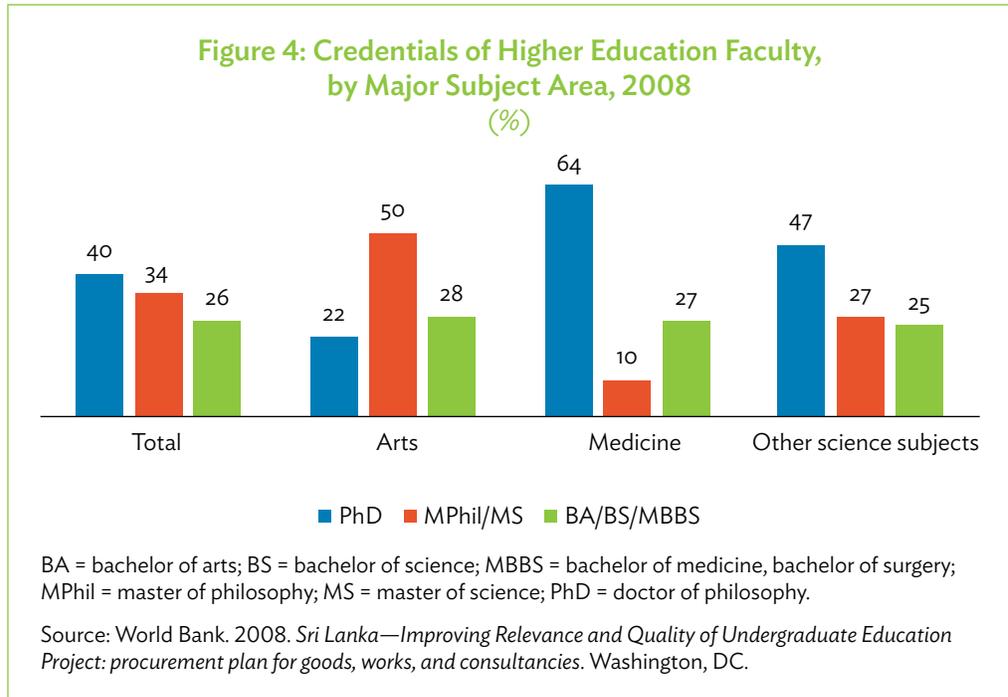
About 40% of higher education faculty in Sri Lanka have a doctorate, while 34% have a master's degree and 26% have a bachelor's degree. Across disciplines, the lowest proportion of faculty members with doctorate degrees are found in the arts and social sciences, and the highest are in the sciences. On the other hand, the highest proportion of faculty

⁴⁰ These percentages are based on a database maintained by the Quality Assurance and Qualification Council and on the author's own estimates.

⁴¹ This is based on information provided by the British Council and by the cross-border educational institutions.

⁴² World Bank, *Sri Lanka—Improving Relevance and Quality of Undergraduate Education*.

members with master's degrees are in the arts and social sciences, and the lowest are in medicine (Figure 4).



Of the 15 public universities, 5 account for roughly 77% of all faculty members with doctorate degrees. More than half of the academic staff at the University of Colombo (52%) and the University of Peradeniya (59%) have doctorate degrees, as do more than 30% at the Universities of Kelaniya, Moratuwa, Ruhuna, and Sri Jayewardenepura. At the remaining universities, fewer than 30% of the permanent academic staff hold doctorate degrees. See Appendix 3 for the figures regarding the qualifications of the academic staff at major institutions.

Student-teacher ratio. Considering all academic staff, permanent and temporary, the student-teacher ratio at public universities increased from 14:1 in 2002 to 16:1 in 2009. If the analysis is limited to permanent faculty, however, the overall student-teacher ratio rises to 20:1, the ratio of students to senior faculty is 49:1, and the ratio of students to faculty members with doctorate degrees is 109:1. About 27% of the permanent faculty possess only a bachelor's degree.

The above national aggregates, however, hide the great disparity that exists across the public universities. For example, the overall student-faculty ratio may be 20:1, but it is 8:1 at Uva Wellassa University (UWU) and 35:1 at the University of the Visual & Performing Arts (UVPA). The ratio of students to senior faculty is 19:1 at the University of Peradeniya (PDN) and 167:1 at UWU; and the ratios of students to faculty with doctorates range from 23:1 at

PDN to 478:1 at UVPA.⁴³ As for the other public universities, the student–faculty ratios are high at the Universities of Colombo, Kelaniya, Ruhuna, and Sri Jayewardenepura, but the other eight institutions do not have high ratios, particularly with respect to senior faculty and faculty members with doctorates.

Research output indicators. Research and development (R&D) in Sri Lanka is conducted by public universities; private sector organizations; and a number of public research institutes (primarily agricultural), such as the Tea Research Institute, the Coconut Research Institute, the Rubber Research Institute of Sri Lanka, the Sugarcane Research Institute, and the Industrial Technology Institute. Public institutions account for about 95% of the country’s R&D output, represented by state agencies (61%) and higher education institutions (34%). Private sector participation in R&D, on the other hand, amounts to only about 5% of the total. R&D in Sri Lanka is heavily concentrated on applied research (75%), in contrast to basic research (14%) and experimental research (11%). Similarly, within the higher education system, applied research accounts for 92% of R&D, while basic research accounts for only about 4%.

The number of scientists engaged in science and technology research in Sri Lanka fell from 13,286 in 1996 to 9,746 in 2004, while the number of scientists per million population dropped from 726 to 502 over that same period. This could be partly attributed to low investment in R&D and to a serious brain drain.⁴⁴ In 2008, about 70% of the scientists engaged in science and technology research had a bachelor’s degree, while only 10.3% had a doctorate degree.⁴⁵ The estimated human resources of about 1.6 million people were involved in science and technology research during the 2009/10 academic year: 8% of them were qualified by virtue of their academic credentials alone; 14% were qualified due to both their academic credentials and professional experience, and 78% were qualified due solely to their professional experience.⁴⁶

One of the weaknesses of the higher education sector in Sri Lanka is that much of the research output of public universities is of low quality and of low relevance to national needs. University–industry research collaboration is also very low. Moreover, the average number of doctorate degrees produced per year by public graduate institutions is only around 250, and 92% of them are in the medical science field. Sri Lanka had a relatively high ranking for innovation in the 2012–2013 Global Competitiveness Index (58th out of 144 economies),⁴⁷ but it lagged behind on a number of other, innovation-related indicators. And while Sri Lanka performed better than other South Asian countries on a range of indicators in the 2012 Knowledge Economy Index (KEI), the country’s performance was behind that of countries in East Asia and the Pacific. Annual spending on R&D in Sri Lanka

⁴³ World Bank, *Sri Lanka—Improving Relevance and Quality of Undergraduate Education*.

⁴⁴ World Bank. 2005. *Treasures of the Education System in Sri Lanka: Restoring Performance, Expanding Opportunities and Enhancing Prospects*. Colombo. http://siteresources.worldbank.org/INTSOUTHASIA/Resources/TreasuresInTheEducationSystem_February2005.pdf

⁴⁵ Government of Sri Lanka, Ministry of Science and Technology, National Science Foundation (NSF), Science & Technology Policy Research Division. 2012. *National Survey of Research & Development and Innovation in Sri Lanka, 2008*. Colombo.

⁴⁶ H. Jayasekera and N. Arunatilake. 2012. The Narrow Human Resource Base in Science and Technology Could Constrain Sri Lanka’s Knowledge Economy Ambitions. *Talking Economics* (the blog of the Institute of Policy Studies of Sri Lanka). 10 October. <http://www.ips.lk/talkingeconomics/2012/10/10/the-narrow-human-resource-base-in-science-and-technology-could-constrain-sri-lankas-knowledge-economy-ambitions/>

⁴⁷ K. Schwab, *Global Competitiveness Report 2012–2013*, p. 328.

amounts to about 0.14% of GDP, below that of countries such as the PRC (1.44%), India (0.85%), Malaysia (0.69%), Pakistan (0.22%), Singapore (0.26%), and Thailand, (2.25%).⁴⁸ As mentioned above, Sri Lanka had an overall ranking of 101st out of 146 countries in the 2012 KEI; this was based on a score of 3.63 on a 1–5 scale,⁴⁹ which placed Sri Lanka slightly above the lower-middle-income country value of 3.42.

Graduate programs. Graduate programs are offered by both government and nongovernment providers.⁵⁰ As with undergraduate courses, public providers play a lead role in graduate-level education. Graduate programs at public institutions of higher learning fall into three categories: (i) discipline-specific programs, (ii) faculties of graduate studies offering interdisciplinary graduate programs,⁵¹ and (iii) discipline-based postgraduate institutions.⁵²

The first category includes programs offered by discipline-specific departments that lead to graduate diplomas, master's degrees, MPhil degrees, and doctorates. The second, interdisciplinary programs under faculties of graduate studies, emerged with the introduction of the Faculty of Graduate Studies Ordinance No. 3 of 1987. Under this formula, the faculty of graduate studies is supervised by a dean and managed by a board of graduate studies; the faculty is also accountable to the university senate and the university council. This is a positive development that has enabled the formulation of interfaculty and interdisciplinary programs. Among the faculties of graduate studies established so far, some have gained full recognition and cooperation from all the other faculties in their universities and from industry. They have also established links with foreign universities.

The third category, discipline-based postgraduate institutes, are affiliated with specific professions such as agriculture, engineering, medicine, and management. The content of the graduate programs offered by these institutes depends on the demands of the relevant profession and the skills expected of their graduates. While the overall administration of each institute is entrusted to its board of management, the academic programs are administered by discipline-specific boards of study that are responsible for curriculum design and for the formulation, review, and evaluation of the courses offered.

Table 3 shows that enrollment in graduate programs at public higher education institutions is around 22,000 in 2011, distributed among conventional universities (44%), the Open University system (26%), and postgraduate institutes (31%). The level of graduate enrollment relative to undergraduate enrollment is around 25%, versus the 35%–65% ratio maintained by world-class universities. In terms of discipline, about 75% of graduate students are enrolled in programs in the arts, humanities, and social sciences

⁴⁸ Government of Sri Lanka, Ministry of Science and Technology, National Science Foundation (NSF), Science & Technology Policy Research Division. 2012. *National Survey of Research & Development and Innovation in Sri Lanka, 2008*. Colombo.

⁴⁹ World Bank. 2012. *Knowledge Economy Index (KEI) 2012 Rankings*. Washington, D.C. p. 2. <http://siteresources.worldbank.org/INTUNIKAM/Resources/2012.pdf>

⁵⁰ "Nongovernment" refers mainly to (i) professional institutions and (ii) private higher education institutions, including those affiliated with foreign universities.

⁵¹ Examples include the faculties of graduate studies at the Universities of Colombo, Jaffna, Kelaniya, and Sri Jayewardenepura.

⁵² Examples include the postgraduate institutes of management, agriculture, archaeology, English, medicine, Pali and Buddhist studies, and science.

(e.g., education, management and commerce, and law). The graduate output of public universities is around 2,100 per year, of which 84% are in the social sciences. By and large, doctorate degrees account for 15% of the output of public university graduate programs and postgraduate institutes.

Table 3: Graduate Program Enrollment and Output—Public Sector Institutions

Year	Enrollment				Output			
	University	OU	PGIs	Total	University	OU	PGI	Total
2007	4,912	0	2,362	4,912	1,752	0	1,443	3,195
2008	6,356	4,301	3,414	10,657	6,356	4,301	1,546	12,203
2011	9,747	5,799	6,815	22,361	3,092	110	2,026	7,254

OU = Open University; PGI = postgraduate institute.

Source: University Grants Commission. 2012. *Sri Lanka University Statistics 2011*. Colombo.

At the global level, world-class universities tend to have a higher proportion of carefully selected graduate students. For example, at Harvard University, an average of 59% of its student body are graduate students; at Stanford, 64%; at the Massachusetts Institute of Technology, 60%; at the London School of Economics, 51%; and at Tokyo University, 45%. In many cases, the students and faculty are not exclusively from the country in which the university is located. This reflects the fact that these universities attract the most talented people, no matter where they come from, and that they are open to new ideas and approaches. In the case of Sri Lanka, graduate studies is one of the potential areas for growth and expansion. It is also an area that provides opportunities for foreign collaboration. As a matter of fact, the international dimension is becoming increasingly important in determining the configuration of graduate programs at elite institutions in Sri Lanka.⁵³

Most graduate-level courses at Sri Lankan universities are offered during the weekends and after working hours. This is to enable employed students, who form the majority of the graduate student population, to undertake graduate studies while continuing to work. But this practice can be a major constraint on the expansion and strengthening of graduate education, as it severely restricts faculty–student interaction, open discussions, and the exchange of ideas, all of which are essential to the development of the graduate students' research skills. It also prevents students from completing their research and independent studies (e.g., extended essays) on time.

The success and viability of graduate programs depend upon their ability to attract fee-paying students. Market competition is an important factor in improving the quality, relevance, and value of academic programs. It would therefore be desirable to allow healthy competition among higher education institutions, so as to generate quality programs,

⁵³ J. Salmi. 2009. *The Challenge of Establishing World-Class Universities*. Directions in Development Series. Washington, DC: The World Bank. <http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/547670-1237305262556/WCU.pdf>

attract large populations of good students, and consolidate each institution's status and reputation based on performance. However, there is no proper quality assurance system in operation for graduate programs. The standing committee on postgraduate studies and research that functions under the UGC is the only institutional mechanism that monitors the quality of graduate programs offered by public sector institutions. It appears to be more a mechanism for control than a means for promoting market-oriented, high-quality graduate programs. Moreover, as is the case with undergraduate programs, there is no quality monitoring mechanism for nongovernment institutions.

G. Financing Higher Education

Data on public expenditure reveal that in 2010 Sri Lanka spent only about 2.5% of its GDP on education, versus its counterparts in Asia, where public spending on education was at or above 3.2% of GDP. For example, India spent 3.2% of its GDP on education, Malaysia 4.5%, and Viet Nam 5.3%.⁵⁴ Similarly, the proportion of Sri Lanka's public investment (recurrent and capital) on higher education—0.3 % of GDP and 1.5% of total government expenditure—was way below that of its South Asian neighbors. Such a low level of investment not only results in the deterioration of quality and relevance, but also constrains the future expansion of higher education in the country. At the macro level, the budget deficit is high and there are other social sectors competing for public funding; as a result, there is less scope for increasing public investment in education. Policy makers thus need to develop alternative strategies for providing additional funding for higher education.

The 1997 Presidential Task Force on University Policy Reforms recommended increasing the government's contribution to higher education to 1.0% of GDP, but this has not been implemented. Of the total investment in higher education in 2011, the proportion of investment in capital was 23% and recurrent expenditure, 77%. Of the total recurrent expenditure, about 61% was spent on academic services, and another 20% was spent on general administration and staff services (Table 4). Of the total expenditure on academic services, more than 70% was spent on faculty salaries. The rest was spent on areas such as maintenance and welfare services.

⁵⁴ UNDP. 2010. *Human Development Report 2010: The Real Wealth of Nations; Pathways to Human Development*. New York and Houndmills, Basingstoke, Hampshire, UK: Palgrave Macmillan. http://hdr.undp.org/sites/default/files/reports/270/hdr_2010_en_complete_reprint.pdf

Table 4: Distribution of Recurrent Expenditure by Higher Education Institutions, 2011

Category	Expenditure (SLRs million)	Percent of Total Expenditure by Institutions
General administration and staff services	2,923	20.4
Academic services ^a	8,687	60.7
Welfare services	880	6.2
Maintenance services	1,069	7.5
Others ^b	749	5.2
Total	14,308	100.0

SLRs = Sri Lankan rupees.

Note: The figures represent the totals spent by the University Grants Commission and by 31 major higher education institutions in Sri Lanka.

^a “Academic services” also includes teaching resources.

^b “Others” refers to expenditure on postgraduate studies, research publications, external examinations, ancillary activities, extension courses, advanced accounts, physical education, farms, etc.

Source: Government of Sri Lanka, University Grants Commission. 2012. *Sri Lanka University Statistics 2011*. Colombo.

In 2000, more than 90% of the income of the major public higher education institutions came from the government (Table 5). The discrepancy between total income and expenditure was due to a shortfall in allocated public funds.

Table 5: Income and Expenditure of Higher Educational Institutions, 2000 and 2011

Item	Details	2000		2011	
		Expenditure (SLRs million)	Percent of Total	Expenditure (SLRs million)	Percent of Total
Income	Government grants	4,955	93.6	16,953	88.8
	Fees	196	3.7		
	Others ^a	145	2.7	2,134 ^b	11.2
	Total	5,296	100.0	19,086 ^c	100.0
Expenditure	Capital	1,279	25.0	3,788	20.9
	Recurrent	3,832	75.0	14,308	79.1
	Total	5,111	100.0	18,096	100.0

SLRs = Sri Lankan rupees.

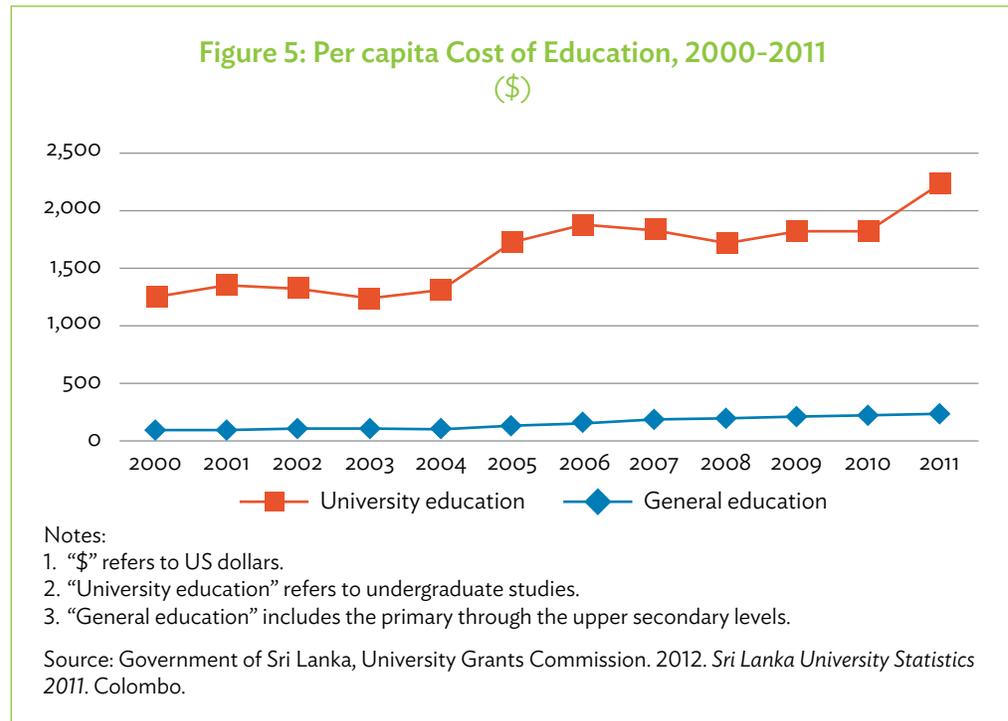
^a “Others” refers to income from interest, sales, and miscellaneous receipts.

^b In this column, “others” includes income from fees, as well as from interest, sales, miscellaneous receipts, and income from extension courses.

^c The discrepancy in addition is due to rounding off.

Source: Government of Sri Lanka, University Grants Commission. *Sri Lanka University Statistics 2011*. Colombo.

The per capita cost of a university bachelor's degree remained around \$1,250 until 2003, after which it increased to \$1,868 by 2006 and then slightly declined to around \$1,700 in 2008 (Figure 5).

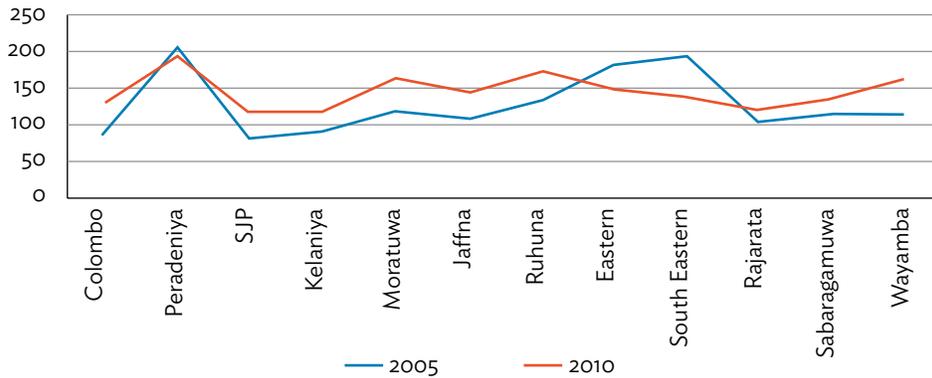


The per capita cost of undergraduate studies by university is presented in Figure 6, based on an analysis showing that the highest per capita costs have been observed in small and new institutions, such as Eastern, South Eastern, and Wayamba Universities. Larger, older universities, such as Colombo, Jaffna, Kelaniya, and Sri Jayewardenepura, have the lowest per capita costs. There are two exceptions to this trend. The Open University of Sri Lanka (OUSL), which offers only distance-education courses, has a high enrollment and very low per capita costs; but the University of Peradeniya (PDN), which is the second-largest university in terms of student population, has a high per capita cost, similar to that of South Eastern University.

There are also wide differences in the per capita recurrent costs of undergraduate studies, based on discipline, ranging from SLRs 55,000 (for law) to SLRs 540,000 (for dentistry) per year (Figure 7). Law, business studies, and education have low per capita recurrent costs, in contrast to medicine, dentistry, veterinary medicine, and agriculture. As with enrollment and graduation data, however, there are hardly any details available on the per capita cost of higher education at private institutions.

There are three main sources for student financial assistance: Mahapola Scholarships, the university bursaries, and endowed scholarships. The Mahapola Trust Fund was established under the Mahapola Higher Education Scholarship Trust Fund Act No. 66 of

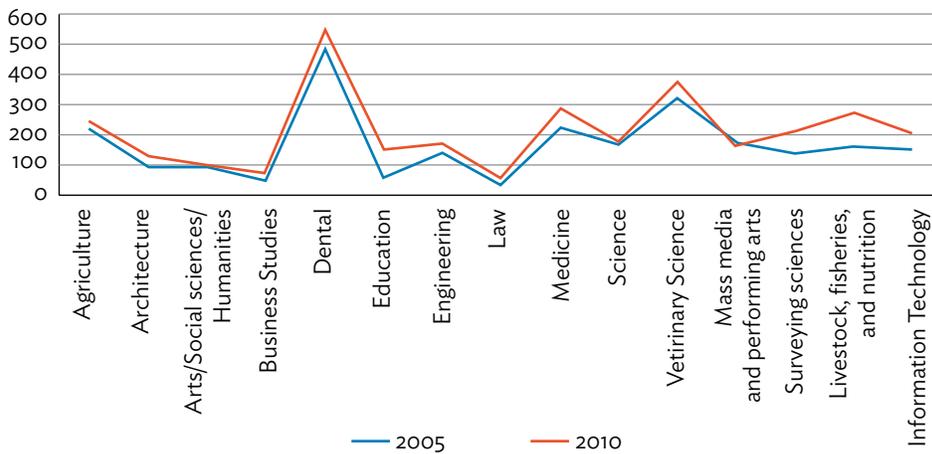
Figure 6: Per Capita Cost of Undergraduate Studies, by University, 2005 and 2010 (SLRs '000)



SJP = Sri Jayawardenepura University, SLRs = Sri Lankan rupees.

Source: Government of Sri Lanka, University Grants Commission. 2012. *Sri Lanka University Statistics 2011*. Colombo.

Figure 7: Per Capita Cost of Higher Education, by Discipline, 2005 and 2010 (SLRs '000)



Source: Government of Sri Lanka, University Grants Commission, Management Information System Division.

1981, and is administered by the Mahapola Board of Trustees. Students receiving Mahapola scholarships and endowed scholarships are selected annually by the UGC. The student bursary scheme was introduced in 1983. Funds for this scheme are allocated from a consolidated fund under the Ministry of Higher Education (MOHE) and administered by the UGC. The selections for bursary scholarships are handled by the universities or other higher education institutions. Both the Mahapola and Student Bursary scholarships provide generous financial support, and their relative magnitude is shown in Table 6.

Prior to the Mahapola scholarship scheme, a student loan scheme called the “Higher Education Loan Fund” was established in 1972 to assist public university students from low-income families, but it was abandoned in the late 1970s due to high administrative costs and low recovery rates. Apart from the scholarship schemes, many low-income students are provided with hostel accommodations at subsidized rates.

Table 6: Breakdown of Higher Education Scholarships, 2009

Scheme	Number of Student Scholarship Recipients	% of All Student Scholarship Recipients	Total Scholarship Funding (SLRs million)	% of Total Funding
Student bursary	17,936	33.9	289.9	77.2
Mahapola	34,958	66.0	84.1	22.4
Endowed scholarships ^a	59	0.1	1.3	0.3
Total	52,953	100.0	375.3 ^b	100.0

SLRs = Sri Lankan rupees.

Note: Percentages may not actually total 100% because of rounding off.

^a These include commercial bank scholarships, Mitsubishi Corporation International Scholarships, Police Central Welfare Council Benefits Scheme, and a scholarship scheme for university students affected by the 2004 tsunami.

^b In 2011, the combined totals of the Mahapola and bursary scholarships rose to SLRs 880 million.

Source: University Grants Commission, Management Information Systems Division.

CHAPTER 3

Major Issues and Constraints in Higher Education

A. Access and Equity

The state is still the main provider of university education in Sri Lanka, and the public universities are guided by the Universities Act No. 16 of 1978. Student admissions to public universities in Sri Lanka are based on criteria laid down by the University Grants Commission (UGC), with the concurrence of the Ministry of Higher Education (MOHE). All applicants must have a minimum mark of 30% on the common general test paper. About 40% of admissions are granted based on Z scores ranked on a nationwide basis,⁵⁵ 55% based on merit and on the size of the population of each district, and 5% specifically from the 16 districts considered educationally disadvantaged. Due to this quota system, students from schools with a lower level of performance on the General Certificate of Education–Advanced Level (GCE [A/L]) examination are at an advantage over students from schools in the developed areas. However, this situation has been criticized as depriving some students with relatively high Z scores and who are from educationally less disadvantaged districts. This system also appears to penalize certain students who perform well on the GCE (A/L) and seek admission to programs in medicine, engineering, law, commerce, and other areas. (See Appendix 4 for a description of the admissions policies of public universities.)

An alternative to the current admissions system could be a system based 100% on merit. However, the proponents of the 100% merit policy for university admissions should also address the need to ensure equitable access to higher education. For example, the plantation community is the most deserving group to have benefited from the affirmative action aspect of the quota system.⁵⁶ A 2007 World Bank study revealed that the socioeconomic

⁵⁵ In statistics, a standard score indicates how many standard deviations an observation or datum is above or below the mean. It is a dimensionless quantity derived by subtracting the population mean from an individual raw score and then dividing the difference by the population standard deviation. The UGC selects students for university admission using the Z-score cutoff marks based on the results of the General Certificate of Education–Advanced Level Examination.

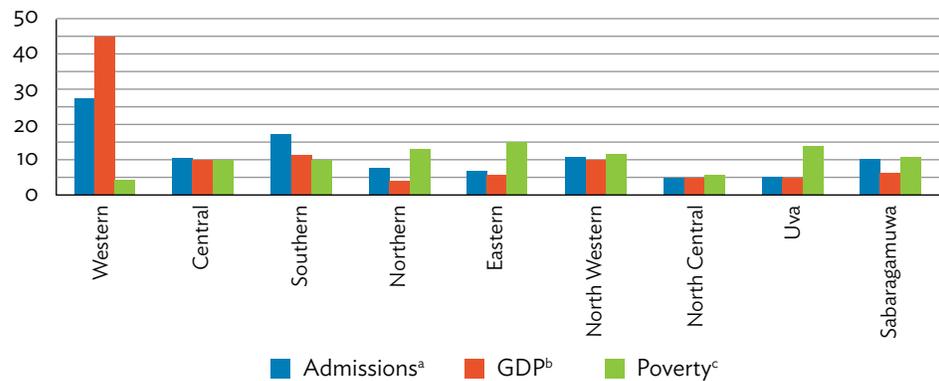
⁵⁶ S. Sandarasegaram. 2006. *Educational Disadvantage in Sri Lanka with Special Reference to University Education*. Colombo. The plantation sector is characterized by relatively high poverty, poor living conditions, and fewer educational facilities. Aside from the district-based merit allocations, a system of scholarships and student financial assistance through grants and loans would be worth considering.

conditions of certain groups in Sri Lanka place them at a disadvantage when it comes to providing facilities for preparing their children to continue on to higher education.⁵⁷

Public universities have a limited absorptive capacity, only about 16.2% of the students qualified to enter university during 2007–2011. In 2011, for example, the public university system could absorb only 15.5%. Females made up 60% of total admissions that year. They outnumbered males in the arts (79%), medicine (63%), and management (57%); but were outnumbered in science (47%), information technology (45%), and engineering (20%).

Given that the selection criteria for state universities are based on a combination of merit and quotas (to enforce equitable access), there is no evidence confirming the contention that ethnic minorities are discriminated against in terms of access to higher education. During the 2011/12 academic year, the proportional distribution of entrants to state universities was 80.1% Sinhala, 13.3% Tamil, 6.4% Moor, and 0.2% for the other communities (Figure 8). However, in terms of equity in the locations of institutions, the provinces with high poverty rates and low per capita incomes appeared to have fewer public universities.

Figure 8: Provincial Gross Domestic Products, Poverty Rates, and University Admissions, 2011 (%)



GDP = gross domestic product.

^a The percentages of admissions refer to the proportion of students from each province admitted to university.

^b The GDP percentages refer to the portion of the national GDP attributed to each province.

^c The poverty percentages refer to the poverty rates within each province. Note that there was no poverty data available for the Northern and Eastern Provinces.

Sources: Government of Sri Lanka, University Grants Commission, Management Information Systems Division; Central Bank of Sri Lanka. 2012. *Annual Report 2012*. Colombo; and Government of Sri Lanka, Department of Census and Statistics. 2012. Colombo.

⁵⁷ World Bank. 2007. *Sri Lanka: Poverty Assessment; Engendering Growth with Equity; Opportunities and Challenges*. Washington, DC. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/02/06/000020953_20070206094457/Rendered/PDF/365680LK.pdf. This report provides an insight into the poverty levels in the eight relevant provinces, and into their students' educational attainments in grade 9, in the General Certification of Education-Ordinary Level exam, and in the GCE (A/L) exam.

This is clearly evident with respect to Central, Sabaragamuwa, and Uva Provinces, which have high incidences of poverty. In contrast, there is clear evidence of both a higher number of university students admitted from the Western Province and a heavier concentration of public universities located there. In fact, the Western Province accounts for more than 30% of higher education institutions overall, including four of the top state universities.

Discrimination against low-income groups in terms of access to higher education was confirmed by studies conducted by The World Bank and the United Nations Development Programme (UNDP).⁵⁸ Enrollment rates at tertiary institutions rise along with the economic quintiles for both men and women. The lack of equity in government spending on higher education is due to the smaller enrollments at higher education institutions in the poorer provinces.⁵⁹

The government is concerned about the disparities among the provinces regarding the distribution of higher education institutions, and is working on the establishment of new institutions in provinces with low incomes and high poverty rates.⁶⁰ Moreover, as mentioned above, to improve the access of economically disadvantaged students to higher education, the government has provided financial assistance, mainly in the form of Mahapola or bursary scholarships, as well as hostel accommodations at subsidized rates for low-income students from the geographical periphery. It should also be noted that public universities do not charge any course fees at the undergraduate level, irrespective of a student's socioeconomic background.

The Open University of Sri Lanka (OUSL) deserves special attention with regard to the issue of equity and access to higher education. Established under the Universities Act 1978 for the purpose of providing higher education for working adults, the OUSL is a pioneer in providing distance learning programs at the tertiary level. Its admissions policy allows persons with even minimal academic training to register and proceed up to the graduate level. It is the only state university that charges fees for academic programs at the undergraduate level.⁶¹

The total external degree program (EDP) or distance education program enrollment in 2011 was 250,091, or 4.2 times the total enrollment in conventional universities, with a female share of 70%. There is a heavy concentration of EDP enrollment in the arts (74.6%) and commerce and management (23.6%), while information technology (1.5%) and science (0.3%) had minimal enrollments in 2011. The completion rate for EDP programs is less than 5%, and existing data indicate that the rate of unemployment among EDP graduates is around 77%.⁶² In spite of all these problems, however, enrollment in EDPs continues to be

⁵⁸ World Bank, *The Towers of Learning*; UNDP. 2012. *Sri Lanka Human Development Report 2012: Bridging Regional Disparities for Human Development*. UNDP Sri Lanka: Colombo. <http://www.lk.undp.org/content/dam/srilanka/docs/localpublications/Sri%20Lanka%20Human%20Development%20Report%202012.pdf>

⁵⁹ World Bank, *The Towers of Learning*.

⁶⁰ The establishment of Uva Wellassa University is a good example.

⁶¹ Total enrollment in the OUSL in 2011 was 31,610, representing those registered for certificate (7,736), diploma (3,160), bachelor's degree (1,491), postgraduate diploma (4,912), and higher degree (887) programs. The OUSL website. <http://www.ou.ac.lk/home/>

⁶² The World Bank. 2010. *Doing Business 2010: Reforming through Difficult Times*. Washington, DC: World Bank, International Finance Corporation (IFC), and Palgrave MacMillan. <http://www.doingbusiness.org/-/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB10-FullReport.pdf>

high for several reasons, such as the negligible tuition fees, limited access to public sector higher education institutions, and the convenience of distance education.

The OUSL has undergone significant progress—from an experiment in distance education in the early 1980s to the status of a matured open distance learning provider. The OUSL offers a wide range of programs, both technology-based and nontechnical. The nontechnical programs may be described as akin to the traditional mode of correspondence education. The 30-year period between 1983 and 2013 has witnessed the development of a well-equipped network of OUSL regional centers offering more than 60 programs in education, engineering, IT, languages, law, management, nursing, and social sciences. And opportunities for study range from undergraduate to research degree programs.

The present distance learning modality involves the use of IT, such as the internet, CD-ROMs, and mobile devices (e.g., cell phones, flash drives, and MP3 players). The incorporation of technology into teaching and learning systems has had profound implications for human capital development. In response to these changes, Sri Lanka has made considerable progress in the field of distance education since the 1980s. Opportunities for Sri Lankan students to access both national and international educational organizations through technology are increasing. The Distance Education Modernization Project, funded by the Asian Development Bank (ADB) and the government, aims to expand postsecondary education through distance learning. This project will make a remarkable contribution toward promoting equal opportunities for all citizens. However, the serious use of ICT as a mode of delivery still seems to be confined at present to the graduate level.

In the private sector, higher education providers can be divided into four categories: (i) firms registered by the Board of Investment (BOI), (ii) affiliates of international universities, (iii) professional associations, and (iv) UGC-approved degree-awarding institutions. The first three categories are not subject to regulatory interventions by the UGC or MOHE, while the fourth one is subject to UGC and MOHE regulations, but enjoys more autonomy than public institutions in its operational activities. In spite of increasing demand, private sector participation in higher education continues to be restricted because of the misguided view that allowing more of it would deny low-income students the opportunity for a higher education. This policy has led to students seeking admission in universities abroad—including in nearby countries such as Bangladesh, India, and Nepal—at a significant cost to these students and their families. This is a clear indication of the families' willingness to pay for higher education, but policy makers have failed to recognize the negative consequences of their antiprivate education policy. At the same time, opportunities for the poorer sections of society have been constrained by the limited number of available slots at state universities.

The limited space for students has created a particularly difficult situation for the state universities, given that the global higher education environment is now characterized by greater competition among higher education providers. The prevailing ideology in Sri Lanka of public sector monopoly of higher education has prevented the private sector from establishing universities in the country, but it has not prevented private enterprises from building ties with foreign universities and establishing facilities to domestically train candidates for degrees and diplomas offered by the foreign institutions. Despite these

developments, however, regional inequity remains an issue that deserves special attention. Given the heavy concentration of higher education providers (both state and nonstate) in and around Colombo, and the presence of established state universities in Kandy and Matara, universities located in Northern, Eastern, Southern, and Uva Provinces require special policy support. The universities in these provinces tend to have less-qualified staff (both academic and nonacademic) and inadequate facilities. Strengthening these universities through a special policy package would also promote the government's regional development efforts.

B. Quality of Learning

There are substantial differences in the quality of graduate output within and across public and private higher education institutions in Sri Lanka. The unevenness is mainly due to disparities in the quality of the faculty and facilities. Except for some of the established conventional universities, higher education institutions, even the foreign-affiliated private providers, lack faculty members with doctorates and experience. They also lack adequate teaching materials, equipment, and supplies. On the other hand, many private higher education institutions do not possess strong track record of producing high-quality graduate given that many of them were established only recently; this could harm their ability to attract students. And the absence of a national quality assurance and accreditation body for private higher education does not make their prospects any better.

With regard to quality, special mention must also be made of the EDPs offered by the OUSL and by the conventional universities. The EDP is an important method of meeting the demand by socially disadvantaged groups for a university education. Nine universities currently offer EDPs in the arts, commerce and management, IT, and the sciences.⁶³ EDPs are also a potential source of income for universities. The students in EDPs are drawn from a large pool of GCE (A/L)-qualified students who failed to gain admission into full-time campus-based programs (i.e., internal degree programs). About 98% of EDP students attend weekend classes conducted by private institutions, with only a few attending weekday evening or daytime classes.

The performance of EDPs is affected by a lack of student support, poor institutional support, the absence of public-private partnerships, poor academic standards, high dropout rates, the lack of market orientation, and long delays in conducting examinations and releasing the grades. Students in private EDPs are entirely dependent on their institutions for academic advice, guidance, and knowledge inputs, but the quality of these services is very unsatisfactory. In addition, EDPs are confronted with issues such as poor quality of tutorials; absence of reading lists, handouts, and group discussions; limited selection of subjects and courses; and limited opportunities for acquiring knowledge and soft skills.

The evaluation methods of EDPs are outdated and inefficient, as these programs continue to use the year-end examination system, rather than the continuous assessment systems

⁶³ These are Eastern University, Sri Lanka; Sabaragamuwa University of Sri Lanka; the University of Colombo School of Computing (UCSC); University of Jaffna; University of Kelaniya; University of Moratuwa; University of Peradeniya; University of Ruhuna, Sri Lanka; and the University of Sri Jayawardenepura.

used in full-time internal-degree programs. There are exceptions: both the University of Colombo School of Computing (UCSC) and the University of Moratuwa have adopted innovative delivery methods for their EDPs. The UGC has also introduced a handbook on EDPs that covers the qualifications framework, the issue of quality assurance, and codes of practice. In view of the recent developments in higher education and in the labor market for university graduates, an incentive-oriented approach would be more effective in improving the academic standards of EDPs, rather than continuing with regulatory-oriented interventions. The service providers offering EDPs need training in distance education and in the evaluation of methodologies, as well as better facilities and institutional support.

The UGC and its standing committees have prescribed a common structure for degree programs at all public universities. In practice, however, the organization, methods of evaluation, and degree-awarding criteria vary quite significantly across these universities. In November 2008, the UGC made an unsuccessful attempt to promote a common credit and qualifications framework for Sri Lanka's public university system; the intent was to maintain a consistency of standards and comparability of university degrees. The framework included grades, grade-point values, and grade point average (GPA) cut off values for awarding distinction and merit passes for all undergraduate degree programs offered within the public university system.

Quality assurance and accreditation (QAA) is a recent development in Sri Lanka, carried out by the Quality Assurance and Accreditation Council (QAAC), which was established in 2005 under the World Bank's Improving Relevance and Quality of Undergraduate Education (IRQUE) project, implemented during 2003–2009.⁶⁴ In February 2010, the QAAC was transformed into a division of the UGC. The QAAC is linked with two international organizations that deal with QAA: the International Network for Quality Assurance Agencies in Higher Education and the Asia Pacific Quality Network. It is also a member of the Guideline for Good Practice Committee on External Review of Quality Assurance. It is important to note, however, that the services of the QAAC are limited to public universities; there is no formal institutional arrangement for carrying out quality assurance programs for private institutions of higher learning. A single quality assurance system for both would be the most desirable option, as it would ensure a common standard across all institutions. The development policy framework enunciates that a quality assurance accreditation system for the entire higher education sector will be implemented in the soon to standardize higher education programs conducted by various institutions.⁶⁵

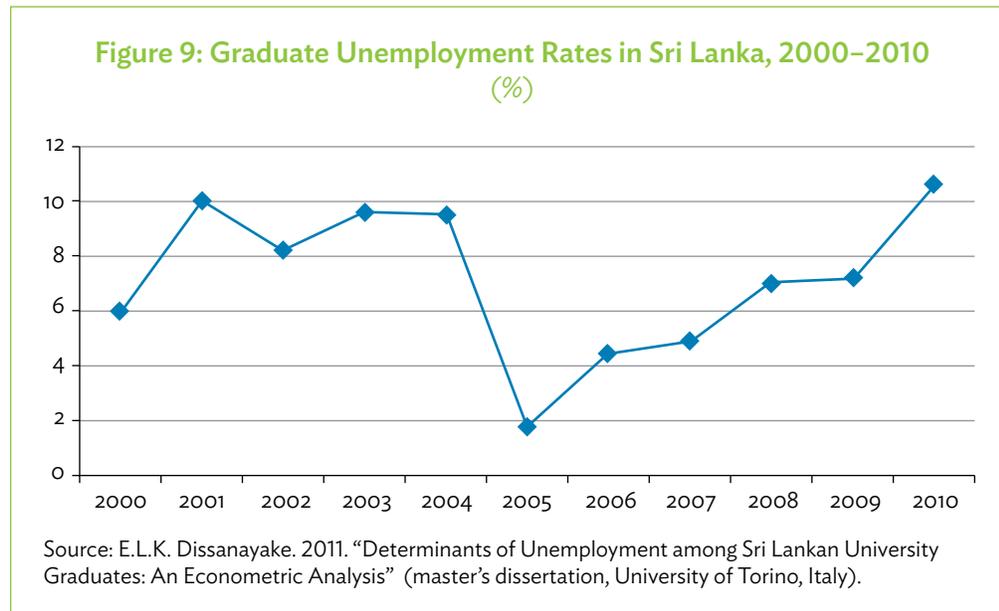
C. Economic Relevance

Unemployment among Sri Lanka's higher education graduates is high (Figure 9). Graduates tend to pursue public sector employment, as many of them are reluctant to work elsewhere. But the private sector accounts for the highest share of total employment in the country. For this reason, its views regarding strategies for improving the quality and relevance of graduates are very important. In fact, trade promotion organizations (e.g., Federation of

⁶⁴ World Bank, *Sri Lanka—Improving Relevance and Quality of Undergraduate Education*.

⁶⁵ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*.

Chambers of Commerce and Industry of Sri Lanka) have conducted several surveys to identify the skills profile of university graduates preferred by the business community.



Two surveys conducted by the Ceylon Chamber of Commerce, in 1999 and 2007, identified a list of attributes preferred by the business community in a graduate: (i) computer literacy and basic numerical skills; (ii) a general knowledge of world affairs; (iii) a wide range of interests; (iv) critical thinking ability combined with an open, positive, and practical mindset; (v) a willingness to learn from a wide cross section of people; (vi) the ability to lead a team and achieve results within a given time frame; (vii) the ability to prioritize and utilize time productively; (viii) initiative and willingness to take risks; (ix) personal grooming and business etiquette; (x) the ability to communicate effectively, including in English; (xi) good interpersonal skills, including the ability to work with different people and as a member of different teams; (xii) the ability to adapt to changing work environments; (xiii) ethical conduct; (xiv) innovative thinking; and (xvii) an awareness of the importance of emotional intelligence.

Similarly, Chandrasiri (2008) identifies initiative, flexibility, and adaptability as the top three attributes vital for private sector employment. Other personality attributes frequently cited by the respondents in this study included communication skills, team orientation, trainability, presentation skills, a positive attitude, accountability, ambition, discipline, and civics (general understanding of laws and regulations). The study also reveals that the list of attributes identified by the private sector employers is equally applicable to government and national planning department (NPD) employers.⁶⁶ Higher education providers clearly need to be concerned with the skills required by employers, in addition to providing

⁶⁶ S. Chandrasiri. 2008. Labour Market Experience of University Graduates in Sri Lanka. *Higher Education Policy*. 21 (3). pp. 405–423.

subject area knowledge. Some universities responded to the findings of these studies by establishing career guidance units and by introducing new academic programs, including some geared to the development of soft skills.

Meanwhile, as a major stakeholder, the business sector is actively engaged in ongoing policy debates about higher education issues such as limited access, graduate unemployment, and overall quality. Although its participation in higher education is generally informal and limited to a few faculties, the business sector also helps with the universities' career guidance activities. This involvement or partnership has the potential for further development and expansion.

Private sector employers also serve as members of university councils, faculty boards, and various subcommittees, to which they are appointed by the MOHE, the UGC, or by the university councils themselves. The subcommittees deal with such areas as staff development, recruitment, and promotions; but they spend little time on matters relating to labor market demand for university graduates. The faculty boards review and approve the curricula developed by the faculty members.

Almost all public sector universities currently follow the course unit system at the undergraduate and graduate levels. Most courses are given 3 credit hours (i.e., 3 hours of class per week), totaling 45 hours of lectures per semester. These universities also offer 1-credit hour courses or 15-contact-hour course modules. Such courses can be finalized at the departmental level, subject to the approval of the university senate. However, many of these courses are more subject area-oriented and modular-oriented, rather than offering competency-based training. In view of the attributes that the business community expects of graduates, short competency-based courses at the undergraduate level would be very useful in improving the overall quality of graduates.

Vodopivec and Nimnath (2010) examine the school-to-work transitions of a sample of state university graduates in Sri Lanka, and show that nearly half the graduates did not find jobs even after 4 years of job hunting. This study also confirms the importance of social status and networks for securing a job in the formal private sector, indicating that rural graduates who lack such contacts are at a disadvantage. The findings, thus, suggest that there may be some truth to the claim made by a number of young graduates that privileged and elite families use their social and political networks to secure employment for their children.⁶⁷

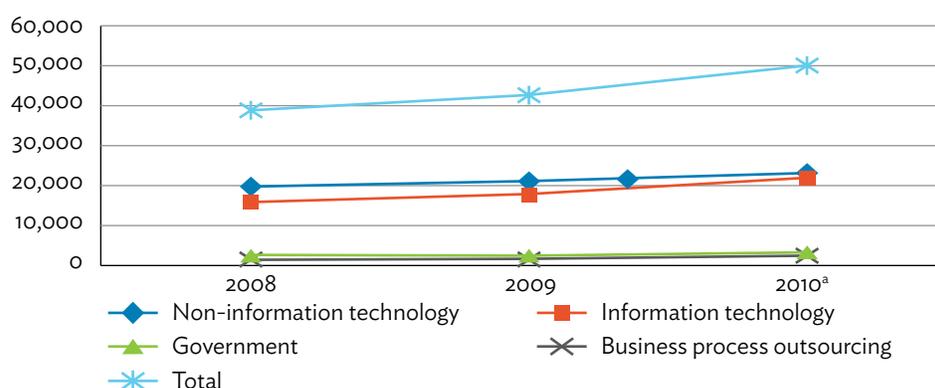
On the demand side, the government's development policy framework, published in 2010 by the Department of National Planning, predicts the skills that will be required by the national economy over a period of 10 years (2011–2020). The three subsectors identified as having the highest demand for employees are IT, medical and health science, and beauty culture; and each of them is expected to require over 19,000 new trainees per year (Appendix 5). This figure is projected to go up to 90,000 by 2020, with annual increases of 30% thereafter. The other subsectors identified as having a high labor

⁶⁷ M. Vodopivec and N. Withanachchi. 2010. School-to-Work Transition of Sri Lankan University Graduates. In R. Gunatilaka, M. Mayer, and M. Vodopivec, eds. *The Challenge of Youth Employment in Sri Lanka*. Washington, DC: The World Bank. http://www.unicef.org/srilanka/challenge_youth_unemployment.pdf

absorptive capacity are metal and light engineering, tourism, office management, and construction.⁶⁸ The numbers of students wanting skills training in these subsectors are projected to reach about 12,000 to 13,600 by 2020, with annual increase of 1.4% per year. At present, the expected graduate output qualified for employment in these subsectors is quite low. There is thus an urgent need for changes on the supply side.

In 2010, the Sri Lanka Information and Communications Technology Association (SLICTA) estimated the demand for qualified ICT graduates to be more than 7,500 per year—versus an annual supply of only 2,500 graduates.⁶⁹ The development policy framework estimates the current ICT workforce to be around 50,000, and projects it to increase to 186,000 in 2016, with most of the growth occurring in database management, digital media and animation, business analysis and systems integration, network administration, programming and software engineering, testing and quality assurance, business process outsourcing, and marketing and web development.⁷⁰ ICT has also provided a new avenue for exports, and there are currently about 175 firms in Sri Lanka offering ICT services to foreign clients. In addition, the government's National Human Resources and Employment Policy has identified nine subsectors with high growth potential, which would lead to a corresponding increase in the demand for employees.⁷¹

Figure 10: Growth of Sri Lanka's Workforce in Information and Communication Technology, 2008–2010



^a The figures for 2010 are estimates.

Source: Information Communications Technology Agency of Sri Lanka. 2011. *National ICT Workforce Survey*. Colombo.

⁶⁸ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*.

⁶⁹ SLICTA website. <https://www.icta.lk/>

⁷⁰ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 130.

⁷¹ Government of Sri Lanka, Secretariat for Senior Ministers. 2012. *The National Human Resources and Employment Policy for Sri Lanka*. Colombo. http://www.nhrep.gov.lk/images/pdf/nhrep_final.pdf. These subsectors are (i) agriculture; (ii) manufacturing; (iii) tourism; (iv) ICT and business process outsourcing; (v) health services; (vi) ports and shipping; (vii) environment-friendly jobs; (viii) infrastructure investments; (ix) performing arts, music, and creative industries; and (x) other emerging spheres.

The global market for advanced human capital is expanding, so policy makers should consider the potential employment opportunities in foreign markets for Sri Lankan graduates. Approximately 1.8 million Sri Lankans are already working abroad, and their remittances account for about 10% of the country's GDP. Of these migrant workers, middle-level categories account for about 2.6%, while professional categories account for about 1.1%. The rest are employed as clerical and related workers (2.7%), skilled labor (24.8%), semiskilled labor (2.4%), unskilled workers (20.3%), and housemaids (46.0%).⁷²

Similarly, labor market information is important for analyzing the economic relevance of graduate output. It would include national data on the employment status of different occupational categories, tracer studies on the job search behavior of graduates, and information databases maintained by the alumni associations. In spite of the high level of graduate unemployment, however, no major tracer studies have been carried out on the employability of university graduates, only a couple of small-scale studies conducted in 2003. At present, an analysis of the labor market for university graduates can only be done using information released by the Department of Census and Statistics, the Ministry of Labor Relations and Manpower, and the Ministry of Youth Affairs. The databases maintained by these agencies compile general information relating to the labor market, but without any specific reference to university graduates. For instance, the quarterly labor force surveys conducted by the Department of Census and Statistics provide labor market information related to graduates together with GCE A/L qualified students. Similarly, the other databases provide very limited information relating to the job search behavior of university graduates.

From the above analysis, it is evident that state universities need to concentrate more on enhancing the economic relevance of their graduate output. They must recognize that they are no longer producing graduates mainly for public sector institutions. The employment prospects for graduates are mainly in businesses and NGOs operating in both domestic and foreign markets. This is particularly true for graduates in the humanities and social sciences, but science programs also deserve attention, as the research and development (R&D) output of the country needs to be increased significantly. The universities need to cooperate closely with the private sector in designing new academic programs more aligned with industry needs and providing employment opportunities to university graduates. They also need to take into account labor market demands and the government's own projected skill requirements.

D. Organization and Management

Public universities in Sri Lanka are semiautonomous bodies that are heavily dependent on state funds. This makes them accountable both to the state and to the general public.

According to the Universities Act No. 16 of 1978, a public university is a body corporate with perpetual succession established with a specified name, and with the powers and authority to operate under that name. The Universities Act 1978 allows university councils to suspend, dismiss, or otherwise punish persons in the employ of their institutions. Procedures for conducting inquiries into disciplinary matters involving university employees

⁷² Sri Lanka Foreign Employment Bureau.

are prescribed in the 1984 Establishment Code of the University Grants Commission and Higher Education Institutions. University councils have the power to make bylaws regarding several matters, including student discipline (Section 135). However, these bylaws should not exceed the powers vested in the universities by the Universities Act 1978 (Section 29); if they do, they can be challenged in court.

In operational terms, the decision making powers of the universities are seriously constrained by the powers vested in the MOHE and the UGC. As stated in Section 5.2 of the Universities Act 1978, student admissions criteria are clearly defined at the national level, and state universities have no autonomy in selecting students for undergraduate programs. The universities also have no autonomy in hiring and firing administrative staff. These constraints have led to severe capacity limitations in all categories of administration within the university system.

The University Act 1978 provides the UGC with powers to intervene in a wide range of routine operational matters relating to decisions on the courses to be offered, the establishment of posts and appointment of faculty, promotion procedures, as well as the appointment and deployment of administrative staff. This arrangement emphasizes control rather than the provision of autonomy and incentives, which would help the universities realize their own organizational goals.

The regulatory orientation of the UGC is partly due to a reliance on legislation and to the belief that the best way to maximize the outcomes of the higher education system through tight control. However, this approach has several implications for institutional efficiency. Specifically, it: (i) delays decision making, (ii) discourages entrepreneurial initiative, (iii) generates an unnecessarily heavy workload, and (iv) discourages client-specific services by promoting standard solutions imposed from above. In contrast, some of the arguments in favor of centralized control highlight the greater consistency in decision making and the ability to achieve national educational goals, rather than just institutional gains. However, given the increasing participation of the private sector in higher education, particularly foreign institutions, one of the key issues in higher education governance is how to achieve a balance between regulation and autonomy for public universities, given that they operate in a highly dynamic market environment. This is especially relevant when it comes to promoting an entrepreneurial culture at state universities and helping them to become world class. The development policy framework, developed by the Department of National Planning, states that “universities are encouraged to become centres for economic development, agents of innovation and incubators of entrepreneurship.”⁷³ It also states that at least three local universities will be targeted to become among the top 250 universities in the world.⁷⁴

The public universities provide information on operational matters to the UGC and other regulatory agencies. Once the extent of autonomy has been agreed upon and implemented, many of the existing regulations and controls vested in the UGC could be delegated to the universities. Eventually, when the universities acquire autonomy, it will provide an

⁷³ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 120.

⁷⁴ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 122. The three universities are the University of Colombo, which currently ranks 2,185th in the world; the University of Moratuwa, which ranks 2,198th; and the University of Peradeniya, which ranks 3,005th. See: www.webometrics.info/index

incentive for change and great improvement in performance.⁷⁵ The government has already recognized this point. As the development policy framework states, “The autonomy and dignity of universities and their governance system will be respected and ensured. Universities are encouraged to generate a substantial amount of financial resources for their activities.”⁷⁶

In addition to the Universities Act 1978, financial regulations and various circulars issued by the Treasury are applicable to the public universities as well. These regulations and circulars cover salaries, allowances, foreign travel, the purchase and sale of assets, and the creation of administrative positions. It should be noted that these regulations have been somewhat relaxed in recent years with respect to the right of universities to retain income generated from training and other sources. In fact, some universities have been very innovative in growing their development funds at the departmental, faculty, and university levels by using their own generated incomes.

In spite of 3 decades of promarket policy reforms, Sri Lanka’s public university system is still based on the classic British Commonwealth model, which is highly regulatory and less responsive to changes in the labor market and to developments in higher education around the world. The country’s higher education system is thus constrained, as it cannot easily come to terms with modern systems of management,⁷⁷ particularly in the context of an emerging knowledge-based economy. Higher education institutions functioning under ministries other than the MOHE are also subject to applicable administrative and financial regulations, so they are also rather unresponsive to changes in the labor market. Nongovernment providers are essentially demand-driven and efficiency-oriented, while their organizational structures and management systems reflect a combination of domestic and foreign managerial experience. The presence of cross-border education, in particular, promotes the use of international best practices in higher education in Sri Lanka.

Planning at UGC-approved public universities takes place at the level of the faculties, university administrations, and the UGC. All the universities are required to prepare their own corporate plans and forward them to the UGC, the MOHE, the Treasury, and the Parliamentary Committee on Public Enterprises. Each university council is generally responsible for formulating a suitable mission, as well as vision statements, policies, strategies, and the university corporate plan. Deans of faculties, the heads of departments, and the heads of other bodies within the university are responsible for ensuring the successful implementation of action programs enumerated in the corporate plan.

In practical terms, however, corporate plans are not used as instruments for monitoring university performance. They are used only to indicate the resource requirements of universities and to identify medium- and long-term development goals. Similarly, the corporate plans do not involve any policy dialogue with the UGC or with other

⁷⁵ World Bank. 2008. *Global Trends in University Governance*. Education Discussion Paper No. 7. Washington, DC.

⁷⁶ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 124.

⁷⁷ Some of the distinguishing features of modern higher education management include decentralized decision making at both the sectoral and institutional levels, performance-based incentives, social responsibility, participative decision making, and working toward corporate goals. For more details see: J. Fielden. 2008. *Global Trends in University Governance*. Education Working Paper Series, Number 9. Washington, DC: The World Bank. http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/Global_Trends_University_Governance_webversion.pdf

regulatory agencies. The failure to achieve performance targets for other areas of activity (e.g., infrastructure, facilities, learning environment, student and staff welfare, and capacity building) is mainly due to the lack of funding support, absence of a management information system, lack of skills in planning and monitoring, interference in administration and financial matters, procedural delays, and an excessively heavy administrative workload. Having become aware of some of these issues, the MOHE is currently working on a performance improvement strategic plan for public universities in Sri Lanka.

The expansion of the public university system in Sri Lanka since 1985 has resulted in the hiring of more than 10,000 persons. The administration of these universities comprises nonadministrative staff (9,893), academic support staff (812), and administrative and medical officers (827). The special knowledge and skills needed by university administrative staff must be gained through experience and in-service training, but the public university system does not provide such training, nor does it have a well-established system for staff development. Thus, Warnapala (2009b) argues that though a number of new universities have been established in Sri Lanka, the challenge remains in terms of management capacities and office organization.⁷⁸ At the operational level, most of the managers (e.g., registrars, deputy registrars, bursars, secretaries, senior assistant registrars, and senior assistant bursars) lack management experience and have serious capacity limitations—particularly in the areas of organizing, planning and monitoring, coordination, office management, computer literacy, public relations, and business promotion. To address these limitations, the UGC and the World Bank's Improving Relevance and Quality of Undergraduate Education (IRQUE) project have provided training, both locally and overseas, for administrative staff of public universities. These interventions, however, were grossly inadequate in view of the severe shortage of management competency in the public university system.

Given the highly globalized and competitive nature of higher education, universities in Sri Lanka need to be highly entrepreneurial and efficient in carrying out their main functions. As explained earlier, professors who accept administrative positions generally do not have any experience in management. Most had been previously confined to academic environments. Planning and performance monitoring at regular intervals are also absent at public universities, resulting in poor performance in such areas as human resource management, marketing, product and program development, costing, and financial management.

Reforms in higher education governance are driven by external and internal pressures, so their implementation presents challenges to staff of both the regulatory agencies and the universities. A move from a system with a centralized control mechanism to one with a regulatory and supervisory orientation would require a new model of operations at both the regulatory agencies and the universities. It would also require different styles of decision making, as well as new organizational structures characterized by modern office-management procedures. Moreover, successfully implementing reforms requires new skills, and this can take time.

⁷⁸ W.A. Wiswa Warnapala. 2009. *Tertiary Education in Sri Lanka: Relevance in the Global Context*. Distance Education Modernization Project, Ministry of Higher Education. Wellampitiya, Sri Lanka: Lassana.

The World Bank (2007), Fielden (2008), Salmi and Saroyan (2007), and Saint (2009a and 2009b) have all noted that the current global trend in higher education is for governments to grant greater freedom to institutions of higher learning, and even to make them fully independent and self-governing. According to Saint, this trend has been occurring since 2005.⁷⁹ Among the countries that have recently implemented this policy are Denmark, Germany, Indonesia, Japan, and Thailand.⁸⁰

In Sri Lanka, however, the degree of control exercised by the UGC over public universities negatively affects their operational efficiency, innovativeness, entrepreneurship, and ability to respond to changes in the labor market.⁸¹

The basic principle behind institutional autonomy is that universities operate better when they are in control of their own direction, development, and destiny. They are motivated to be more entrepreneurial if they can directly reap the rewards of their own efforts. Moreover, if universities are given the autonomy to respond to national policy goals as they see fit, there is a reasonable chance that they will choose different ways of reaching the same goal, and that some of those ways will turn out to be especially innovative. It is very unlikely, however, that a “control-oriented model” would lead to such innovative practices.

Reforming institutional governance often requires changing higher education legislation at the national level. Reforms of government policies on university autonomy, governance, and leadership inevitably lead to amendments to existing legislation. The level of detail in defining governing boards, their composition, and their powers varies greatly from one country to another. In some countries, national legislation provides a blueprint for what is desired, while in other cases, there is ample scope for institutional leadership to define its own statutes and internal regulations.

One of the biggest questions facing the government is how to balance the autonomy needed by public universities with the accountability required by the state. Accountability is generally operationalized through various forms of public reporting (e.g., milestones defined in the institution’s strategic plan, progress reports to Parliament, etc.) and through governance arrangements ensuring that stakeholders are represented in policy discussions at the institutional and systemic levels. In return for ceding greater autonomy to the universities, governments have sought to strengthen the means of accountability so that their stewardship of public funds is not compromised. Many governments are thus

⁷⁹ World Bank, *Sri Lanka: Poverty Assessment*; Fielden, *Global Trends in University Governance*; J. Salmi and A. Saroyan. 2007. League Tables as Policy Instruments: Uses and Misuses. *Higher Education Management and Policy*. 19 (2). pp. 1–38; W. Saint. 2009. *Guiding Universities: Governance and Management Arrangements around the Globe*. Washington, DC: World Bank. http://www-wds.worldbank.org/external/default/WDSContentServer/WDS/IB/2010/01/13/000334955_20100113040112/Rendered/PDF/526570WP0Unive10Box345574B01PUBLIC1.pdf; W. Saint. 2009. Legal Frameworks for Higher Education in Sub-Saharan Africa. *Higher Education Policy*. 22 (4). pp. 523–550. <http://ejournals.bc.edu/ojs/index.php/ihe/article/view/8498/7632>

⁸⁰ J. Salmi. 2007. Autonomy from the State vs Responsiveness to Markets. *Higher Education Policy*. 20 (4). pp. 223–242.

⁸¹ Some of the key areas of excessive UGC control include the UGC Standing Committee’s approval of new courses (both at the undergraduate and graduate levels), setting out procedures for recruiting and appointing staff, and the creation of new posts. In fact, the release of more than 900 circulars in 2010 alone is a clear reflection of the UGC’s direct intervention in the operations of the public university system. Most of these circulars deal with appointments, promotions, transfers, payments, and course fees. However, from the public welfare point of view, UGC intervention is deemed justifiable, particularly in the areas of curriculum development, quality assurance, and utilization of public funds.

developing more complex supervisory and reporting schemes as they relax direct control. In Sri Lanka, it appears that accountability is pursued more through close regulation than through performance monitoring.

Private higher education institutions come under different legal provisions, and so are not subject to state interference. Even the UGC-approved degree-awarding institutions experience minimal state intervention after going through the standard approval process. Cross-border education providers are also unaffected by government regulatory controls.⁸² The institutions registered under Board of Investment (BOI) regulations receive tax holidays and the remission of customs duties. The length of the tax holiday varies from 5 to 12 years, depending on the number of students at the institution and the number of centers located outside the Colombo and Gampaha regions. For example, an institution with 250 students would be eligible for a 5-year tax holiday, while one with 2,000 or more students would be eligible for a 12-year tax holiday. The private providers registered under the Companies Act No. 17 of 1982 are also not subject to any controls imposed by the UGC or MOHE.

As stated in the Department of National Planning's development policy framework, without the existence of a thriving private sector, the national targets for private sector participation in higher education would be unachievable.⁸³ Not only would the cost of expanding the public university system be more than the government could afford, the existing public universities could not adequately respond to changing market needs. In contrast, private providers can move faster and sometimes more effectively to fill gaps in the supply of higher education services. The Department of National Planning noted that the state will promote public-private partnerships and private sector participation in developing higher education facilities. This is a positive response from the government, and it needs to be strengthened with the necessary institutional and policy support. The immediate requirement in this regard would be an amendment to the 33-year-old Universities Act with a clear emphasis on increased access, autonomy, governance, accountability, entrepreneurship, and public-private partnerships.

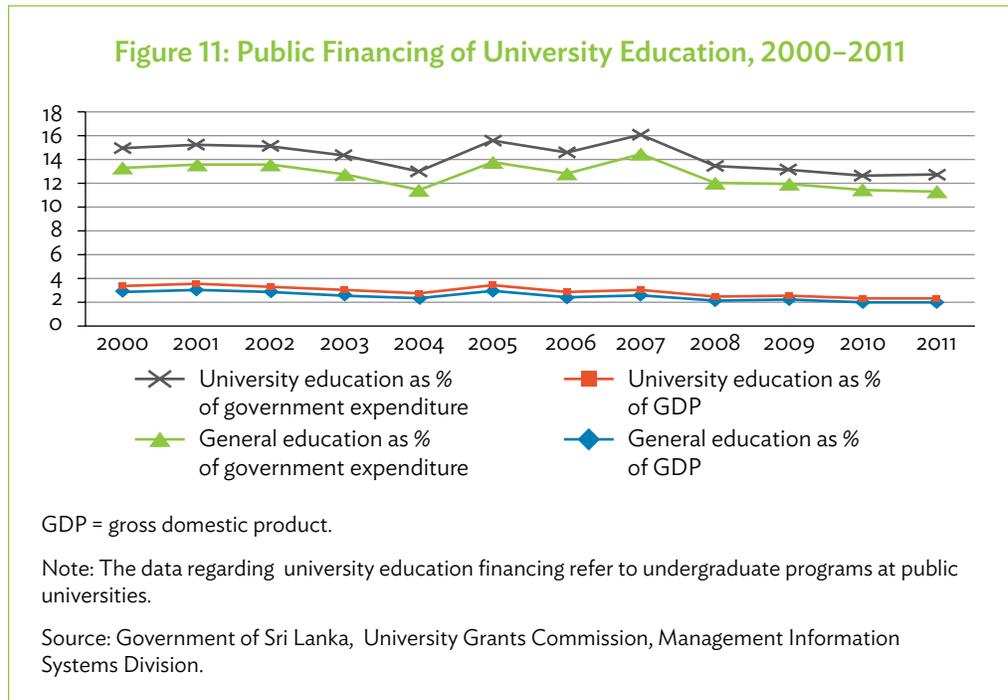
Similarly, the complexity of Sri Lanka's higher education system makes the division of responsibilities difficult to define. Higher education activities cut across several ministries (e.g., higher education, youth affairs and skills development, science, industry, defense, and technology), of which a number are not directly concerned with education. There are thus many government agencies that have legitimate policy interests in—and managerial authority over—higher education activities. Coordination of these interests is needed if the government is to arrive at a national strategic framework for the future. In addition, the categories of higher education activities are also changing, though they continue to involve individuals belonging to different age groups, part-time and full-time students, and distance learning students. Finally, as higher education is becoming a global business, there is also a need to consider the growing roles of the private sector and professional bodies as higher education providers. It is important that legislation avoid creating barriers to flexibility; institutions will need to adapt and change, and the law should not stand in their way.

⁸² In Sri Lanka, private higher education providers are not subject to quality monitoring by the Quality Assurance and Accreditation Council (QAAC). However, the government is planning to establish a quality assurance system for private providers.

⁸³ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*.

E. Costs, Financing, and Internal Efficiency

Public financing and per capita cost. Figure 11 shows the relative shares of public expenditure allocated to general education and higher education. The average annual public investment in higher education during 2000–2011 was 1.4% of the national budget and 14.1% of the total budget for education.



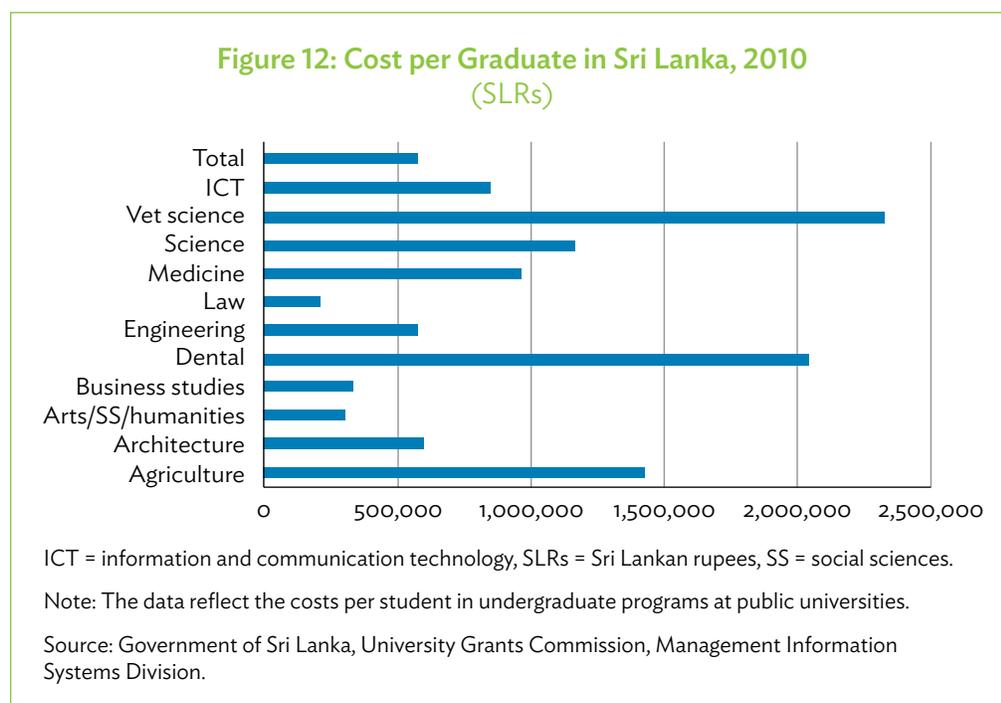
Education expenditure in Sri Lanka amounts to 1.9% of GDP and 7.3% of the government budget. This is far below the average level of investment maintained by low- and middle-income countries (4% of GDP). It is also much lower than the average investment levels maintained by East Asian countries (such as the Republic of Korea, Malaysia, Singapore, and Thailand) and by South Asian countries (such as Bangladesh and Nepal). As a result, investment in education on a per capita basis is also low. The public recurrent expenditure per student as a share of per capita GDP was 9.1% in Sri Lanka in 2009, in contrast to 15% in Malaysia and 18% in Thailand.⁸⁴ The per capita cost of university education in Sri Lanka remained at \$1,250 until 2004, then increased to \$1,800 in 2006, but slightly declined to \$1,700 in 2008.

Government grants traditionally account for about 95% of total public university income, with the rest coming from sources such as interest, rent from properties, sales, fees, and hostel fees. Income data for 2010, however, indicate that the relative share of other income increased to 13% of total income. This was mainly due to income coming from graduate

⁸⁴ World Bank, *The Towers of Learning*.

and other extension programs. Government grants cover both capital and recurrent expenditures of public universities, but the relative size of recurrent expenditures has increased significantly since the mid-1980s, crowding out capital expenditure, which is vital for long-term quality improvement, growth, and expansion. A comparison of unit costs reveals a marginal decrease in recurrent expenditure from 2009 to 2010.

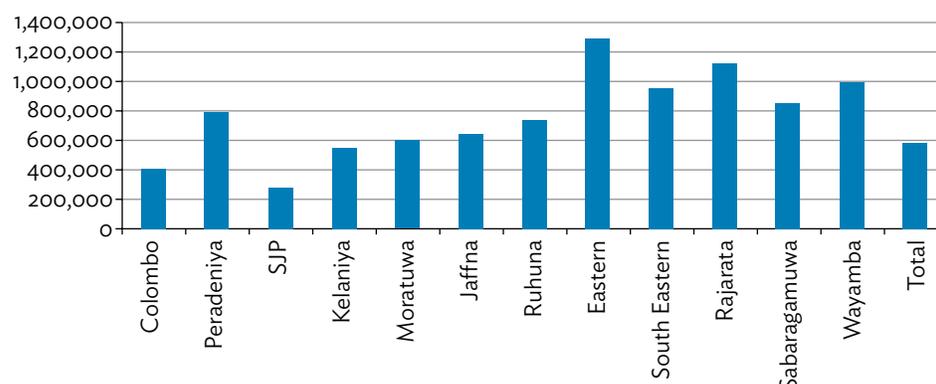
In addition to unit cost analysis, separate cost estimates were prepared for this study by taking into account the unit recurrent cost per undergraduate, completion rates, and the number of years of study in the program.⁸⁵ The findings indicate that the average cost per bachelor's degree graduate in 2010 was about SLRs 561,476 (\$4,271). The unit cost of undergraduate studies in Sri Lanka does appear to be on the low side relative to the average for the countries of the Organisation for Economic Co-operation and Development (OECD), which was \$11,512. There are also cost variations among disciplines, with programs in veterinary science shown to be the most expensive in 2010, followed by dental science and agriculture. At the low end were programs such as law, business studies, and the arts, with unit costs well below the overall average of SLRs 495,129 (\$3,772). (Figure 12).



The interuniversity variations in unit costs were analyzed using the same methodology, and the findings show that in 2010 they were highest at Eastern, Rajarata and Wayamba universities (Figure 13).

⁸⁵ These cost estimates are based on the following methodology: (i) First, calculate the completion rates, which is done by multiplying enrollment in the final grade by the examination pass rate, and dividing the result by the enrollment in the first year of studies, which is the year when the class entered the institution; and (ii) calculate the cost per graduate, which is the unit recurrent cost per graduate times the number of years of study in the program, divided by the completion rate. For the purposes of this analysis, the duration of study is assumed to be 3 years.

Figure 13: Cost per Graduate in Sri Lanka, by University, 2010 (SLRs)



SJP = University of Sri Jayewardenepura, SLRs = Sri Lankan rupees.

Note: For each university, the average cost per student is for undergraduate programs only.

Source: Government of Sri Lanka, University Grants Commission, Management Information Systems Division.

The interuniversity variations of unit costs need to be analyzed further in the context of the financing and internal efficiency of the public university system. Chandrasiri (2003) makes an attempt to identify key determinants of unit costs in terms of cost per undergraduate and cost per degree program. The data reveal that the student–teacher ratio, proportion of nonacademic staff, and discipline-specific costs are important variables in controlling the unit costs of undergraduate programs. There has been a disproportionate increase in the share of nonacademic staff since the 1980s, with a large number of administrative and clerical employees performing the same tasks, without any improvement in efficiency. In addition, the quality and commitment of nonacademic employees have deteriorated significantly due to heavy protection by trade unions, capacity limitations, and limited exposure to modern management techniques.⁸⁶

Academic staff salaries. Another key issue faced by policy makers in higher education is the low salaries of university faculty. As shown in Table 7, faculty salaries, which average about \$530 per month, are much lower than those earned in the business sector. In Sri Lanka, a lecturer with a doctorate typically earns one-third of the salary earned by a manager with a bachelor’s degree and 5 years of work experience. Similarly, a senior professor’s salary is on average 30% lower than the salary of a senior manager in the corporate sector. This issue has been heavily debated among academics and policy makers.⁸⁷ As noted in the 2011 and 2012 budgets, the government granted salary increases

⁸⁶ S. Chandrasiri. 2003. Financing of University Education in Sri Lanka. *Higher Education*. 45 (1). pp. 91–108.

⁸⁷ In fact, academics went on strike for about 2 months (June–July 2012) demanding an increase of education expenditure to 6% of GDP and an increase in the salaries of university lecturers.

to academics for 2 years, starting in January 2011, including a monthly research allowance equivalent to 25% of their base salaries.⁸⁸

Table 7: Salaries of University Faculty, per Month
(\$)

Category	Up to 7 January 2011		From 7 January 2011 ^a	
	Starting	Maximum	Starting	Maximum
Professor	511	548	960	1,056
Associate professor	406	502	805	897
Senior lecturer	377	427	717	805

^a Beginning on 7 January 2011, academics received salary increases in the form of various allowances, including academic allowances, research allowances, etc.

Source: Government of Sri Lanka, University Grants Commission.

Resource budgeting and allocation process. The financial systems of public universities in Sri Lanka are input-oriented, resulting in planning, budgeting, and accounting systems that prevent cost recovery, quality management, and cost-effective and financially sustainable strategies. The government allocates an annual block grant to the UGC to be distributed among universities and institutes. The budgeting process at the university level is based on the historical method, which simply uses the preceding year's expenditure as the basis for allocating funds, with some upward adjustment for inflation, promotions, salary increases, and newly approved projects and programs. It does not utilize widely accepted budgeting methods based on "inputs," "outputs," and "quality."

The existing resource allocation mechanism for higher education is strongly centralized and regulated. It does not provide incentives for innovation or improvements in efficiency. Public universities should be empowered to expand their funding sources beyond traditional government budget allocations. Before making any such moves, however, they must strengthen their management capability, financial control, analytical skills, and social marketing expertise.

The growing demand for higher education is causing financial strain on governments in both the developed and developing worlds. In addition, the demand for public funds from other sectors will also continue to grow. Thus, large shifts in government financing toward higher education could decrease government funds for other social sectors. It is therefore critical that new initiatives in the higher education sector be designed to increase cost efficiency through cost sharing and partnerships, with a special emphasis on quality and

⁸⁸ This allowance was first made available in January 2011 and, like the rest of the salary increase, it lasted for 2 years. During this time, the recipient's research had to be completed and the findings published.

equitable access so as to support inclusive growth.⁸⁹ Although Sri Lanka is maintaining an 8% annual GDP growth, its resources are likely to be strained during 2015–2020.

Governments around the world use one of five methods to allocate resources to universities, and sometimes a mix of them: (i) as part of the government budget, (ii) through annual negotiation, (iii) per-student formulas, (iv) performance-based funding, and (v) competitive bidding.⁹⁰

The application of these funding methods varies around the world. In the majority of countries, the per capita allocations are based on student enrollments of the previous year, and the formulas used are transparent to all. However, in most cases, allocations are based on outputs and results, rather than on inputs into the system. For example, in the Netherlands, 50% of allocations are based on the number of degrees awarded; and in Norway, 25% of funding is related to factors such as student credits completed and the number of graduates. In Australia, the allocation of resources is for 3 years, so that institutions can plan with some certainty; while in Switzerland, it is based on the contributions that universities obtain from third parties, so as to reward success in external income generation. A widely used approach is to allocate the funding (determined by formulas or other means) in the form of a lump sum, or block grant. This means that the institution is not subject to any detailed “line item control,” and has total freedom to decide how the grant money shall be spent.⁹¹ In view of the various methods of public financing, it is evident that Sri Lanka’s higher education sector needs to employ an innovative mechanism for allocating public funds. The existing body of research proposes interesting and promising programs that have various degrees of sophistication.

Cost sharing. The 1.5% share of total government expenditure allocated to higher education is grossly inadequate for meeting the development needs of that sector. The public universities are faced with severe capacity and resource constraints, and thus need to optimize their use of facilities, equipment, laboratories, lecture halls, and human resources. Supplementing governmental with nongovernmental revenue sources seems a sensible way forward. The tradition of providing fully subsidized higher education is no longer financially feasible in Sri Lanka, in view of the basic social services competing for public financing.

In fact, the world trend in higher education financing has been a shift toward increased cost sharing.⁹² Even countries such as the Russian Federation, which has a constitutional provision stipulating free higher education, and the PRC, which had a 40-year tradition of free higher education, have adopted cost sharing.⁹³ Similarly, in 1996, Thailand introduced a new loan-based cost-sharing plan modeled on the Australian system. A number of other developing countries that had at one time embraced the free higher education policy have

⁸⁹ J. Sarvi. 2008. Higher Education in Asia and the Pacific Region: Issues of Financing and Partnerships, Particularly from the Perspective of Access, Equity, Quality, and Diversity of Higher Education. Paper presented in Asia-Pacific Subregional Preparatory Conference for the 2009 World Conference on Higher Education. Macao. 24–26 September.

⁹⁰ Fielden, Global Trends in University Governance.

⁹¹ Fielden, Global Trends in University Governance.

⁹² Asian Development Bank (ADB). 2009. *Good Practice in Cost-Sharing and Financing in Higher Education*. Manila. <http://www.adb.org/sites/default/files/publication/28623/good-practice-cost-sharing-financing-educ.pdf>

⁹³ For example, the People’s Republic of China (PRC) implemented a large-scale cost recovery plan in 1997.

changed their policies since around 2000.⁹⁴ In general, the main objective of cost sharing in higher education is to increase the total level of resources available to the higher education sector and to contain public expenditure.

Private higher education providers. One of the most direct ways to foster cost sharing in Sri Lanka is to encourage private providers to expand their higher education services. Not only is the cost of expanding the public higher education sector beyond the budgetary means of the government, the public universities themselves are unable to respond adequately to the changing needs of the market. In contrast, private providers can often fill the gaps in the supply of higher education services faster and more effectively.

Private sector participation in higher education has been opposed on the grounds that it would deny low-income students the opportunity for a higher education. However, the space for students in the public university system is inadequate, so much so that a large number of students who can afford to do so leave the country to attend foreign universities.

Investment in higher education. There is a need to increase investment in higher education. The dynamic plans laid out for higher education, and its proposed role in the country's economic development, will require considerable additional funding. The obvious source for that funding is student fees, and the feasibility of this option can be demonstrated by the willingness of middle- and high-income families to pay for their children's higher education. In fact, tuition payment at private institutions is already seen at both the primary and secondary levels, and it would be acceptable even at the tertiary level, in view of the high private rates of return.⁹⁵ At present, the total tuition charged by private institutions for a student's education varies from SLRs 650,000 (\$4,945) to SLRs 1,200,000 (\$9,129), depending on the degree program; and institutions with foreign affiliations tend to be more expensive than their local counterparts. The observed private rates of return on higher education have been rising in most countries, and international analyses suggest that the private rates of return exceed the social rates of return (Table 8). Moreover, when higher education fees are introduced, it is common to establish a system of student grants to offset the impact on students' families.

Table 8: Private and Social Rates of Return on Education
(%)

Education Level	Estimates for Sri Lanka					
	ADB Estimates		Private		Social	
	Private	Social	Male	Female	Male	Female
Primary	27	19	19	25	15	20
Secondary	17	13	25	22	20	18
Tertiary	19	11	26	24	11	10

Sources: Asian Development Bank (ADB). 2008. *Education and Skills: Strategies for Accelerated Development in Asia and the Pacific*. Manila; World Bank. 2005. *Treasures of the Education System in Sri Lanka: Restoring Performance, Expanding Opportunities and Enhancing Prospects*. Colombo; and World Bank and ADB. 2005. *Sri Lanka: Improving the Rural and Urban Investment Climate*. Colombo and Manila.

⁹⁴ ADB, *Good Practice in Cost-Sharing and Financing*.

⁹⁵ The "private rate of return" refers to the costs borne by a student (or the student's family) and the resulting benefits to the student after graduation. This is in contrast to a social rate of return, which refers to the costs and benefits to the economy as a whole (especially to the taxpayer).

Overall, Sri Lanka's higher education system is not delivering the skills and research outcomes the country needs. This is primarily due to the gross underfunding of higher education. Unmet financial needs exist for research, labs, libraries, and academic staff salaries and benefits.

Tuition. Tuition varies from 11% to 54% of total income at universities across five Asian economies (Table 9). For example, in the PRC, tuition payments are the main source of higher education financing, with the average university tuition in Beijing ranging from \$615 to \$806 in 2010. Tuition for science and engineering programs vary from \$674 to \$806 per year, while in languages and medicine they range from \$879 to \$7,332. In Viet Nam, policies are in place to encourage tuition deductions and exemptions, as well as financial aid schemes for low-income students. The introduction of tuition fees appears to be a feasible financing option for Sri Lanka, given its unmet demand for higher education, the willingness of students' families to pay, and the potential benefits of education to both the public and to individuals.

Table 9: Revenue Mixes of Public University Systems in Five Countries
(%)

Economy	Government Subsidies	Tuition	Other Income
PRC (2004)	47	30	23
Indonesia (2009)	56	38	6
Mongolia (2008)	35	54	11
Philippines (2006)	73	11	16
Viet Nam (2010)	50	45	5

PRC = People's Republic of China.

Source: World Bank. 2012. *Putting Higher Education to Work: Skills and Research for Growth in East Asia*. World Bank East Asia and Pacific Regional Report. Washington, DC.

Student financial aid. Without a financial aid option, however, the tuition payment system could adversely affect equity, presenting an insurmountable barrier to higher education for many students in Sri Lanka. There should be a combination of monetary instruments to ease the barriers for the disadvantaged. Mongolia and Viet Nam have used a fairly effective combination of instruments to assist disadvantaged groups, and Sri Lanka could implement similar innovative financial aid policies.

One of the commonly applied instruments in this regard is the student loan scheme, which Malaysia and Thailand depend on heavily. For example, in Malaysia, the National Higher Education Fund Act 1997 provides loans to facilitate access to public and private higher education. It comprises both full and partial loans to cover tuition and living expenses. Similarly, the Student Loan Fund, instituted by the Government of Thailand in 1996, aimed at increasing the access of low-income families to upper secondary, vocational, and university education. The loans cover tuition, schoolbooks, supplies, and living expenses. In Viet Nam, about 29% of the students enrolled at the country's 103 higher education institutions are supported by a loan scheme. For Sri Lanka, an estimate of the potential costs of a proposed loan scheme for disadvantaged students at private higher education

institutions revealed that the government would incur annual incremental costs of SLRs 700 million (\$5.33 million for 1,000 students).⁹⁶

It is important to note that financial reform in higher education is more of a political than a technical issue. There is also no clear consensus regarding the desirability of higher-education cost sharing. In Sri Lanka, cost recovery is a very sensitive issue, in spite of the serious limitations of the present higher education system. However, the consequences of inaction on this matter would be very severe, particularly in light of the strong development potential of higher education in Sri Lanka. Inaction on the cost-sharing issue would also hinder the achievement of the government's projected higher education development targets. On the global level, experience has shown that cost recovery is best introduced gradually, in stages.

Entrepreneurial development of universities. Entrepreneurial activities are another possible source of financing for universities, as well as a means of attracting foreign students. Many universities in developing countries find that they are able to generate 10% to 15% of their budget from such activities, against an average 7% in Sri Lanka. As noted earlier, the entrepreneurial potential of Sri Lankan universities is constrained by various administrative and financial regulations, and by a traditional and inward-looking orientation. As a result, the university system has failed to fully benefit from the ever-growing market opportunities for revenue generation, despite having a large pool of human resources with marketable skills. There is also a suboptimal utilization of the physical resources of public universities. Entrepreneurial initiative within each university could be promoted through a separate administrative unit equipped with the necessary human resources, administrative support, dedicated funding, and infrastructure facilities. Such a "unit" would be tasked with augmenting the income of faculty members, so they would be motivated to remain at the university, and with upgrading their value to the economy and society. Potential entrepreneurial activities could include the following:

- (i) **consulting services** for private industry, government ministries, national planning departments (NPDs), donor agencies, and foreign firms, in such areas as management, accounting and auditing, science and technology, database management, management information system design, preparation of project feasibility studies, urban planning, and legal services;
- (ii) **training services** for industry, government agencies, NGOs, and donor agencies; and
- (iii) **research services** for government and the private sector, including research and development (R&D) on new products, industry analysis, market surveys, environmental assessments, and socioeconomic surveys.

Thus, Sri Lankan policy makers should think of a broader concept of revenue generation for the higher education sector, one that encompasses a wide range of higher education services targeted at both domestic and foreign markets. Many senior academics are internationally recognized and have the capacity to participate in foreign assignments. Such avenues could be exploited through the provision of infrastructure and policy support.

⁹⁶ This was based on the assumption of SLRs 700,000 (\$5,325) in total tuition charged per student by private higher education institutions.

F. Information and Communication Technology Development

In spite of its high potential for growth and expansion, the position of ICT development in Sri Lanka is relatively weak compared with ICT's status in India and Malaysia (Table 10). More specifically, Sri Lanka needs to improve internet access in its schools, internet access to hard data, and the number of broadband internet subscribers. Its low ranking in ICT development relative to other Asian countries seriously affects national long-term growth and development. In fact, an immense opportunity exists for Sri Lanka to participate in the global market for knowledge-based services, including software development, programming, and business process outsourcing. This is particularly true given that competitive pressures are driving large corporations to seek high-quality, cost-effective sources for services in new and emerging markets.

The revenue generated by Sri Lanka from its software exports is currently estimated at \$80 million per year. The local software industry believes that Sri Lanka could achieve \$1 billion in ICT-related service exports by the end of 2016—with the right mix of industry coordination, support from academia, and the establishment of a policy environment conducive to ICT growth.⁹⁷

Table 10: Sri Lanka's Rankings in Information and Communication Technology Development, 2012–2013

Indicator	Number of Countries Ranked	Sri Lanka	India	Malaysia	Viet Nam
Quality of math and science education	144	69	30	20	58
Internet access in schools	144	105	75	38	41
E-readiness ranking	70	60	54	34	65
E-learning readiness ranking	70	59	45	25	57

Sources: Schwab, Klaus. 2012. *The Global Competitiveness Report 2012–2013*. Geneva: World Economic Forum; and Asian Development Bank (ADB). 2012. *Access without Equity? Finding a Better Balance in Higher Education in Asia*. Manila.

The government has invested extensively in information technology (IT) education at public universities and in promoting the use of IT in administration, monitoring, and other functions of the public higher education system. In 2009, the Treasury provided an initial grant of SLRs100 million (\$760,746) for the development of IT at the public universities.⁹⁸ The level of ICT (infrastructure, hardware, software) development and use within the higher education system, particularly at the public universities, is relatively low, with wide

⁹⁷ Information and Communication Technology Agency of Sri Lanka (ICTA). 2011. *National ICT Workforce Survey–2011*. Colombo.

⁹⁸ This grant was subsequently reduced to SLRs 85 million (\$619,850).

variations within and among institutions. For this reason, the Department of National Planning's development policy framework spells out an ICT development plan for the higher education system as follows: "Therefore, the ICT sector stands out as one of the potential areas for development and income generation and for job creation in the country. In order to meet this increasing demand for ICT graduates, a new university is planned to be set up as a partnership project with the private sector. This will be a dynamic and modern university, equipped with cutting-edge technology and committed to ICT, and science and technology education. The university will provide world-class education within the broad sphere of telecommunications, multimedia, computers, digital art, animation, information technology, software development, and science and technology."⁹⁹

In the public university system, ICT is currently used in administration, teaching, self-paced learning, and research, with the pattern of usage varying significantly across institutions. ICT is heavily used in the accounting and finance divisions of public universities; none of them, however, use the advanced software capable of generating the databases needed for the fast and efficient retrieval of information for decision making. The university examination divisions use ICT mainly for record keeping, as integrated database management systems have yet to be initiated.

In terms of the use of internet resources, open source courseware, and available teaching and learning software, some of the universities (particularly those offering ICT programs) have made significant progress since 2010. The University of Colombo School of Computing (UCSC) is a pioneer in this field, particularly with respect to its bachelor of information technology program.

Several donors have been actively participating in the ICT development of the higher education sector since 2005. Most of their contributions have been university-specific and program-oriented (e.g., the establishment of the UCSC with support from the Japan International Corporation Agency). The most recent intervention in this regard has been the World Bank-sponsored Improving Relevance and Quality of Undergraduate Education (IRQUE) project, which ended in June 2009. Its intervention in ICT aimed mainly to develop an integrated information system for the entire public higher education sector. It included three management information systems: (i) the Higher Education Management Information System (HEMIS), (ii) the National Higher Education Management Information System (N-HEMIS), and (iii) the University Higher Education Management Information System (U-HEMIS).

The N-HEMIS was developed to provide information for the planning, monitoring, and evaluation of the entire higher education sector.¹⁰⁰ It was established by the German higher education statistics agency, Hochschul-Informations-System GmbH, and is hosted on the servers of the UCSC and the Ministry of Higher Education (MOHE). The UCSC provided local technical support, and the UGC and the National Education Commission (NEC) implemented N-HEMIS data marts. HEMIS has also shown continuous progress since 2008. Its student information system module has been implemented at four universities

⁹⁹ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 123.

¹⁰⁰ The web-based N-HEMIS has been fully implemented by the Ministry of Higher Education (MOHE).

(Colombo, Kelaniya, Sabaragamuwa, and Sri Jayewardenepura), with the training of the relevant staff already completed.

G. Research and Development

The Department of National Planning's development policy framework notes that a lack of adequate human capital for R&D and of innovation in high-tech areas is a major constraint faced by the science and technology sector in Sri Lanka. It also states that only 5%–20% of university faculty are engaged in research, while more than 90% of research by academics with doctorates is concentrated in the social sciences. Hence, universities should expand science programs and facilities, encourage its faculty to acquire doctorate degrees, and conduct more research. The diffusion of R&D remains weak, and attempts to forge links among universities, industry, and government organizations have not been very successful. This could be attributed to a lack of interest and initiative on the part of university administrations and academics, and on the part of industry leaders and industry promotion associations. As shown in Table 11, the total number of scientists recorded by human resources departments at higher education institutions, government agencies, and NGOs decreased from 4,520 in 2006 to 4,037 in 2008, a clear indication of a decline in local capacity for scientific research. This could be attributed to several causes, among them low investment in R&D, the inward orientation of the university education system, a narrow industrial base, brain drain, and inadequate institutional and policy support.

Table 11: Numbers of Scientists and Technicians in Research and Development, by Sector, 2006 and 2008

Sector	2006.				2008			
	Scientists		Technicians		Scientists		Technicians	
	No.	%	No.	%	No.	%	No.	%
Higher education institution	2,839	62.8	807	42.1	2,466	61.1	793	36.6
State	1,479	32.7	1,031	53.8	1,187	29.4	1,204	55.6
Private and NPD	202	4.5	80	4.2	384	9.5	169	7.8
Total	4,520	100.0	1,918	100.0^a	4,037	100.0	2,166	100.0

NPD = national planning department.

^a The percentages in this column do not total 100% because of rounding off.

Source: Government of Sri Lanka, National Science Foundation. 2008. *National Survey of Research and Development in Sri Lanka 2008*. Colombo.

The intensity of R&D in a country is calculated based on various proxy measures. In terms of human resources, the number of scientists and researchers in Sri Lanka has stagnated at around 190 per million people. Although this ratio is higher than those for India (157) and Pakistan (69), it stands in stark contrast to the ratios for Thailand (330), Malaysia (430),

and Singapore (7,000). Sri Lanka's gross expenditure on R&D is around 0.14%. Its high-technology exports are a mere 1% of its manufactured exports, while it is 24% for Thailand and 45% for Malaysia. Moreover, Sri Lanka has very few United States (US) patents granted each year, and the royalty and license fees it receives are nil.

At present, there are several public sector institutions engaged in R&D, but the quality of these institutions needs to be improved through the provision of adequate resources.¹⁰¹ The Ministry of Science and Technology is the key agency entrusted with the task of promoting R&D in Sri Lanka. The science and technology sector is currently faced with several constraints: (i) lack of funds, (ii) lack of well-trained professionals at research institutions, (iii) lack of an entrepreneur-supportive research institution network, (iv) an inadequate level of high-end technology exports, (v) the inadequate R&D orientation of universities, and (vi) inadequate university–industry linkages.

¹⁰¹ Among the institutions engaged in R&D are the Industrial Technology Institute, National Science Foundation, National Engineering Research Development Centre, Atomic Energy Authority, Arthur C. Clark Institute of Modern Technology, Council on Information Technology, Sri Lanka Institute of Nanotechnology, and the Department of Meteorology.

CHAPTER 4

Innovations and Good Practices

A. Development Plans and Targets

The government has outlined the country's development agenda for higher education. Its 10-year development framework for 2006–2016 devotes a full chapter to education, identifying equity, quality, efficiency, and effectiveness as key issues that need to be addressed.¹⁰² The overall goal of the education policy articulated in the Department of National Planning's development policy framework is “to transform the education system into one that will provide the technological skills required for rapid economic growth and national development.”¹⁰³ It also specifies that, while all the public universities will be allocated resources and brought up to the minimum standards required for accreditation, the universities will be encouraged to specialize in priority areas of national development and thus become centers of excellence in the region, and to explore other sources of funding.¹⁰⁴

The government's 2012 budget speech made particular reference to skills development, university–industry linkages, productivity improvement, the promotion of knowledge-based economic activities, and the maintenance of an 8% growth rate from 2012 to 2016. The development policy framework of the Department of National Planning sets out the expected development targets, particularly with respect to the higher education sector, as follows: “Sri Lanka has emerged as a promising economy in Asia and expected to take off over the forthcoming years, and increase its per capita income to over \$4,000 by 2016. Changing structure of the national economy, combined with rapidly changing technology, increasing income of people and modernization of lifestyles and global links will open up new employment opportunities with specific technical knowledge and skills. The demand for an educated, skilled and professional workforce is projected to rise in the medium term.”¹⁰⁵ The development policy framework also outlines several targets regarding student enrollment in higher education, which is expected to increase from 21,000 in 2010 to 40,000 in 2020. Foreign student enrollment is projected to increase from 307 in 2010 to 12,000 in 2015, and then to 50,000 by 2020.¹⁰⁶

¹⁰² Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning, 2006. *Mahinda Chintana: Vision for a New Sri Lanka; A Ten Year Horizon Development Framework 2006–2016; Discussion Paper*. Colombo. <http://www.thegef.org/gef/sites/thegef.org/files/documents/MahindaChintanaTenYearDevelopmentPlan.pdf>

¹⁰³ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 114.

¹⁰⁴ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*.

¹⁰⁵ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 130.

¹⁰⁶ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*, p. 121.

To further detail the government's policies and strategies for tertiary education, the National Policy Framework on Higher Education and Technical & Vocational Education was formulated and submitted to the government by the NEC in June 2009. However, it did not contain specific targets for higher education, so there was still a need to design a comprehensive development program for the public higher education system, including the provision of resources.

B. Policies, Plans, and Programs

The MOHE, the NEC, and the UGC, in consultation with stakeholders in the higher education system, prepared a development framework for higher education. Similarly, the National Policy Framework on University, Technical and Vocational Education, prepared by the NEC in 2010, outlines detailed strategies and action programs for higher education. In addition, the World Bank's Higher Education Sector Report, published in 2009, provides a comprehensive analysis of Sri Lanka's higher education system and highlights three major areas for future reforms: (i) improving quality and relevance; (ii) developing internationally recognized and market-oriented degree programs; and (iii) implementing quality assurance and accreditation systems.

A major theme has been the importance of developing human capital at the university level to the achievement of the country's development targets. The 2013 budget speech stated, "Skills education and university education should be re-oriented to ensure that all graduates who pass out will be gainfully employed in the economy, which should be the priority in education reforms. Toward this, career development among teachers and university academia, training, improvements in teacher training and the working environments, an incentive structure and professional security for academic staff, modern infrastructure and technology and accommodation for students, need to be developed."¹⁰⁷ The speech also set the goal of making it possible for 10% of the children entering the school system each year to later have a university education.¹⁰⁸

Based on the findings of the existing body of studies on higher education reform, and based on government policy statements, including the 2011–2015 Second Five Year Plan Framework,¹⁰⁹ the following can be identified as the main goals for future reforms: (i) enhance the employability of university graduates, (ii) enhance the human resource development and research output of higher education institutions, and (iii) implement policy support and administrative reforms.

¹⁰⁷ Government of Sri Lanka, Ministry of Finance and Planning, 2012. *The Budget Speech 2013*, p. 44 (para. 36.2). Colombo. <http://www.treasury.gov.lk/depts/fpd/budgetspeech/2013/budgetSpeech2013-eng.pdf>

¹⁰⁸ Ministry of Finance and Planning, *Budget Speech 2013*, p. 44 (para. 36.2). At present, only 2% of the age cohort starting school each year eventually goes on to a university education.

¹⁰⁹ Ministry of Finance and Planning, *Budget Speech 2013*, p. 6 (para.4.1).

C. Reform Programs

In 1998, Sri Lanka commenced educational reforms that have dealt with several key issues, including the diversification of academic programs, staff development, financing, student welfare, and graduate studies.¹¹⁰ More specifically, they have covered the following needs of the university education system: (i) expansion of the public higher education system; (ii) curriculum reform and the diversification of university courses; (iii) state university–private sector linkages; (iv) career guidance and counseling; (v) university admissions and management; (vi) staff training, development, and assessment; (vii) financing; (viii) student issues,¹¹¹ and (ix) graduate research and training.

The efforts of the UGC and the universities to implement the above reform agenda have led to several success stories. Some of the universities and faculties have been able to implement several reform programs during the post-1998 period.

The UGC has also introduced several institutional innovations and development activities (Box 1). The first initiative, the establishment of new universities with an innovative orientation, began with the setting up of three public universities and their faculties: (i) Uva Wellassa University, in Badulla;¹¹² (ii) University of the Visual & Performing Arts, Colombo;¹¹³ and (iii) Trincomalee Campus, of Eastern University, Sri Lanka.¹¹⁴

The establishment of career guidance units (CGUs) at state universities was an important innovative reform that was implemented in 2003. In fact, at its meeting on 1 September 2003, the UGC decided that CGUs must be further developed and made an integral part of the public university system. Subsequently, a separate standing committee on career guidance was established, with particular attention paid to the following:

- (i) undertaking activities in the areas of career counseling, information services, networking, work experience opportunities, graduate placement, and integration into curricula;
- (ii) ensuring stakeholder participation, as appropriate, including through such mechanisms as university “career guidance advisory committees”; and
- (iii) maintaining databases on student profiles and employment opportunities, in addition to providing support for self-employment and entrepreneurship initiatives.

The UGC has also made arrangements to provide the administrative positions needed to improve career guidance services within the state university system. The objectives of the career guidance program are to help expose undergraduates to the world of work and

¹¹⁰ The Sixth University Grants Commission. 2006. *The Development of the University System of Sri Lanka, 2001–2006*. Colombo: UGC.

¹¹¹ Student issues include financial support and the improvement of student facilities such as canteens, hostels, healthcare centers, lecture halls, and educational supplies and equipment.

¹¹² Uva Wellassa University has three faculties: Science and Technology, Management, and Animal Science and Export Agriculture.

¹¹³ The University of the Visual & Performing Arts has three faculties: Visual Arts, Dance & Drama, and Music.

¹¹⁴ Eastern University’s campus in Trincomalee has two faculties: Applied Sciences and Communication and Business Studies.

Box 1: Institutional Innovations and Development Activities

- (i) Establishment of new universities with an innovative orientation;
- (ii) Establishment of four new institutes and a school (e.g., computer school, school of business administration, etc.);
- (iii) Creation of seven new faculties;
- (iv) Establishment of 13 new departments, a unit, and a center;
- (v) Recognition of five new degree-awarding institutes;
- (vi) Sponsoring of projects by seven development partners:
 - (a) World Bank (Improving Relevance and Quality of Undergraduate Education project),
 - (b) Asian Development Bank (Distance Education Modernization Project),
 - (c) Norwegian Agency for Development Cooperation (Norad),
 - (d) Swedish International Development Corporation Agency (Sida) (SASEC project),
 - (e) United Nations Population Fund (UNFPA),
 - (f) Japan International Cooperation Agency (JICA), and
 - (g) Government of the Netherlands;
- (viii) Strengthening of information technology facilities; and
- (ix) Establishment of a unit for quality assurance and accreditation.

SASEC = South Asia Subregional Economic Cooperation.

Source: Government of Sri Lanka, Sixth University Grants Commission. 2006. *The Development of University System of Sri Lanka, 2001–2006*. Colombo: UGC.

to improve their soft skills. At present, career guidance programs are conducted only for third- and fourth-year students at selected universities. By and large, the progress of career guidance since 2004 has been far behind the targets, which include appointing full-time counselors to the CGUs, maintaining job-opportunity databases, offering training on soft-skills development, promoting internships, and making career guidance available to all students.

Some of the universities have exposed students to the world of work through internships. Successful examples include the Department of Economics, University of Colombo; the Industrial Training Division, University of Moratuwa; and the Department of Accounting, University of Sri Jayewardenepura (Box 2). The University of Colombo's economics department, for instance, requires that undergraduates complete a 3-month internship, which can be in the public sector, private sector, or at an NGO. As calculated by the author from the results of student evaluations for 2007, skills development was rated the highest, with an average score of 4.4 on a 5.0 scale. The work environment and orientation program both received scores of 4.3, while departmental supervision averaged 3.7.

Staff development centers were established at all the public universities, and some of them have been successful in providing training for academic and nonacademic staff.

The government has also invested extensively in information technology (IT) education, with a view to promoting both academic and administrative uses of IT. The IT standing committee, set up by the UGC, also promotes the use of IT in the public university system.

Box 2: Examples of University Internship Requirements

Department of Economics, University of Colombo

It is mandatory that all undergraduate economics majors at the University of Colombo do an internship during the second semester of their fourth year, as a part of their requirements for a BA economics (honors) degree. The objectives of this program are twofold: to familiarize students with the world of work and to improve their work-related skills. A student's internship assessment comprises two course units: (i) work performance and (ii) a research paper. Work performance is rated based on three components: orientation assessment (10%), work performance evaluation (20%), and an institutional report (70%). The internship is overseen by two supervisors: one from the university and the other appointed by the organization providing the internship. The institutional participants in the internship program include the private sector (69%), NGOs (8%), and the public sector (23%).

Industrial Training Division, University of Moratuwa

The Industrial Training Division at the University of Moratuwa is an independent service unit functioning under the director of industrial training. This division coordinates with the National Apprentice and Industrial Training Authority to offer industrial training placements. Undergraduates in the Faculty of Engineering are jointly observed by university and institutional supervisors. In addition, the Faculty of Engineering helps students to become student or associate members of the Institution of Engineers Sri Lanka. It is mandatory that all undergraduates, after completion of their Level 3 examinations, undergo 24 weeks of industrial training (Module No. 3990) and obtain six non-GPA credits as part of their requirements for the BS (honors) degree from the Faculty of Engineering.

Department of Accounting, University of Sri Jayewardenepura

This university is streamlining the monitoring and evaluation of its internship program, which is part of the degree program in accounting, through the establishment of the Centre for Accounting Internship and Skill Development.

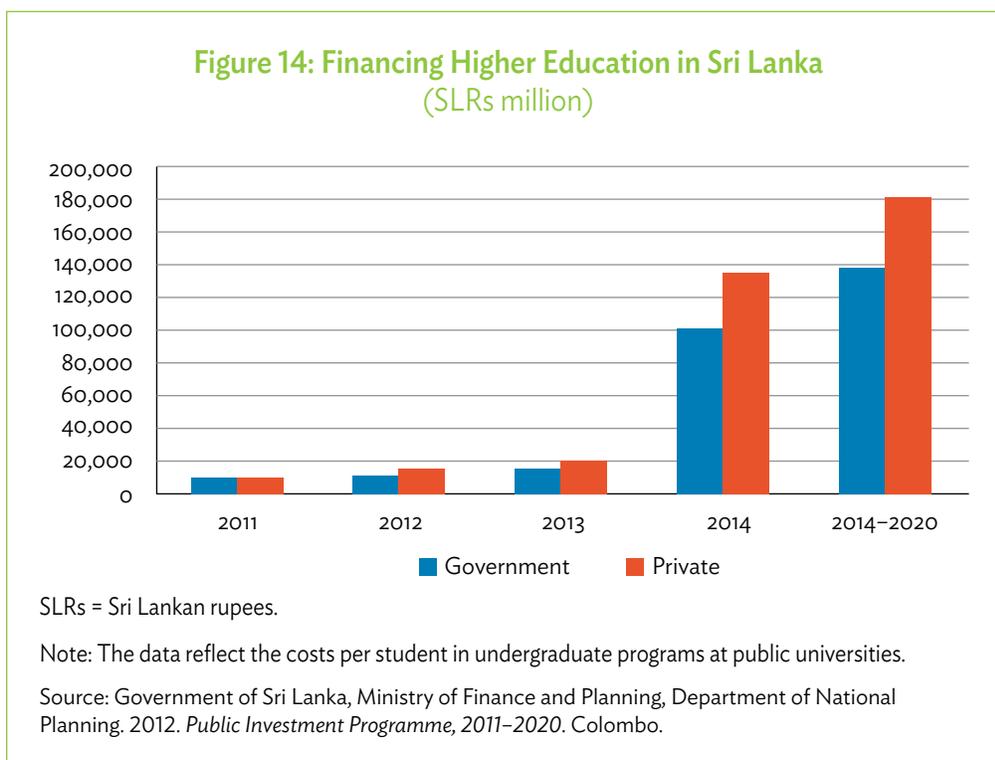
BA = bachelor of arts, BS = bachelor of science, GPA = grade point average, NPD = national planning department.

Source: Department of Economics, University of Colombo; Industrial Training Division, University of Moratuwa; and the Department of Accounting, University of Sri Jayewardenepura.

The undergraduate IT program at the University of Colombo School of Computing (UCSC) clearly demonstrates the possibility of introducing innovations to an external degree program (EDP) through public-private partnerships. The University of Moratuwa has come up with a similar program, which leads to a degree in ICT (Appendix 6, Box A6.1). The Faculty of Graduate Studies of the University of Colombo has introduced five programs using mobile learning ("m-learning"), which is the latest delivery mode based on ICT (Appendix 6, Box A6.2).

D. The Role of Official Development Assistance

Several donors have been assisting Sri Lanka's higher education system. However, their participation has been mostly limited to faculty- or department-specific projects. As indicated in its Public Investment Programme, 2011–2020, the government is planning to raise funds for higher education development from both foreign and domestic sources (Figure 14). The foreign share during 2011–2020 is expected to be around 43%.



Two projects funded by The World Bank—Improving Relevance and Quality of Undergraduate Education (IRQUE) and Higher Education for the 21st Century—have been the only major foreign-funded projects so far in Sri Lanka's higher education sector. The purpose of the IRQUE project was to reorient and improve tertiary education, with particular attention paid to the quality and relevance of undergraduate programs. The following are some of the major outcomes realized through the IRQUE project:

- (i) the improvement of university education by adding programs in general English and general IT skills, and the improvement of the student learning environment by providing institutional block grants;
- (ii) a breakthrough in the introduction of competition into the process of awarding funds to universities;
- (iii) training for both academic and nonacademic staff;

- (iv) improved social harmony among student groups in the university system;
- (v) the introduction of new practices, such as developing subject benchmark statements, subject reviews, external reviews, and institutional reviews;
- (vi) the establishment of the Quality Assurance and Accreditation Council (QAAC) and its recognition by the UGC; and
- (vii) curriculum development and the introduction of new academic programs.

E. Lessons Learned and Good Practices

The higher education system inherited by Sri Lanka when it gained independence, in 1948, was based on the traditional British system, and it was this tradition that influenced the changes in the system up to the early 1970s. Since then, many significant socioeconomic changes have taken place at the national level, with far-reaching implications for the higher education system. The promarket policy reforms of the post-1977 period led to major changes in the trade and industry sectors. The export-led growth strategy further accelerated these changes, with a high degree of integration into the global production system. These changes also created a high demand for university education in Sri Lanka. In response, the policy makers in the higher education system initiated several policy reforms after 1977. The post-1977 reform agenda covered a wide range of issues: curriculum reform, teaching methodology, student evaluation, market relevance, staff development, financing, career guidance, quality assurance, progress review, and corporate planning. Many universities have been active in introducing reforms in these areas under the guidance of the MOHE, the Department of National Planning, and the UGC. The donor community has also contributed to the reforms by providing the necessary funding and technical support. The specific lessons learned and best practices developed from these efforts are summarized in the following sections:

Curricula. As a result of higher education curriculum development, university curricula—along with the number of lecture hours, tutorial hours, and consulting hours—became well-established at the state universities. Moreover, all the state universities have been following the credit hour system (i.e., with a 45-contact-hour course unit equaling 3 credit hours). The course unit system currently in practice is also a result of these reform programs. It was introduced with the objective of providing choice, diversity, and flexibility in course selection. The expectation was that the reforms would promote multidisciplinary and interfaculty courses, student participation, and continuous assessment systems. However, Lakshman (2007) argues that “in many instances, it was merely the external appearance of the course unit system that was adopted, not its true spirit of modern curriculum development.” He further argues that the new system is not any better than the old one, and hence the quality of the average university graduate continues to be poor.¹¹⁵ In contrast, many others take the view that the course unit system is better, and that it could function more efficiently with additional resource inputs. Among the private providers, the credit-hour-based course unit system appears to be well in place, particularly at institutions linked with accredited foreign universities.

¹¹⁵ W.D. Lakshman. 2007. Challenges in University Education in Sri Lanka. Second Annual Sessions, Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB), University of Colombo. Colombo, Sri Lanka. April.

Career guidance. Reform initiatives toward improving the marketability and relevance of degree programs were implemented in the form of several measures, including those relating to career guidance. The use of career guidance is well established in the higher education system, but most of these measures are only at the initial stage of implementation due to resource constraints and a lack of institutional support. The CGU at the University of Moratuwa is an interesting success story. Started in 2000, it is one of the leading professional development initiatives within the university, conducting a number of professional development projects every year in collaboration with the university administration and the academic departments. The CGU acts with the sole intention of improving the soft skills and employability of students graduating from the university, focusing mainly on improving the students' communication, leadership, and general administration skills.

There is currently a CGU in all public sector universities, but only a few of them are functioning actively. Similarly, internship programs are widely used by Sri Lankan universities as a strategy for enhancing the employability of graduates.

University–industry linkages. The measures effected by some public universities to establish university–industry linkages have taken forms that vary from institution to institution. The introduction of the “university–industry–community interaction cell” concept at the faculty and/or departmental levels is one such example. This was implemented mainly to develop and strengthen the relationship among academia, industry, and the community, with a view to building a mutually beneficial partnership. More specifically, these cells are expected to fulfill multiple objectives:

- (i) to establish and maintain university–industry–community interaction links;
- (ii) to encourage and help undergraduate students conduct research and case studies;
- (iii) to generate resources in the form of industry-supported projects and consultancy programs;
- (iv) to provide management consultancy and advisory services to entrepreneurs, government, and the community;
- (v) to initiate forums that facilitate networking and linkages among businesses, government, and NGOs; and
- (vi) to promote entrepreneurial studies and an entrepreneurial culture at universities.

Some of the examples currently in operation include the cells initiated by the University of Colombo (Appendix 6, Box A6.3), the University of Moratuwa, and the University of Kelaniya.

The University of Morutawa established its interaction cell, with the assistance of the Asian Development Bank (ADB), in order to realize three main objectives: (i) identifying public and private sector organizations willing to establish links with the university; (ii) moving successful university research projects and expertise to industry through joint research and development, consultancies, and technology transfers; and (iii) identifying and meeting the continuous professional development needs of industry. Staff members at the University of Morutawa have also set up Uni-Consultancy Services, a nonprofit association that acts as the university's vehicle for interacting with industry. All services provided to industry are on a self-financing basis (Appendix 6, Box A6.4). The Department of Accounting of the University of Sri Jayewardenepura has also introduced some innovative measures to establish links with the business community (Box 3).

Box 3: The Department of Accounting, University of Sri Jayewardenepura

Under the IRQUE project, sponsored by The World Bank, the Department of Accounting of the University of Sri Jayewardenepura introduced innovative measures to establish links with the business community. These included:

- (i) developing a new curriculum for the BS Accounting (special) degree to suit globally accepted standards for accounting degree programs, with a focus on student-centered learning, web-based learning, and skills development for students;
- (ii) establishing the Skill Development Center, the language laboratory of the Department of Accounting used for improving the students' English language skills via English-language instruction packages;
- (iii) streamlining of the monitoring and evaluation of the department's internship program through the establishment of the Centre for Accounting Internship and Skill Development;
- (iv) improving the teaching and learning of IT-based accounting course units through the Accounting Resource Centre, as well as the department's computer laboratory, which was renovated and refurbished under the IRQUE project;
- (v) providing access to the latest textbooks in accounting for both students and faculty, through the expansion of the specialized accounting library;
- (vi) expanding the dissemination of knowledge to GCE (A/L) accounting teachers and students through workshops and seminars, the distribution of teaching materials, and the publication of magazines and booklets on accounting; and
- (vii) enhancing relationships with the professional accounting associations by entering into memorandums of understanding with them to initiate collaboration on curriculum development, research, and training, and to obtain recognition for the accounting degree program offered by the university.

BS = bachelor of science, GCE (A/L) = General Certificate of Education–Advanced Level, IRQUE = Improving Relevance and Quality of Undergraduate Education; IT = information technology.

Source: University of Sri Jayewardenepura, Faculty of Management Studies & Commerce, Department of Accounting.

Staff development activities. Staff development is an important innovative measure that has recently been accepted and practiced within the higher education system. At the policy-making level, the UGC has taken a keen interest in promoting staff development activities, and the universities have responded positively to the idea of implementing staff-development programs. Since 2009, the UGC has supported staff-development activities by providing funds and other resource inputs. At present, the staff development function is well established at all public universities, and the Staff Development Center at the University of Colombo is one of the success stories (Box 4).

Quality assurance. Quality assurance is another important area of higher education reform, particularly for participating donors. Since the late 1970s, policy makers have been debating about the high rate of graduate unemployment and the low quality of graduate output. However, no firm action has been taken at the policy-making level to improve the academic standards of Sri Lanka's higher education institutions. Finally, the issue of quality

Box 4: The Staff Development Center at the University of Colombo

The SDC, at the University of Colombo, is one of the success stories of staff development in Sri Lanka. The SDC completed its 18th year in 2015, and continues to offer its services to the University of Colombo and other universities. Its target beneficiaries include academic, administrative, clerical and other staff, as well as students. In 2010, the SDC conducted seven staff-development programs and eight training programs for a total of 624 participants. The training programs included a certificate in teaching in higher education, accreditation of senior staff in higher education, and short courses in university teaching. The training offered by the SDC during its first few years was confined to academic staff development, but it gradually expanded to cover the training of administrative, clerical, and other support staff.

The center was developed with the assistance of SEDA, which is based in the United Kingdom. Subsequently, it also received funding from Sweden under its Sida SAREC program. Over the years, the SDC has developed links with ICED, based in the United Kingdom, and the Professional and Organizational Development Network in Higher Education, in the United States. These links have led to the international accreditation of programs offered by the University of Colombo's SDC, and to a continuous upgrading of its study programs with the assistance of international consultants. The university's certificate in teaching in higher education program is accredited by SEDA.

Besides international linkages, the SDC has developed links with local private sector organizations such as the Ceylon Chamber of Commerce, the National Chamber of Commerce of Sri Lanka, and the National Chamber of Exporters of Sri Lanka.

Over the years, the SDC has helped develop other universities' staff development centers. For example, it assisted the University of Ruhuna in replicating its clerical skills program, and did the same for Sabaragamuwa University of Sri Lanka and the University of Sri Jayewardenepura.

ICED = International Consortium for Educational Development, SAREC = Department for Research Cooperation, SDC = Staff Development Center, SEDA = Staff and Educational Development Association, Sida = Swedish International Development Cooperation Agency.

Source: University of Colombo, Staff Development Center.

assurance was addressed with the establishment of the QAAC in 2005, with funding from the IRQUE project. The establishment of the QAAC has led to several new practices, such as the development of subject benchmark statements, subject reviews, external reviews, and institutional reviews. The UGC, having recognized the importance of maintaining a good quality of academic output, established a separate division for quality assurance within its own Secretariat, the National Quality Assurance and Accreditation Council (NQAAC), and it has strengthened the UGC standing committee on quality assurance and accreditation by appointing university vice-chancellors as committee members.

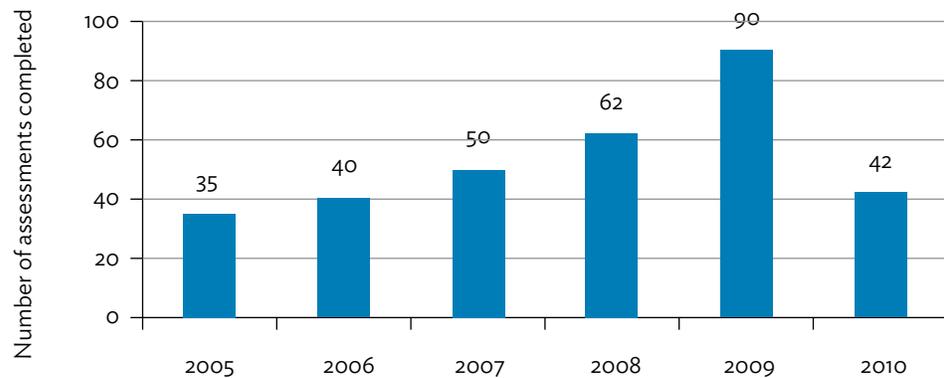
The following activities were carried out by the NQAAC of the UGC in 2010:

- (i) the evaluation of new curricula, courses, and new degree programs at all the higher education institutions established under the Universities Act No. 16 of 1978, as

- well as the degree programs of the institutes recognized by the minister of higher education under section 25A of the Universities Act;
- (ii) evaluation of the degree-awarding status of institutes;
 - (iii) development of criteria and procedures for the recognition of new higher education institutions;
 - (iv) assessment of the quality of foreign-university-affiliated degree programs and delivery arrangements, and agreements on the mutual recognition of awards accredited by foreign quality-assurance agencies;
 - (v) reports and recommendations regarding national quality assurance and accreditation arrangements; and
 - (vi) conducting institutional, subject, program, and library reviews at higher education institutions.

The QAAC completed 334 external quality assessments at public universities between 2005 and 2010, including 17 institutional reviews, 302 subject reviews, and 15 library reviews. Its performance up to 2010, on an annual basis, is summarized in Figure 15.

Figure 15: External Quality Assessments Completed at Public Universities by the Quality Assurance and Accreditation Council, 2005–2010



Source: Government of Sri Lanka, University Grants Commission (UGC), Quality Assurance and Accreditation Council (QAAC).

Cross-border education. The presence of cross-border higher education could also be considered a positive result of the ongoing policy reform process. Currently, the presence of cross-border education can be seen in both the public and private sectors. The involvement of public universities is mainly through memorandums of understanding with foreign universities covering both undergraduate and graduate programs.¹¹⁶ This involvement generally takes the form of student exchange programs, faculty exchanges, capacity building, joint study programs, and joint research. With private providers, the involvement is more diversified, also including franchise arrangements, branch campuses,

¹¹⁶ Two examples are the National Institute of Business Management and the Institute of Bankers of Sri Lanka.

and joint degree programs. Cross-border higher education at the semigovernmental-organization level usually involves joint degree programs offered through an affiliation with a foreign university. For example, the National Institute of Business Management offers three degree programs jointly with University College Dublin (UCD) and Limkokwing University, in Malaysia.¹¹⁷ Similarly, the Institute of Bankers of Sri Lanka offers a bachelor's degree in management jointly with Northumbria University, United Kingdom (UK), and a master of science (MS) and master of business administration jointly with local universities, Northumbria University, and the ICFAI University Group, based in India.¹¹⁸ Among the private sector providers involved in cross-border education are seven degree-awarding institutions approved by the UGC.¹¹⁹

Promoting entrepreneurship. The establishment of an outreach center at Wayamba University of Sri Lanka is yet another innovation under the sponsorship of the IRQUE project. The center provides extension services and supports academic programs at the university, which established a revolving fund of SLRs 1 million (\$7,607), with assistance from the IRQUE project's Quality Enhancement Fund. The revolving fund offers undergraduate and graduate students loans and technical know-how to help them start their own small-scale businesses. For example, a pilot project assisted by the university's outreach center is already in the business of supplying fish food to a caged-culture project in the Central Province that is supported by the revolving fund and by the Ministry of Fisheries and Aquatic Resources Development.

Linkages with foreign universities. Linkages with foreign universities have emerged as an important development among public universities in Sri Lanka. The most recent agreements have included the signing of memorandums of understanding with foreign counterparts in order to promote student exchange programs, faculty exchanges, capacity building, joint study programs, and joint research. These memorandums are also targeted at specific study programs, both graduate and undergraduate. For example, the UC-ISS project—involving the University of Colombo's Department of Economics and the Institute of Social Studies, at Erasmus University Rotterdam in The Hague, Netherlands—was a very successful joint effort that led to the introduction of three graduate programs at the University of Colombo (i.e., graduate diploma, master's, and MPhil/PhD). The project also included capacity building and the promotion of South–South ties, for example, the training of academics from Viet Nam at the master's and doctoral levels under the sponsorship of the Government of the Netherlands (Appendix 6, Box A6.5). It should be noted, however, that the UC-ISS project did not fulfill the expected objectives of promoting research and consultancy activities, due to the lack of institutional support, lack of human resources, and heavy concentration on teaching (instead of research) at both the undergraduate and graduate levels.

In contrast, private higher education providers maintain strong links with foreign universities as a strategy for promoting cross-border education. These include franchises agreements, branch campuses, and joint-degree programs. As mentioned above, there are 78 private institutions registered under the Companies Act No. 17 of 1982 that offer foreign degree

¹¹⁷ The three programs offer the following degrees: bachelor of science (BSc) in business management, BSc in management or human resource management, and a BSc in interior design.

¹¹⁸ The Institute of Bankers of Sri Lanka was incorporated by Act of Parliament No. 26 of 1979.

¹¹⁹ These institutions are recognized under section 25a of the Universities Act No. 16 of 1978.

programs, diplomas and certificate courses. Of these, 26 offer undergraduate programs in business administration, ICT, law, computing, engineering, construction, banking, finance, information systems management, and sociology.

It is important to note, however, that the above examples are mostly institution-specific, and are not representative of the higher education sector as a whole. Even at the institutional level, success stories are limited to a few subunits of a university. In view of the key role assigned to the higher education sector in promoting the growth and development of Sri Lanka, and in the context of emerging competitive pressures, there is a strong need for a system-wide implementation of these policy reforms.

CHAPTER 5

A Summary of Major Challenges and Recommended Interventions

Despite the continued practice of liberal policy reforms, higher education in Sri Lanka continues to be predominantly in the public sector. This has led to serious policy implications in terms of access, capacity building, quality, governance, and financing. There is a lack of recognition of the willingness of students' families to pay for quality higher education, and of the market potential for attracting foreign students. As the financial system for universities is input-oriented, the planning, budgeting, and accounting systems prevent cost recovery, quality management, and cost-effective and financially sustainable strategies. At present, the government allocates an annual block grant to the UGC to be distributed among the public universities and institutes.

While several higher education reform programs have been implemented by the government since the early 1990s, further strategic interventions are needed to respond effectively to the challenges of knowledge-driven economic growth and to meet the development targets set by the government. The policy regimes that have prevailed since the 1980s have also failed to provide a clear-cut direction for promoting private sector participation in higher education as an alternative or complementary strategy for enhancing access and improving the quality of graduate output.

The government should also initiate both institutional and policy reforms in order to promote state universities as active partners in its proposed knowledge hub. Public universities should be empowered to increase their sources of funding beyond the traditional government budgets. However, before embarking on any such move, universities must strengthen their management capability, social marketing expertise, financial control, and analytical skills. Institutional autonomy without a culture of internal quality and accountability runs the risk of failure to produce the desired outcomes.

The key findings of this study point to an urgent need to address several issues in order to enhance the overall efficiency of the higher education sector: (i) management autonomy and accountability, (ii) institutional and policy support, (iii) equitable access, (iv) internationalization, (v) quality of graduate output and research orientation, (vi) heavy dependence on public funds, (vii) slow expansion of graduate education, (viii) poor learning environment, and (ix) the absence of an entrepreneurial spirit. To address these issues, interventions will be needed at both the national and university levels. National-level interventions should include policy making and institutional support, the promotion of private sector participation, and the improvement of research and development (R&D) capabilities. University-level interventions should include capacity building, enhancing the learning environment, and improving the quality and relevance of course curricula.

A. Major Challenges in Higher Education

The higher education system in Sri Lanka has grown in size and complexity since the 1980s. The government and regulatory agencies have taken various steps to provide the necessary policy support for the growth and expansion of a more dynamic higher education system, but higher education in Sri Lanka has been unable to respond to demand- and supply-side developments in the labor market. Clear-cut policy directives are also required for promoting nongovernment sector participation in higher education as a way of meeting the huge unmet demand.

Box 5: A Summary of Key Constraints on Higher Education in Sri Lanka

Inadequate Capacity Building of Academic Staff. Both the training and research output of the higher education system in Sri Lanka have been affected by inadequate capacity building of university faculty. The proportion of qualified staff at the public universities is low, and concentrated efforts are needed to get more doctorate degrees and professor-level academics into the university system. The situation is even worse with respect to nongovernment higher education providers, but the exact magnitude of the problem is not known due to the paucity of data. In addition, faculty, particularly at the public universities, require training in teaching and evaluation methodologies, thesis supervision, and in managerial and administrative skills.

Inadequate Administrative Support. Inadequate administrative support is a major problem at public universities in Sri Lanka. The vice-chancellors, rectors, deans, directors, and heads of departments are faced with the challenge of effectively carrying out their administrative functions without adequate support staff. The centralized, control-oriented recruitment procedures, on the one hand, and the lack of administrative skills, on the other, have been aggravating the situation since the 1990s. Most administrators are busy with day-to-day managerial work rather than with policy formulation, planning, coordination, progress monitoring, and initiation of development projects. Strong administrative support is a precondition for the further development of higher education in Sri Lanka.

Inadequate Policy Support. The issue of inadequate policy support has been heavily debated since the mid-1970s under different political regimes. Since the mid-1990s, the government agencies concerned with higher education have introduced various reform measures to provide the necessary policy support for the growth and expansion of a more dynamic higher education sector. In spite of all these efforts, however, some of the key policy issues are still left unaddressed, such as (i) the approval of the revised version of the Universities Act No. 16 of 1978, (ii) the introduction of new legislation for private and other nongovernment higher education providers, (iii) quality assurance for private and other nongovernment higher education providers, (iv) greater autonomy for state universities in terms of financing, (v) human resource management, and (vi) the development of new programs. W. A. Wiswa Warnapala argues that although the higher education system (primarily the universities) has made a contribution to the intellectual and professional enterprise of Sri Lanka, and has begun to expand in response to popular pressure, the changes have taken place in the form of ad hoc arrangements. Warnapala further argues

Box 5 continued

that new policy initiatives are necessary to overhaul the entire system, with a view toward making it more responsive to the country's development efforts.^a

Low Quality and Relevance of Graduate Output. The low quality and relevance of graduate output, a primary constraint identified by the government and the donor community since the 1990s, still remains an issue, particularly in the faculties of humanities and social sciences. This problem is even more severe for external degree holders.

Unsatisfactory Learning Environment. The need to improve the learning environment is another constraint, one directly linked to the student unrest at many universities. This issue involves a wide range of problems, including the lack of proper lecture halls and poor library facilities; and insufficient student housing, study rooms, computer labs, and recreation facilities.

^a W. A. W. Warnapala. 2009. *Higher Education Policy in Sri Lanka: New Perspectives and Change*. Colombo: Vigitha Yapa Publications.

Source: Asian Development Bank.

At the national level, the government has established the vision, strategy, and goals for the development of higher education, but it also recognizes the possible serious constraints in achieving those goals. The higher education system in Sri Lanka is faced with several challenges due to competitive pressures—from both the demand and supply sides, on the domestic front, and from developments in university education at the global level. Meeting these critical challenges will only be possible with a more innovative, flexible, autonomous, and efficient higher education system.

B. Priority Areas for Strategic Interventions

The following are possible priority areas for strategic interventions that could bring about positive developments and changes in Sri Lanka's higher education system:

Equitable access. Demographic projections for 15–24-year-old cohorts during 2013–2033 indicate a decline in numbers. This means that Sri Lanka has entered a period of demographic transition.¹²⁰ Thus, policy makers need to act fast in order to get the full benefit from the demographic bonus that will likely result.¹²¹ For policy makers to respond to this window of opportunity, higher-education reforms will have to strike a balance among costs, sustainability, and equitable access. In view of these challenges, there should be an effort to explore creative ways to improve access to financing and to manage the higher education sector with the joint participation of public and private providers. Promoting equitable access to higher education for the underserved segments of society will require giving service

¹²⁰ A “demographic transition” is the shift from a largely agrarian society characterized by high fertility and mortality rates to a more urbanized industrial society with low fertility and mortality rates.

¹²¹ The “demographic bonus,” or “demographic dividend,” occurs when, at an early stage of a demographic transition, a fall in fertility rates causes the labor force to grow more rapidly than the population dependent on it (i.e., fewer young mouths to feed). As a result, more resources are freed up for investment in economic development and family welfare, and per capita income may grow as well.

providers incentives to back that effort, and offering additional academic support to students from lagging regions, such as the Northern, Eastern, and other outlying provinces.

Equitable access and inclusiveness are key factors in establishing a broad and diversified human resource base. Sri Lanka's National Higher Education Strategic Management Plan for 2012–2015 identifies “increased opportunities and access to higher education” as one of the goals of the medium- and long-term development of the higher education system. It also spells out several actions to achieve this goal.¹²² During the implementation stage, however, more attention needs to be placed on enhancing equitable access for all. The government needs to acknowledge the aspirations of the country's youth and to accept the responsibility of ensuring that the widespread demand for higher education is managed in the most positive and sensitive way possible, without sacrificing quality.

Although expanded access has been one of the accomplishments of the higher education system in Sri Lanka between 2013 and 2018, the issue of equity still needs to be addressed. Therefore, measures to improve access to higher education must also promote equity.

Cost is another factor affecting equitable access. Education providers need a funding formula that will allow wider access without sacrificing quality and equity. Policy reforms to promote greater access and equity should arise from consultations with key stakeholders through policy dialogues.

The Sri Lankan educational system, built over decades of public investment and committed to providing free and accessible education, has helped Sri Lanka achieve impressive progress as measured by social indicators in education, health, life expectancy, and equal opportunities for women and girls. The priority given to education has contributed significantly to Sri Lanka's high ranking in human development. Sustaining these achievements and working toward greater progress in education is the responsibility of the state. However, appropriate policy planning and implementation will require the active participation of many other actors: students, parents, teachers, trade unions, the private sector, and all other citizens. There is a collective responsibility for revitalizing the education system as an important public good and as a necessary dimension of democratic and accountable governance. Some of the policy options employed in other countries with regard to higher education have included special financial incentives, loan schemes, grants, distance education, and the creation of alternative pathways of entry.

Quality and relevance. The quality and relevance of graduate output is a major issue that has been discussed at length by policy makers, academics, and the donor community since the mid-1990s. Based on international best practices, boosting the quality and relevance of higher education will require interventions to improve (i) the quality of students, faculty, and staff; (ii) the reliability of assessments and examinations; (iii) the relevance of undergraduate programs, R&D, university–industry linkages, and internship programs; and (iv) the utilization of ICT for staff development, access to the latest research, and for partnerships with foreign universities. Since 2003, the government and the donor

¹²² Government of Sri Lanka, Ministry of Higher Education. 2012. *National Higher Education Strategic Management Plan of Sri Lanka: 2012–2015 Mid Term Plan*. Colombo. pp. 7, 11. http://www.mohe.gov.lk/images/pdf/strategic_vision_low_resolution.pdf

community have invested heavily in efforts to address these issues. These investments will have to continue during the next decade, 2013–2023, with a special focus on the social sciences and related disciplines. The graduates of these faculties still find it difficult to find jobs in the private sector due to serious problems with the quality and relevance of their education. Universities need to provide a talent pool of graduates for private sector enterprises operating in domestic and foreign markets. The era of channeling graduates into an inefficient public sector is over, particularly given the current labor market situation.

The estimated cost of these interventions is \$55 million. The identified priority areas are in line with the government's development policy framework and with the policy reform agenda proposed by the National Education Commission (NEC).¹²³ It is also in line with the development initiatives of the donor community in higher education sector since 2002. In addition to emphasizing these aspects, this study recommends several other strategic interventions to promote innovative practices in higher education, and they are discussed below. It should be noted that the higher education sector of postconflict Sri Lanka has the capacity to absorb additional funding support and to meet government development targets.

Research and development capabilities. Improving the R&D capabilities of the higher education system is an urgent requirement, especially in terms of promoting national competitiveness. R&D investment in Sri Lanka is very low, and public institutions account for 95% of the R&D that is being done. As mentioned above, state universities account for 34% of R&D, and their work should be integrated with R&D done in industry. Getting a high rating in the World Bank's Knowledge Economy Index (KEI), as well as enhancing national competitiveness, will require greater investment in R&D, information technology (IT), and higher education. Universities have a key role to play in this regard, particularly in terms of patents, research, and journal publications. Fortunately, there have been positive policy responses since 2010 toward enhancing R&D capabilities at public universities.

Graduate programs. Graduate programs need to be strengthened and aligned with recent developments in higher education worldwide. In Sri Lanka, graduate enrollment is equivalent to about 25% of undergraduate enrollment, versus the 35%–65% maintained by world-class universities. In fact, world-class universities demonstrate their strength in research by having a high proportion of graduate students. It is important to maintain advanced training and research programs at the graduate level for several reasons. On the one hand, they promote R&D in higher education; and on the other, they provide training for employees in the public sector, private sector, and national planning departments (NPDs). In the long run, graduate programs contribute to the upgrading of industry. Given the intellectual capacity of local academia, the development of graduate programs would also result in the expansion of higher education services, which would, in turn, attract foreign students and thereby contribute to the development of the government-proposed knowledge hub. And graduate programs could be a major source of income for state universities. Similarly, external degree programs have the potential to enhance access and to promote ICT-oriented delivery modes and cost-sharing practices. Both graduate

¹²³ Department of National Planning, *Sri Lanka: The Emerging Wonder of Asia*; Government of Sri Lanka, National Education Commission. 2010. *National Policy Framework on University, Technical and Vocational Education*. Colombo.

and external degree programs also provide opportunities for partnerships with overseas universities as a mechanism for building management capacity.

Governance. Governance is one of the main determinants of world-class status for universities. It involves balance between autonomy and accountability that enables institutional initiative and responsiveness. The global trend since 2003 has been a gradual shift to greater autonomy in university governance and management. In Sri Lanka, the higher education system has become larger and more complex in terms of systems and procedures. Thus, no single government agency can centrally manage the various administrative and performance monitoring functions of the system. Because the UGC's tight regulatory controls and rigid management practices inhibit effective reform or innovation, the higher education system in Sri Lanka is far behind in reforming governance structures and management practices. The change-resistant governance structures need to be replaced with structures characterized by more autonomy and better "autonomy indicators." In this context, the main responsibility of policy makers is to create a regulatory environment that encourages, rather than stifles, innovation at public universities and private institutions, in order to expand access to good-quality higher education.

Management capacity building. Management capacity building in the higher education sector refers to the development of the professional management skills of the academic staff and administrative support staff at higher education institutions. Both internal and external inefficiencies drain scarce resources away from the fundamental objectives of increasing access, quality, and relevance.

The findings of this study point to a compelling need for an aggressive academic staff development program that will (i) upgrade the large numbers of faculty members who have only bachelor's-level qualifications, (ii) ensure sufficient numbers of teachers for an expanding system of public and private institutions, and (iii) ensure that there are enough faculty to teach courses in the priority disciplines. Project interventions in management-capacity building for the academic staff should include planning, performance monitoring, communication skills, career guidance, negotiation skills, faculty and student welfare, performance monitoring and evaluation, and management information systems. For nonacademic staff, capacity building would involve skills development in human resource management, financial management, supplies management, office management, capital works, and maintenance and procurement. In addition to short-term and medium-term training, partnerships with overseas universities have proven to be a useful mechanism for management capacity building.

Financing. Limited financing is one of the major constraints faced by Sri Lanka's higher education system. As argued in the 2010 annual report of the Central Bank of Sri Lanka, investment in higher education has been artificially restricted, and innovative funding measures need to be implemented to stimulate R&D and capacity building.¹²⁴ From the analysis presented in this study, it is clear that there is insufficient funding for research, laboratories, libraries, ICT infrastructure, better salaries, and for improvements in the learning environment. Moreover, the government's development targets for higher education will require substantial financing as well. To achieve these, an entrepreneurial orientation

¹²⁴ Government of Sri Lanka, Central Bank of Sri Lanka. 2011. *Annual Report 2010*. Colombo.

should be introduced into the higher education system, along with cost-sharing measures and incentives. There should also be a performance-based funding formula, as opposed to the current practice of incremental allocations of public funds based on historical budget figures. These changes would promote more efficient resource mobilization, foster an export orientation in higher education services, and improve the quality of education through increased competition among universities.

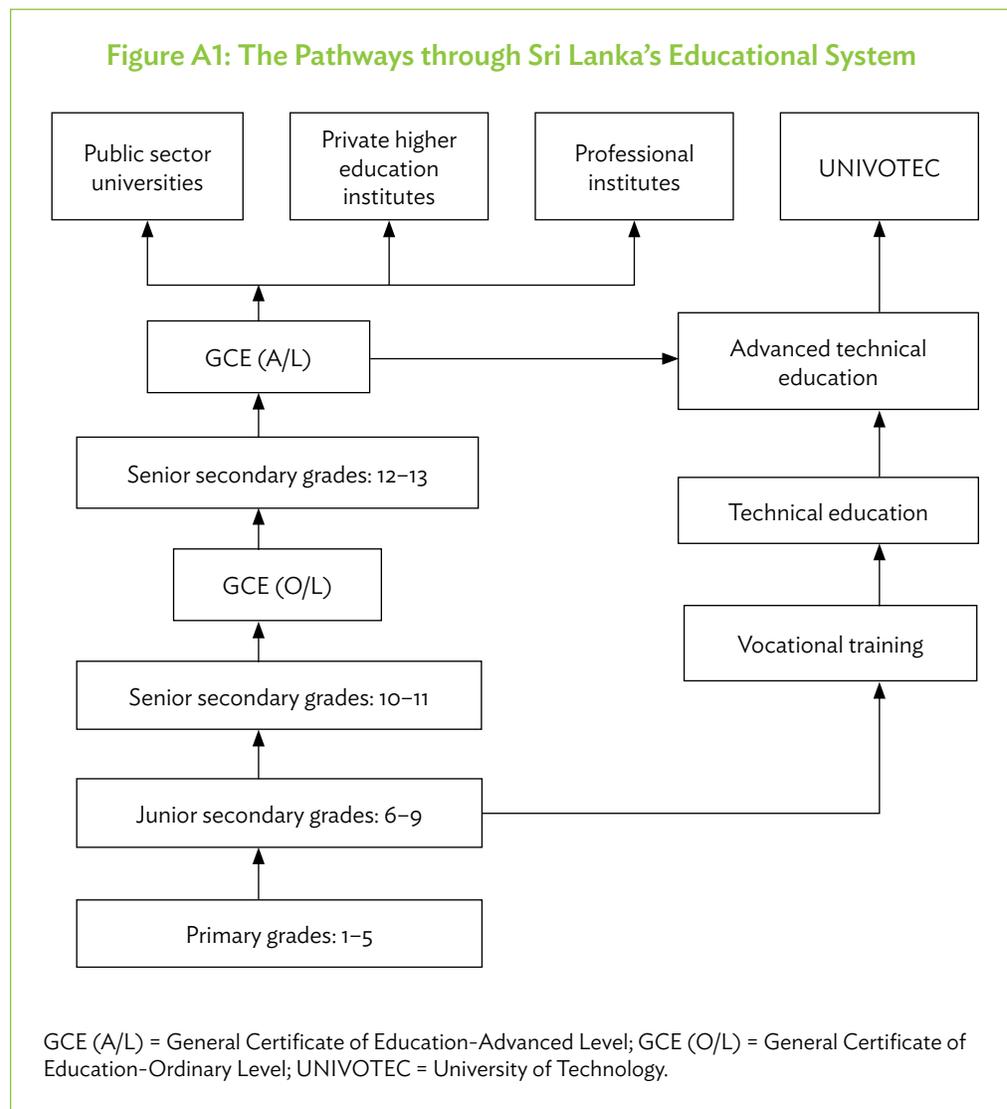
International best practices in financing provide policy makers with a wide range of strategic options for encouraging higher education institutions to be more responsive to the needs of society and industry by offering these institutions incentives to mobilize additional resources through increased cost sharing, income-generation activities, and donations. In the area of cost sharing, one potential source would be student fees, which would need to be introduced jointly with student scholarship and/or loan assistance programs at both public and private institutions. A 10% enrollment increase on a fee-levying basis for selected academic programs with high market demand may increase the income generated by public universities by over 50%. Similarly, the incremental cost of a loan scheme for members of disadvantaged groups enrolling in fee-levying academic programs would be less than 1% of the total cost of the higher education sector.

The political viability of cost-sharing measures should also be taken into account, with due attention paid to the costs and consequences of inaction on this matter. The delay in implementing this option has already resulted in significant losses to the national economy by way of limited access, underfunding, inefficiency, and loss of foreign exchange due to the greater numbers of Sri Lankan students going abroad for their studies. The global experience in income generation at higher education institutions clearly shows the dynamism and ingenuity of university leaders. Many universities in developing countries find that they are able to generate 10% to 15% of their budget from such activities, versus an average of 7% in Sri Lanka. The government can promote such initiatives by providing positive incentives such as matching funds, tax incentives, and competitive funds (e.g., those awarded based on the institution's income-generating activities and gross savings). The tax incentives are especially important for encouraging donations.

APPENDIX 1

The Structure of Sri Lanka's Educational System

The School System. Sri Lanka has a 13-year school system providing general education, and the age of admission to grade 1 is 5 years. The school system is divided into three main levels: primary, junior secondary, and senior secondary. Next follows tertiary education at universities or institutes. Grades 1–9 are compulsory (Figure A1).



The public sector accounts for about 93% of primary and secondary education institutions and 95% of student enrollment. Approximately 4 million schoolchildren are enrolled in about 9,410 government schools, including both national and provincial schools (Table A1.1). There are about 697 state-funded *pirivenas* (temple-based educational institutions); 25 special education schools; over 90 private schools offering the national curriculum; and approximately 150–200 international schools (total enrollment of about 70,000), which prepare students for overseas examinations. The network of government schools provides universal access to primary and secondary education. Each year, some 328,000 students enter the educational system at grade 1, and the enrollment rate is very high (97%). The retention at the end of primary education (grade 5) is 98%, and the pass rate for the General Certificate of Education–Ordinary Level (GCE [O/L]) is 50%. Students who complete grade 11 and pass the GCE (O/L) exam generally proceed to grades 12 and 13, and then take the General Certificate of Education–Advanced Level (GCE [A/L]) exam, for which the pass rate is 45%.

Table A1.1: Salient Features of General Education in Sri Lanka

Item	2012
Total number of schools	10,763
Government schools	9,931
Private schools	98
Pirivenas ^a	734
Students ('000)	4,187
New admissions ('000) ^b	338
Teachers ('000)	224
Student–teacher ratio (government schools)	18:1
Total public expenditure on education (SLRs billion) ^c	136.2
Current	107.3
Capital	28.9

^a Pirivenas are state-funded temple-based educational institutions.

^b Applies to public schools only.

^c This figure includes government expenditure on higher education, along with primary and secondary.

Source: Central Bank of Sri Lanka. *Annual Report 2012*. Colombo.

Pathways and Exit Points from Primary to Higher Education, including Technical and Vocational Education and Training Options

The educational system in Sri Lanka provides pathways and exit points for students at the primary, secondary, and tertiary levels (Figure A1). Only a small proportion of students exit from the school system after the primary or junior secondary levels; the majority exit after the GCE (O/L) or GCE (A/L) examinations. For example, in 2008 about 165,000 students who took the GCE (O/L) exam and 91,000 students who took the GCE (A/L) examinations did not pass. These students would eventually enter the labor force (Tables A1.2 and A1.3),

though some of them would first enter the technical vocational education and training (TVET) sector for further studies.

Table A1.2: The Performance of Students in the General Certificate of Education–Ordinary Level Exam, 2008

Province	Number of Examinees (five or more subjects)	Number Passing the GCE (O/L)	Number Failing the GCE (O/L)
Western	71,227	38,317	32,513
Central	42,289	17,043	25,256
Southern	41,819	19,347	22,472
North-Western	34,362	15,964	18,398
Sabaragamuwa	31,265	13,183	18,082
Uva	22,328	8,450	13,878
North-Central	19,567	7,645	11,922
Eastern	18,856	7,782	11,074
Northern	17,793	6,778	11,015
Total	299,516	134,906	164,610

GCE (A/L) = General Certificate of Education–Advanced Level; GCE (O/L) = General Certificate of Education–Ordinary Level.

Source: Government of Sri Lanka, Ministry of Education, Department of Examinations.

Table A1.3: The Performance of Students in the General Certificate of Education–Advanced Level Exam, 2008

Province	Number of Examinees (five or more subjects)	Number Passing the GCE (A/L)	Number Failing the GCE (A/L)
Western	51,468	27,224	24,244
Central	30,394	16,760	13,634
Southern	25,488	13,759	11,729
North-Western	23,225	12,859	10,366
Sabaragamuwa	19,330	11,087	8,243
Uva	13,868	7,482	6,386
North-Central	12,082	6,102	5,980
Eastern	13,111	7,702	5,409
Northern	10,686	5,382	5,304
Total	199,652	106,357	91,295

GCE (A/L) = General Certificate of Education–Advanced Level; GCE (O/L) = General Certificate of Education–Ordinary Level.

Source: Government of Sri Lanka, Ministry of Education, Department of Examinations.

The TVET sector in Sri Lanka comprises public, private, and national planning department (NPD) sector providers. In 2009, there were 1,304 training institutes registered with the Tertiary and Vocational Education Commission (TVEC), representing 704 public, 462 private, and 138 NGO institutions. The total enrollment in TVEC-registered institutions in 2009 was 123,869, and the completion rate was 59%. In addition, there are about 2,500 private training providers operating in the TVET sector without registering with the commission.

The Structure of the Higher Education System in Sri Lanka

The higher education system in Sri Lanka consists of three broad classes of institutions: (i) universities and other degree-awarding institutions, (ii) advanced technical education institutions, and (iii) private sector institutions. The universities and other degree-awarding institutions comprise 15 public universities, 7 public graduate-level institutes, and a number of private degree-awarding institutions, the majority of which offer degree programs from foreign universities. The advanced technical education institutions include 9 public sector institutions, as well as 17 institutes under the Sri Lanka Institute of Advanced Technological Education (SLIATE).¹ Professional associations—such as the Institute of Chartered Accountants of Sri Lanka, Chartered Institute of Management Accountants, and the Society of Certified Management Accountants of Sri Lanka—also absorb a high proportion of students who have passed the CGE (A/L) examinations.² And there are 50 private higher education institutions in Sri Lanka, with a total enrollment of about 45,700 students.³

¹ The Sri Lanka Institute of Advanced Technological Education (SLIATE) offers courses leading to a National Diploma and Higher National Diploma in technological and business studies.

² In addition, the Chartered Institute of Marketing Sri Lanka and a host of other organizations offer study programs leading to various credentials.

³ World Bank, *The Towers of Learning: Performance, Peril and Promise of Higher Education in Sri Lanka*. Colombo. <http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/Publications/TOLreportfinal.pdf>

APPENDIX 2

Universities and Institutions under the University Grants Commission

Universities

1. Eastern University, Sri Lanka
2. Rajarata University of Sri Lanka
3. Open University of Sri Lanka
4. Sabaragamuwa University of Sri Lanka
5. South Eastern University of Sri Lanka
6. University of Colombo
7. University of Jaffna
8. University of Kelaniya
9. University of Moratuwa
10. University of Peradeniya
11. University of Ruhuna
12. University of Sri Jayewardenepura
13. University of the Visual & Performing Arts
14. Uva Wellassa University
15. Wayamba University of Sri Lanka

Non-Degree-Awarding Institutions Affiliated with Universities

1. Sri Palee Campus, University of Colombo
2. Swami Vipulananda Institute of Aesthetic Studies, Eastern University, Sri Lanka
3. Trincomalee Campus, Eastern University, Sri Lanka
4. Vavuniya Campus, University of Jaffna

Degree-Awarding Institutions Affiliated with Universities

1. Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya
2. Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo
3. Institute of Indigenous Medicine, University of Colombo
4. Intercontinental Institute of Human Resource Management
5. Institute of Technology, University of Moratuwa
6. National Centre for Advanced Studies
7. National Institute of Library & Information Sciences, University of Colombo
8. University of Colombo School of Computing

Degree-Awarding Institutes Not Affiliated with Universities

1. Aquinas Institute
2. National Institute of Fisheries and Nautical Engineering (Ministry of Fisheries)
3. Sri Lanka Institute of Information Technology
4. Survey Institute (Survey General's Department, Ministry of Land)

Graduate Institutes Affiliated with Universities

1. Postgraduate Institute of Agriculture (affiliated with the University of Peradeniya)
2. Postgraduate Institute of Archaeology (affiliated with the University of Kelaniya)
3. Postgraduate Institute of English (affiliated with Open University of Sri Lanka)
4. Postgraduate Institute of Management (affiliated with the University of Sri Jayewardenepura)
5. Postgraduate Institute of Medicine (affiliated with the University of Colombo)
6. Postgraduate Institute of Pali and Buddhist Studies (affiliated with the University of Kelaniya)
7. Postgraduate Institute of Science (affiliated with University of Peradeniya)

APPENDIX 3

Educational Qualifications of Academic Staff, 2008

University	Numbers				Percentages			
	Doctorates	Master's	Bachelor's	Total	Doctorates	Master's	Bachelor's	Total
CBO	245	138	89	472	52	29	19	100
PDN	394	136	137	667	59	20	21	100
SJP	159	163	130	452	35	36	29	100
KLN	180	154	100	434	41	35	23	100
MRT	98	84	60	242	40	35	25	100
UJA	69	100	80	249	28	40	32	100
RUH	157	118	111	386	41	31	29	100
EUSL	23	63	45	131	18	48	34	100
SEUSL	9	40	31	80	11	50	39	100
RUSL	17	22	31	70	24	31	44	100
SUSL	22	57	49	128	17	45	38	100
WUSL	25	36	32	93	27	39	34	100
UVPA	6	44	32	82	7	54	39	100
UWU	1	2	18	21	5	10	86	100
OUSL	71	97	52	220	32	44	24	100
Total	1,476	1,254	997	3,727	437	547	516	100

CBO = University of Colombo; EUSL = Eastern University; Sri Lanka; KLN = University of Kelaniya; MRT = University of Moratuwa; OUSL = Open University of Sri Lanka; PDN = University of Peradeniya; RUH = University of Ruhuna; RUSL = Rajarata University of Sri Lanka; SEUSL = South Eastern University of Sri Lanka; SJP = University of Sri Jayewardenepura; SUSL = Sabaragamuwa University of Sri Lanka; UJA = University of Jaffna; UVPA = University of the Visual & Performing Arts; UWU = Uva Wellassa University; WUSL = Wayamba University of Sri Lanka.

Note: Percentages may not add up to 100% because of rounding off.

Source: World Bank. 2008. *Sri Lanka—Improving Relevance and Quality of Undergraduate Education Project*. Washington, DC.

APPENDIX 4

Admission Policies for Public Universities in Sri Lanka

Admissions of students to public universities in Sri Lanka are done on the basis of criteria laid down from time to time by the University Grants Commission (UGC), with the concurrence of the Ministry of Higher Education. The following are the main considerations of the admissions criteria as of mid-2015:

- (i) The selection of students is made on the basis of a ranking determined by the average Z scores obtained on the General Certificate of Education–Advanced Level (GCE [A/L]) examination.
- (ii) The minimum requirements laid down for eligibility for applying to a public university are:
 - (a) a grade of at least “S” in all three approved subjects, with a minimum total mark of 150, and
 - (b) a minimum mark of 30% on the Common General Paper.

Admissions to arts programs (e.g., the arts, humanities, communications studies, peace and conflict resolution, Islamic studies, Arabic) are conducted on an all-island merit basis, subject to the condition that the total number admitted from a given district will not be below the total number admitted from that district in the base academic year (1993/94).

Admissions to programs in Ayurveda, Unani, and Siddha medicine are made on an all-island merit basis.

Admission to all programs other than those mentioned above are made based on two types of criteria:

- (i) All-island merit criteria: up to 40% of the available places are filled based on the all-island Z score rankings.
- (ii) District merit criteria:
 - (a) Up to 55% of the available places in each program are allocated to Sri Lanka’s 25 administrative districts in proportion to the total population, that is, the ratio of the population of the district to the total population of the country.
 - (b) In addition, a special allocation of up to 5% of the available places in each academic program is set aside for 16 districts that are educationally disadvantaged, again based on the ratio of the district population to the total population. These districts are:

- | | | | |
|-----------------|----------------|------------------|-----------------|
| 1. Nuwara Eliya | 5. Mannar | 9. Batticaloa | 13. Polonnaruwa |
| 2. Hambantot | 6. Mullaitivu | 10. Ampara | 14. Badulla |
| 3. Jaffna | 7. Vavuniya | 11. Puttalam | 15. Monaragala |
| 4. Kilinochchi | 8. Trincomalee | 12. Anuradhapura | 16. Ratnapura |

The places allocated based on the district merit criteria are filled according to Z score rankings within each district. In selecting students for a given academic program, it is ensured that the quota allocated to any district under (a) and (b) above is not below the quota of the base academic year (1993/94).⁴

⁴ Government of Sri Lanka, University Grants Commission. 2006. *The Development of the University System of Sri Lanka—2001–2006*: the Sixth University Grants Commission. Colombo.

APPENDIX 5

Annual Demand for Training in Sri Lanka

Skill Category	2011	2012	2014	2016 ^a	2018 ^a	2020 ^a
IT professional and associated skills	32,684	35,000	36,500	37,500	54,020	67,400
Tourism—managerial categories	3,960	5,160	7,860	12,360	4,242	3,946
Tourism—nonmanagerial categories	16,100	23,500	32,600	39,000	41,692	35,254
Airport and aviation engineers and technicians	252	472	262	315	378	455
Performing-arts-related skills	1,000	1,890	2,596	3,580	4,949	6,856
Building and construction—professional grades	975	1,050	1,100	1,150	1,150	1,200
Technical grades	4,740	4,740	4,740	4,740	4,740	4,740
Building and construction—craft-related grades	17,576	17,576	17,576	16,696	16,696	16,696
Machine operators and mechanics	2,657	1,469	1,469	1,469	1,469	1,469
Automobile and motor mechanic technicians	10,200	10,430	10,909	11,418	11,959	12,532
Environmental managers and engineers	350	375	400	400	450	450
Medical and health science—nurses (private sector)	2,300	2,784	4,095	6,046	9,168	13,596
Other	425	480	600	773	1,202	1,873
Beauty culture—professionals	6,300	6,563	7,128	6,410	8,367	9,117
Beauty culture—other grades	2,695	2,695	2,696	2,696	2,697	2,697
Metal and light engineering—Managerial and technical grades	3,580	3,660	3,829	3,281	4,174	4,374

continued on next page

Table continued

Skill Category	2011	2012	2014	2016 ^a	2018 ^a	2020 ^a
Metal and light engineering—craft-related grades	13,166	13,587	13,500	13,500	13,500	13,500
Mid-level urban and town planners	100	150	200	200	200	200
Telecom industry—mobile repairers	2,000	400	576	829	1,194	1,720
Petroleum-industry-related skills	N/A	20	20	10	10	10
Photography- and film-related skills	1,500	1,563	1,697	1,845	2,009	2,189
Office management	3,500	3,562	3,692	3,829	3,972	4,122
Textiles and garments	3,412	3,412	3,413	3,413	3,414	3,414
Leather products—footwear and other manufactures	660	675	706	739	774	811
Gem- and jewelry-related skills	225	241	277	319	368	425
Rubber- and plastic-industry-related skills	576	584	600	616	633	651
Fisheries-industry-related skills	250	400	450	450	500	500
Total	131,183	142,438	159,491	173,584	193,927	210,197
Above O/L but below university level	37,502	41,339	46,993	53,045	61,303	75,211
Below O/L	93,679	101,098	112,496	120,539	132,622	134,986

IT = information technology; O/L = Ordinary Level.

^a The numbers in these columns are projections.

Source: Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2010. *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future. The Development Policy Framework*. Colombo.

APPENDIX 6

Good Practices in Sri Lankan Higher Education

Box A6.1: Bachelor of Information Technology Programs

University of Colombo School of Computing. The University of Colombo School of Computing (UCSC) was established in 2002 and, over the years, it has excelled as the foremost computer science and information technology institute in Sri Lanka. Its bachelor of information technology program offers flexible study options with diploma-level exit points after years 1 and 2. The UCSC operates with e-learning support through a learning management system, weekly TV programs, a web portal for online access to study material, and CD-based content for offline access. It also uses leading private institutes to provide training at the regional level. Its administrative work is conducted through the External Degrees Centre, located outside the main campus. And the UCSC functions as a separate unit with some degree of autonomy in the organization and management of its academic program. This autonomy has helped make it possible to involve UCSC faculty and nonacademic staff in curriculum development, with support from the industrial sector. The detailed syllabi prepared by the UCSC, with learning objectives and guidance on teaching hours for each course, facilitates effective learning at private institutions and the standardization of teaching.

University of Moratuwa External Degree Program. The University of Moratuwa, which is renowned for producing some of the finest engineering and technological graduates in Sri Lanka, introduced the bachelor of information technology external degree (distance education) to cater to student demand for courses in the field of information and communication technology. The program was launched by the Faculty of Information Technology, but is conducted through the university's Center for Open and Distance Learning.

The center does not register students directly for the external degree program, so students wishing to enroll have to go through one of the program's collaborative partners. To this end, the university evaluated several public and private sector organizations that it considered to have the necessary expertise and resources to offer the program's courses. Special attention was paid during the evaluations to the quality of the learning environment provided by these institutions, to ensure that they met the academic standards demanded by the university.

Sources: University of Moratuwa and University of Colombo.

Box A6.2: The Mobile Learning Experience—Faculty of Graduate Studies of the University of Colombo

In 2008, the University of Colombo Faculty of Graduate Studies commenced its online teaching by offering an executive diploma in marketing (EDM) program, using the innovative method of mobile learning (m-learning). It was reportedly the first program of its kind in the country, and a perfect demonstration of public–private partnership in higher education. The faculty established its m-learning studio with the equipment necessary for online teaching, a computer with an internet connection through a dongle, a set of microphones, and a webcam. While Sri Lanka Mobitel provides technical support, the online platform is provided by Microsoft. Over the years, the faculty has extended the m-learning facility to include four additional programs:

- (i) the postgraduate diploma in business management (PGDBM),
- (ii) postgraduate diploma in public management (PGDPM),
- (iii) postgraduate diploma in public administration (PGDPA), and
- (iv) the masters in public administration (MPA).

The programs provide students with the opportunity to learn through the internet, so they can listen to lectures from anywhere on the island or from overseas. Since 2011, total enrollment in these m-learning programs has exceeded 300, with the breakdown as follows: EDM (22%), PGDBM (24%), PGDPM/PGDPA (32%), and MPA (22%). Female participation in these programs is 42%. About 64% of the students are from the districts adjoining Colombo, while another 19% have been from peripheral districts. The lowest share of students is from the Colombo district (17%).

Source: Faculty of Graduate Studies, University of Colombo.

Box A6.3: University of Colombo Science and Technology Cell

Background. The cell will help to serve the nation more directly by enhancing interactions among academia, industry, and the community. These interactions will also provide an opportunity for undergraduates to gain exposure to the industrial sector and learn more about its needs.

Objectives.

- (i) To advance the frontiers of science and technology, and thereby improve the economy of Sri Lanka;
- (ii) to gain experience and knowledge that will serve to improve the relevance of university curricula; and
- (iii) to enhance the national capacity for community development through a transfer of modern technology.

Modes of interaction.

- (i) Cooperative research projects upon request from industry,
- (ii) community development projects with public sector participation,
- (iii) consultancy activities and technical assistance for starting small and medium-sized enterprises,
- (iv) analysis of chemical and biological samples,
- (v) university–industry exchange programs and student internships,
- (vi) specialized programs designed by universities for continuing education and the training of professionals, and
- (vii) an advisory role for industry specialists at universities.

Source: University of Colombo.

Box A6.4: Uni-Consultancy Services, University of Moratuwa

Uni-Consultancy Services is an association affiliated with the faculty members of the University of Moratuwa (UOM), registered under the Companies Act No. 17 of 1982 as a Company Limited by Guarantee, operating on the premises of the UOM. Established on 14 May 2001, its primary objective is the effective and efficient use of the UOM's vast expertise, knowledge, and experience to meet the requirements of Sri Lankan industry by promoting sustainable development through an environment that is conducive to research and development. Its clientele includes both domestic and foreign organizations.

Vision. A university network of professionals would be engaged in national and international consultancies offering useful services to universities and to Sri Lankan society as a whole, thereby contributing to economic, social, and technological progress in Sri Lanka, and generating greater employment opportunities and bringing in foreign exchange earnings.

Mission. Uni-Consultancy Services is an international leader committed to building the nation through foreign and other consultancies that engage the vast technology resource base at the UOM, at other universities in Sri Lanka, and at foreign universities through the transfer of technology to public and private sector institutions, both locally and abroad.

Long-term goals include the following: (i) provide opportunities for technology transfer to industry and organizations; (ii) offer advisory services; and (iii) serve as a catalyst for product development in Sri Lankan industries.

Source: University of Moratuwa.

Box A6.5: University of Colombo and the Institute of Social Studies, Erasmus University Rotterdam in The Hague

In 1994, the Department of Economics of the University of Colombo entered into an agreement with the Institute of Social Studies at Erasmus University Rotterdam in The Hague to strengthen its graduate programs in economics (the UC-ISS project). The UC-ISS project included capacity building, the development of new products and programs, curriculum development, staff exchanges, research, and consultancies. The end results included the graduation of 13 doctorate degrees, the development of three graduate programs (postgraduate diploma in economic development, master's degree in economics, and MPhil and PhD in economics), and stronger and more relevant undergraduate programs. Reflecting the globalization of higher education, the project also promoted both North-North links and South-South links, as there were students enrolled in the graduate programs from throughout Asia during the project's period of operation, between 1994 and 2000.

Source: University of Colombo, Department of Economics.

References

- Asian Development Bank (ADB). 2008. *Education and Skills: Strategies for Accelerated Development in Asia and the Pacific*. Manila. <http://www.adb.org/sites/default/files/institutional-document/32095/education-skills-strategies-development.pdf>
- . 2009. *Good Practice in Cost-Sharing and Financing in Higher Education*. Manila. <http://www.adb.org/sites/default/files/publication/28623/good-practice-cost-sharing-financing-educ.pdf>
- . 2012. *Access without Equity? Finding a Better Balance in Higher Education in Asia*. Manila. <http://www.adb.org/sites/default/files/publication/29769/access-without-equity.pdf>
- H. Aturupane. 2004. “Public Investment in Education: Conceptual Foundations.” In *Economic Policy in Sri Lanka: Issues and Debates*, edited by Saman Kelegama, 445–466. New Delhi: Sage Publications.
- . 2008. “Education in Sri Lanka: Learning Outcomes, Equity and Household Preferences.” In *Development Perspectives: Growth and Equity in Sri Lanka Education*, edited by S.M.P. Senanayake, W. Wimalaratne, and A. de Silva. Colombo: Department of Economics, University of Colombo.
- . 2009a. “Celebrating 60 Years of Progress and Challenges in Education in Sri Lanka.” Working Paper, Human Develop Unit, South Asia Region, The World Bank. Washington, DC: World Bank. <http://www.cecomm.org.uk/images/stories/reports-conferences/Aturupane%20paper%20final%20Jan%202011%2009%202009.pdf>
- . 2009b. “The Pearl of Great Price: Achieving Equitable Access to Primary and Secondary Education and Enhancing Learning in Sri Lanka.” Create Pathways to Access Research Monograph No. 29, Consortium for Research on Educational Access, Transitions and Equity, Institute of Education, University of London, London, United Kingdom (UK). http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/05/21/000333037_20090521002625/Rendered/PDF/485790WP0educa10Box338914B01PUBLIC1.pdf
- Central Bank of Sri Lanka. Annual reports, various years. Colombo.
- S. Chandrasiri. 2003. Financing of University Education in Sri Lanka. *Higher Education* 45. 1. pp. 91–108.
- . 2008a. The Higher Education Sector in a Paradox. *SAARC Journal Human Resource Development* 4. 1. pp. 129–144.

- . 2008b. “The Labour Market in Sri Lanka with Special Reference to the Informal Economy.” *Sri Lanka Economic Journal* 9. 1. pp. 113–142.
- . 2008c. Labour Market Experience of University Graduates in Sri Lanka. *Higher Education Policy* 21. 3. pp. 405–423.
- . 2010. The Impact of Improving Relevance and Quality of Undergraduate Education (IRQUE) Project. Unpublished report submitted to the World Bank, University of Colombo, Colombo, Sri Lanka.
- . 2012. Decent Work Policy Analysis of Sri Lanka (unpublished paper submitted to the International Labour Organization [ILO] Geneva).
- W. I. De Silva. 2007. *A Population Projection of Sri Lanka For The New Millennium 2001–2101: Trends and Implications*. Institute for Health Policy. Colombo.
- E. L. K. Dissanayake. 2011. Determinants of Unemployment among Sri Lankan University Graduates: An Econometric Analysis. Master’s dissertation. University of Torino, Italy.
- T. Estermann and E. B. Pruvot. 2011. *Financially Sustainable Universities II: European Universities Diversifying Income Streams*. Brussels: European University Association. http://www.eua.be/Pubs/Financially_Sustainable_Universities_II.pdf
- Eurydice European Unit. 2008. *Higher Education Governance in Europe: Policies, structures, funding and academic staff*. Brussels.
- J. Fielden. 2008. Global Trends in University Governance. *Education Working Paper Series*, No. 9. Washington, DC: The World Bank. http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/Global_Trends_University_Governance_webversion.pdf
- Government of Sri Lanka, Ministry of Education. 2009. *School Census Report*. Battaramulla.
- Government of Sri Lanka, Ministry of Education and Ministry of Higher Education. 1997. *General Education Reforms*. Battaramulla.
- Government of Sri Lanka, Ministry of Finance and Planning. 2010. *Budget Speech 2011*. Colombo.
- . 2011. *Budget Speech 2012*. Colombo.
- . 2012. *Budget Speech 2013*. Colombo.
- Government of Sri Lanka, Ministry of Finance and Planning, Department of Census and Statistics. 2012a. *Household Income and Expenditure Survey – 2009/10: Preliminary Report*. Colombo. <http://www.statistics.gov.lk/HIES/PreReportHIES2009Eng.pdf>
- . 2012b. *Sri Lanka Labour Force Survey: Annual Report—2011 (With Provincial and District level data)*. Colombo.
- Government of Sri Lanka, Ministry of Finance and Planning, Department of National Planning. 2010. *Sri Lanka: The Emerging Wonder of Asia; Mahinda Chintana—Vision for the Future; The Development Policy Framework*. Colombo. <http://www.adb.org/sites/default/files/linked-documents/cps-sri-2012-2016-oth-01.pdf>

- . 2006. *Mahinda Chintana: Vision for a New Sri Lanka; A Ten Year Horizon Development Framework 2006–2016; Discussion Paper*. Colombo. <http://www.thegef.org/gef/sites/thegef.org/files/documents/MahindaChintanaTenYearDevelopmentPlan.pdf>
- Government of Sri Lanka, Ministry of Higher Education. 2012. *National Higher Education Strategic Management Plan of Sri Lanka: 2012–2015 Mid Term Plan*. Colombo. http://www.mohe.gov.lk/images/pdf/strategic_vision_low_resolution.pdf
- Government of Sri Lanka, Ministry of Science and Technology, National Science Foundation (NSF), Science & Technology Policy Research Division. 2012. *National Survey of Research & Development and Innovation in Sri Lanka, 2008*. Colombo.
- Government of Sri Lanka, Ministry of Science and Technology, National Science and Technology Commission. 2008. *National Science and Technology Policy*. Colombo. http://www.motr.gov.lk/web/pdf/national_science_&_technology_policy_of_sri_lanka_english.pdf
- Government of Sri Lanka, Ministry of Technology and Research. 2010. *Science, Technology & Innovation Strategy for Sri Lanka: 2011–2015*. Colombo.
- Government of Sri Lanka, National Education Commission. 2010. *National Policy Framework on University, Technical and Vocational Education*. Colombo.
- Government of Sri Lanka, Secretariat for Senior Ministers. 2012. *The National Human Resources and Employment Policy for Sri Lanka*. Colombo.
- Government of Sri Lanka, Sixth University Grants Commission (UGC). 2006. *The Development of the University System of Sri Lanka, 2001–2006*. Colombo: UGC.
- . 2012. *Sri Lanka University Statistics 2011*. Colombo. <http://www.ugc.ac.lk/en/university-statistics-2012/898-sri-lanka-university-statistics-2011.html>
- M. F. Green, ed. 1997. *Transforming Higher Education: Views from Leaders around the World*. American Council on Education. Phoenix, Arizona: Oryx Press.
- L. E. Harrison and S. P. Huntington, eds. 2000. *Culture Matters: How Values Shapes Human Progress*. New York: Basic Books.
- Information and Communication Technology Agency of Sri Lanka (ICTA). 2011. *National ICT Workforce Survey–2011*. Colombo.
- H. Jayasekera and N. Arunatileka. 2012. The Narrow Human Resource Base in Science and Technology Could Constrain Sri Lanka’s Knowledge Economy Ambitions. *Talking Economics* (the blog of the Institute of Policy Studies of Sri Lanka). 10 October. <http://www.ips.lk/talkingeconomics/2012/10/10/the-narrow-human-resource-base-in-science-and-technology-could-constrain-sri-lankas-knowledge-economy-ambitions/>
- W. D. Lakshman. 2007. Challenges in University Education in Sri Lanka. Second Annual Sessions, Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB), University of Colombo, Colombo, Sri Lanka, April.
- P. Pillay. 2008. *Higher Education Funding Frameworks in the Southern African Development Community*. Johannesburg, South Africa: Southern African Regional Universities Association.

- W. Saint. 2009a. *Guiding Universities: Governance and Management Arrangements around the Globe*. Washington, DC: The World Bank. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/01/13/000334955_20100113040112/Rendered/PDF/526570WP0Unive10Box345574B01PUBLIC1.pdf
- . 2009b. Legal Frameworks for Higher Education in Sub-Saharan Africa. *Higher Education Policy* 22. 4. pp. 523–550. <http://ejournals.bc.edu/ojs/index.php/ihe/article/view/8498/7632>
- W. Saint, C. Lao, with P. Materu. 2009. Legal Frameworks for Tertiary Education in Sub-Saharan Africa: The Quest for Institutional Responsiveness. *World Bank Working Paper Africa Human Development Series*. No. 175. The World Bank, Washington, DC. http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/Legal_Frameworks_tertiary_edu_Africa.pdf.
- J. Salmi. 2007. Autonomy from the State vs Responsiveness to Markets. *Higher Education Policy*. 20 (4). pp. 223–242.
- . 2009. The Challenge of Establishing World-Class Universities. *Directions in Development Series*. Washington, DC: The World Bank. <http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/547670-1237305262556/WCU.pdf>.
- J. Salmi and A. M. Hauptman. 2006. “Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms.” Education Working Paper Series No. 4, The World Bank, Washington, DC. http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/Innovations_TertiaryEd_Financing.pdf.
- S. Sandarasegaram. 2006a. *Educational Disadvantage in Sri Lanka with Special Reference to University Education*. Colombo: J.E. Jayasuriya Memorial Foundation.
- J. Salmi and A. Saroyan. 2007. League Tables as Policy Instruments: Uses and Misuses. *Higher Education Management and Policy* 19 (2). pp. 1–38.
- . 2006b. *Educational Disadvantage in Sri Lanka with Special Reference to University Education*. Colombo: J. E. Jayasuriya Memorial Foundation.
- J. Sarvi. 2008. Higher Education in Asia and the Pacific Region: Issues of Financing and Partnerships, Particularly from the Perspective of Access, Equity, Quality, and Diversity of Higher Education. Paper presented in Asia-Pacific Subregional Preparatory Conference for the 2009 World Conference on Higher Education, Macao, September. www.unescobkk.org/fileadmin/user_upload/apeid/workshops/macao08/papers/3-b-2.pdf.
- K. Schwab. 2012. *The Global Competitiveness Report 2012–2013*. Geneva: World Economic Forum. pp. 12–15. http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf
- United Nations Development Programme (UNDP). 2010. *Human Development Report 2010: The Real Wealth of Nations; Pathways to Human Development*. New York and Houndmills, Basingstoke, Hampshire, UK: Palgrave Macmillan. http://hdr.undp.org/sites/default/files/reports/270/hdr_2010_en_complete_reprint.pdf

- . 2012. *Sri Lanka Human Development Report 2012: Bridging Regional Disparities for Human Development*. UNDP Sri Lanka: Colombo. <http://www.lk.undp.org/content/dam/srilanka/docs/localpublications/Sri%20Lanka%20Human%20Development%20Report%202012.pdf>.
- . 2013. *Human Development Report 2013: The Rise of the South; Human Progress in a Diverse World*. New York.
- M. Vodopivec and N. Withanachchi. 2010. School-to-Work Transition of Sri Lankan University Graduates. In R. Gunatilaka, M. Mayer, and M. Vodopivec, eds. *The Challenge of Youth Employment in Sri Lanka*. Washington, DC: The World Bank. pp. 115–138. http://www.unicef.org/srilanka/challenge_youth_unemployment.pdf
- F. A. Van Vught. 1994. Autonomy and Accountability in Government/University Relationships. In J. Salmi and A. M. Verspoor, eds. *Revitalizing Higher Education*. Bingley, UK: Emerald Group Publishing Limited. pp. 322–362.
- W. A. W. Warnapala. 2009a. *Higher Education Policy in Sri Lanka: New Perspectives and Change*. Colombo: Vigitha Yapa Publications.
- . 2009b. *Tertiary Education in Sri Lanka: Relevance in the Global Context*. Distance Education Modernization Project, Ministry of Higher Education. Wellampitiya, Sri Lanka: Lassana.
- N. Warnasuriya. 2008. University Governance and Student Unrest. The Nandadasa Kodagoda Memorial Oration, delivered at the Sri Lanka Foundation Institute. Colombo. August.
- World Bank. 2005. *Treasures of the Education System in Sri Lanka: Restoring Performance, Expanding Opportunities and Enhancing Prospects*. Colombo. http://siteresources.worldbank.org/INTSOUTHASIA/Resources/TreasuresInTheEducationSystem_February2005.pdf
- . 2007. *Sri Lanka: Poverty Assessment; Engendering Growth with Equity; Opportunities and Challenges*. Washington, DC. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/02/06/000020953_20070206094457/Rendered/PDF/365680LK.pdf
- . 2008a. *Global Trends in University Governance*. Education Discussion Paper No. 7. Washington, DC.
- . 2008b. *Sri Lanka—Improving Relevance and Quality of Undergraduate Education Project: procurement plan for goods, works, and consultancies*. Washington, DC.
- . 2009. *The Towers of Learning: Performance, Peril and Promise of Higher Education in Sri Lanka*. Colombo. <http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/Publications/TOLreportfinal.pdf>
- . 2010a. *Doing Business 2010: Reforming through Difficult Times*. Washington, DC: World Bank, International Finance Corporation (IFC), and Palgrave MacMillan. <http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB10-FullReport.pdf>
- . 2010b. *Stepping Up Skills: For more jobs and higher productivity*. Washington DC. <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/>

IB/2010/07/07 /000334955_20100707020537/Rendered/PDF/555660WP0Box3411
01061141CT01PUBLIC1.pdf

- . 2012a. *Knowledge Economy Index (KEI) 2012 Rankings*. Washington, DC. <http://siteresources.worldbank.org/INTUNIKAM/Resources/2012.pdf>.
- . 2012b. *Putting Higher Education to Work: Skills and Research for Growth in East Asia*. World Bank East Asia and Pacific Regional Report. Washington, DC. http://siteresources.worldbank.org/EASTASIAPACIFICEXT/Resources/226300-1279680449418/7267211-1318449387306/EAP_higher_education_fullreport.pdf.
- World Bank and ADB. 2005. *Sri Lanka: Improving the Rural and Urban Investment Climate*. Colombo and Manila. <http://www.adb.org/sites/default/files/publication/30216/sri-lanka-rural-urban-investment-climate.pdf>.

Innovative Strategies in Higher Education for Accelerated Human Resource Development in South Asia: Sri Lanka

This publication is part of a series of six country reports on technical and vocational education and training (TVET) and higher education in Bangladesh, Nepal, and Sri Lanka. Each report presents current arrangements and initiatives in the respective country's skills development strategies. These are complemented by critical analyses to determine key issues, challenges, and opportunities for innovative strategies toward global competitiveness, increased productivity, and inclusive growth. The emphasis is to make skills training more relevant, efficient, and responsive to emerging domestic and international labor markets. The reports were finalized in 2013 under the Australian AID-supported Phase 1 of Subproject 11 (Innovative Strategies for Accelerated Human Resource Development) of Regional Technical Assistance 6337 (Development Partnership Program for South Asia).

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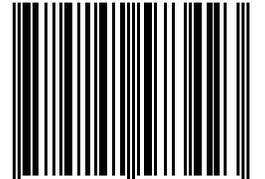
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