8. Sri Lanka

The Democratic Socialist Republic of Sri Lanka is an island country in the Indian Ocean located about 31 kilometers off the southern coast of India. Colombo is the capital of this island nation. Sri Lanka is a multi-ethnic society, with the majority of the population being of Sinhalese origin and Tamils forming the largest minority. The Constitution of Sri Lanka has accepted Sinhalese and Tamil as the official languages. English is accepted as a link language.

Sri Lanka is a plantation economy. The country is famous for the production and export of tea, coffee, coconuts, rubber, and cinnamon, which are the key contributors to its GDP.

Some of the key demographic and economic indicators are given as follows:

Table 23: Key Demographic and Economic Indicators - Sri Lanka

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>19,299,000</td>
<td>2007</td>
</tr>
<tr>
<td>Gross domestic growth (million US $)</td>
<td>32,347</td>
<td>2007</td>
</tr>
<tr>
<td>GDP per capita (US $)</td>
<td>1676.1</td>
<td>2007</td>
</tr>
<tr>
<td>Human development index ranking</td>
<td>102/182</td>
<td>2009</td>
</tr>
<tr>
<td>Population below poverty line</td>
<td>22%</td>
<td>2004</td>
</tr>
</tbody>
</table>

8.1. Background

Sri Lanka’s education system is divided into five parts: primary, junior secondary, senior secondary, collegiate, and tertiary. According to Sri Lankan law it is compulsory for all students to go to school till grade 9 (age 14); however, the MoE has the objective of making all students appear for at least the General Certificate of Education (G.C.E) Ordinary Level.

Most of the schools in Sri Lanka are maintained by the Government. Currently, there are around 9,800 schools in Sri Lanka. There has been a considerable increase in the number of private schools as well.

Sri Lanka’s adult literacy rate is around 91%, which is very high as compared with other developing countries and countries in South Asia. The Secondary Gross Enrollment Ratio is also very high compared with other South Asian countries at 88%.

Some of the key education indicators are given as follows:

<table>
<thead>
<tr>
<th>Education parameter</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult literacy rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>94.8</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Youth literacy rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>97</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Female</td>
<td>98</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Gross enrollment ratio (%): Primary education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>98</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Female</td>
<td>97</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Gross enrollment ratio (%): Secondary education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>86</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>2000–2007</td>
</tr>
<tr>
<td>Expenditure on education (% of GDP)</td>
<td>3.2</td>
<td>2003–2006</td>
</tr>
</tbody>
</table>

Source: [www.unicef.org](http://www.unicef.org); [www.cia.gov](http://www.cia.gov)

The Information and Communication Technology Agency (ICTA) of Sri Lanka is the apex body for development of the ICT sector in Sri Lanka. The Agency’s aim is to use ICTs for economic and social advancement by ensuring the proliferation of ICT to every village in the country. ICTA is responsible for building connectivity infrastructure across the country, it has been formulating policies to enable reforms and restructuring in the educational framework. To reduce the digital divide and reach out to the rural population is the key goal of the agency. ICTA strategizes to:

- Facilitate the formulation and adoption of a National ICT Policy, ICT Action Plan and necessary Legal Framework in collaboration with the Administrative Reforms Committee and relevant stakeholder groups.
- Provide focus and leadership in ICT for development, including building “e-leadership” skills among top government officials, business and civil society leaders.
- Ensure timely and cost effective implementation of projects and build external capacity in project management skills.
- Monitor and evaluate progress to ensure a focus on development results, through obtaining feedback and lessons learned, to inform decision making and continually adjust strategies.

ICTA has planned to launch numerous campaigns through newspapers, radio and television throughout the year. These will be accomplished through initiatives that are simple and attractive to the target group. In July 2003, ICTA took the responsibility of spearheading the initiative of e-Sri Lanka by encouraging the successful implementation of e-Sri Lanka.

e-Sri Lanka’s vision involves leveraging ICT to improve public service delivery, increasing private sector competitiveness, promoting new sources of growth, accelerating social development, and bridging the digital divide. It works with the objective of reaching out to the larger population, which is not privileged enough to have access to the updated technologies.

Importance of extending telecommunication facilities to rural areas has been acknowledged at the highest level by the government. Rural communication networks are relatively expensive to establish, and difficult and expensive to maintain, and are often underutilized.

The key action plans include the development of physical infrastructure, deregulation of the telecommunication sector, mobilization of private sector investment. The tele-density in Sri Lanka is relatively low, with about 44 telephones per 1,000 people in 2001 and Internet use estimated at 8 users per 1,000. Though one may find mushrooming computer vendors and training centers in Colombo and provincial capitals, there is little access to computers in Sri Lankan schools and colleges in rural areas.

The declaration of 2009 as the year of ICT and English is a significant milestone in the Government's long-term plan to improve the quality of life of the people by leveraging the use of ICT. It is hoped that the ICT sector will be able to earn revenue of two billion U.S. dollars by 2012 for the Government. It would also be able to generate employment.

Some of the key ICT indicators are given as follows:

<table>
<thead>
<tr>
<th>ICT parameters</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet users (per 100)</td>
<td>5.7</td>
<td>2008</td>
</tr>
<tr>
<td>Internet subscribers (per 100)</td>
<td>1.23</td>
<td>2008</td>
</tr>
<tr>
<td>Broadband subscribers (per 100)</td>
<td>0.5</td>
<td>2008</td>
</tr>
<tr>
<td>Mobile coverage (%)</td>
<td>90</td>
<td>2007</td>
</tr>
<tr>
<td>Mobile subscribers (per 100)</td>
<td>39.9</td>
<td>2007</td>
</tr>
<tr>
<td>Personal computers (per 100)</td>
<td>3.54</td>
<td>2006–2007</td>
</tr>
<tr>
<td>Internet affordability (US$/month)</td>
<td>4.4</td>
<td>2007</td>
</tr>
<tr>
<td>Mobile affordability (US$/month)</td>
<td>1.2</td>
<td>2007</td>
</tr>
<tr>
<td>Radio subscribers (per 1000)</td>
<td>191.8</td>
<td></td>
</tr>
<tr>
<td>Households with TV (%)</td>
<td>31.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: [www.itu.int](http://www.itu.int), [www.mdgs.un.org](http://www.mdgs.un.org); World Development Indicators Database; [www.cia.gov](http://www.cia.gov)
8.2. Policy Framework and Delivery Mechanism

The MoE realizes that the field of ICT education in Sri Lanka has a huge responsibility and a role in meeting the skill requirements of the information technology industry. Since the time ICT was introduced to the education system (1994), the government has been taking various steps to improve the educational machinery.

A key government initiative to reap the benefits of ICT has been the “e-Sri Lanka” program, which commenced in early 2003. It is a five-pronged strategy that intends to extend the benefits of ICT to impoverished regions by implementing a number of initiatives. The vision of e-Sri Lanka is to be realized through strategies that involve framing ICT policies, spearheading leadership, and supporting institutional developmental program. Attempts are made at creating adequate human resources for ICT and building a dependable information infrastructure. The vision conceived through the initiative of e-Sri Lanka has laid the ICT roadmap for the country. The e-Sri Lanka project had been successful in establishing rural knowledge centers, and e-libraries with the vision of spreading the pulse of ICT education to the majority of the population.

A draft of a National ICT Policy was placed before the government for approval through the National Science and technology Commission (NASTEC) and the Ministry of Science and Technology. The main objectives stated were to use ICTs for efficient administration and management, create a competitive advantage and attract a significant portion of the global software and ICT services market to Sri Lanka, provide information on the country to the world, and use ICT as a tool for the acquisition of information needed for the society. In 2002, Sri Lanka went through yet another review and realignment of national policies related to ICT and telecommunications. The importance of introducing ICT in the school curriculum has been realized by the government, and clear objectives have been laid out which include:

- Enable the effective use of IT as a tool in learning and teaching in school education
- Provide “information literacy” for all school leavers
- Facilitate effective involvement of school system in lifelong education of citizens.
- Restructure the course model in order to meet the requirements of ICT
- Initiate capacity building projects

The National Policy on Information Technology in School Education (NAPITSE) had been framed by the government in order to impart ICT education to the younger generation. This policy aims to provide a global vision and direction to the education system of Sri Lanka. The government has followed a strategic action plan to implement the policy. It had been broken into three stages:

- Stage 1: 2002–03
- Stage 2: 2004–05
- Stage 3: 2006–07

To reach the goals, the following objectives would be achieved under four major strategic themes:
Curriculum Development

- To introduce, sustain, and enhance IT involvement into general education in schools and create opportunities for IT-based learning and teaching
- To introduce IT into pre-service and in-service teacher development and training program and create opportunities for system wide professional development of teachers

Human Resource Development

- To provide necessary education and training to all teachers in government schools, making them competent in using IT for teaching purposes
- To upgrade officers in the education system to handle IT-related activities competently and with ease
- To create opportunities for out of school population to utilize resources in school-based IT resource centers, thus creating an environment for community learning

Physical/Infrastructure Development

- To allocate and distribute optimal resources in an equitable manner to meet the learning needs of students and learning/teaching requirements of teachers. Around 30,000 computers have been installed and supplied to the schools through various projects. The ministry had planned to establish a hardware trainer pool which can take the responsibility of maintaining and upgrading the infrastructural facilities provided to the schools and various institutions.
- To set up an Information Technology Education Resource Center (ITERC) at the national level, nine ITERCs at provincial level and zonal level ITERCs for teacher training/development
- To establish an IT education laboratory at the National Institute of Education (NIE) to improve curriculum development
- To establish an ITERC at the Center for Professional Development of Management of Education
- To dedicate a National College of Education (NCOE) for development of IT teachers under pre-service teacher training
- To provide innovative means of training through activities, such as mobile training laboratories
- To set up a Multimedia Education Software and Web Development Center

Support Initiatives Development

There would have to be support initiatives to ensure the sustenance of IT education in the school system. As IT undergoes rapid changes in terms of technology and usage, the support initiatives will
ensure that such changes are incorporated in the learning process of pupils, without having to wait for the curriculum changes. The following are the envisaged support initiatives:

- To establish IT school clubs
- To encourage preparation of Web sites for schools
- To encourage teachers to own personal computers
- To design, develop and maintain a Web site for the Ministry of Education & Higher Education to assist the school system in e-learning and information management
- To convene appropriately time-framed IT education research and development conferences/colloquia
- To facilitate the setting up of a professional body for those who are involved in IT education in schools
- To establish a fund to support innovative approaches and creative initiatives for school IT education development
- To initiate an award scheme to encourage educators to promote innovative IT education
- To forge strategic partnerships with other government institutions, Sri Lankan Missions abroad, foreign missions in Sri Lanka and national and international NGOs and the private sector to extend the coverage of IT education, promote and enhance the quality of IT education in the school system

8.3. Initiatives

In Sri Lanka, community radio is quite widespread. The initiatives in Sri Lanka have tried to use the extensive experience with radio in integration with computer-based technologies to yield salient results. Some of the key initiatives using ICT in education are:

**Kothmale Community Radio**

The Kothmale Community Radio was implemented in Sri-Lanka by UNESCO in an effort to extend the benefits of ICT to rural people. The Kothmale radio station provides access to computers with dedicated Internet connectivity. This project uses radio as an interface between community and Internet through “Radio Browse” model. Listeners of the radio channel request the broadcasters to surf the Internet on their behalf and find information they require. This information is then relayed back to the listeners in the local language through the program by experts, for example if information on health was demanded, a doctor would be requested to explain and contextualize the information. The station also helps the community develop skills to develop their own Web sites. Since this radio was not owned and run by the community, there were issues regarding its sustenance.

**Sri Lanka Environmental Television Project**

The Sri Lanka Environmental Television Project (SLETP) is a nonprofit, educational service, which uses audio-visual and electronic media—television, video, and the Internet—to address
environment and development issues. The Project, launched in 1994, works with television broadcasters, as well as with a wide range of other users of video material: schools, universities, government agencies, training institutes, and NGOs. SLETP offers country's television broadcasters and video users a broad range of factual programmes on subjects such as the environment, development, health, social justice, and science. The Video resource center is affiliated to International Television Trust for the environment and has access to some of the best factual programmes around the world.

**One Laptop per Child**

The OLPC movement works with the Sri Lankan government to ensure that all school-aged children have access to their own personal laptops. The MoE piloted the OLPC program by purchasing 1,300 laptops from the OLPC foundation with funding aid from the World Bank; full deployment of the laptops will begin in 2010. The XO laptops can be operated using solar power and will enable Sri Lanka to tackle Internet access issues as these laptops use a mesh-net working system, which allows students to communicate instantaneously.

**Secondary Education Modernization Project**

Secondary Education Modernization Project (SEMP) is an initiative funded by the Asian Development Bank (ADB) to support the government's strategy of modernizing the secondary school curriculum and teaching-learning methodologies. It aims at improving the quality of education in secondary school throughout Sri Lanka to ensure an increase in classroom learning and in pass rates on national examinations. Under this initiatives, target schools were equipped with science laboratories, computer facilities, and multimedia units. SchoolNet is another concerted effort of MOE and ADB. It is an initiative to establish a Wide Area Network (WAN) connecting most of the secondary schools and related organizations. SchoolNet gives teachers access to reference material, tutorials, and other educational programmes.

**Nensala Project**

ICTA initiated the Nensala Community development Task force with the vision of spreading a thread of community learning across the rural areas of Sri Lanka. It has established 590 rural telecenters or "Nensalas". The Nenasala Community Development Task Force is set up to manage, conduct and supervise the centers. The Task Force caters to the Nensala operations such as communication development, setting up kiosks, development of the ICT skills and imparting ICT education in the school curriculum, monitoring and evaluation, and capacity building through special training and guidance. Workshops are conducted to receive feedback and ensure proper functioning of the centers.
The Open University of Sri Lanka

The Open University of Sri Lanka (OUSL) was established in 1980 under the purview of the University Grants Commission (UGC) of the Ministry of Higher Education. The University provides educational opportunities to working adults through a distance education mode. The admissions policy has been formulated in such a way that even an individual possessing mere literacy skills can enroll in the University at the lowest level and progress to the postgraduate level at his/her own pace. The self-instructional course content or “Tutor in Print” is designed to cater to the needs of working adults to ensure that work commitments are not disrupted to pursue higher education. Currently the University serves 30,000 students across the country. The Distance Education Modernization Project (DEMP) funded by ADB is an initiative by the Ministry of Higher Education to increase the access to tertiary education for the country through a technology-enhanced distance mode. DEMP has initiated the Open University of Sri Lanka Capacity Enhancement Programme (OUSL–CE) to modernize OUSL into a world class distance education institution, expanding its student capacity to 40,000 learners (National Online Distance Education Service).

The University functions through 4 Regional Centres, 7 Study Centres, and 6 Teaching Centres spread across the country, with educational content being disseminated through multiple media. In 1993, the original audio-visual unit of the university was expanded into the Educational Technology Division (ET). The ET division is responsible for producing instructional audio-visual material, conducting institutional research and training staff to produce state-of-the-art techniques in teaching and learning including online materials. Most audio and video programmes are focused to a specific study component and are given to students as supplementary tools for the courses and modules taught. Students can access audio and video material at the Audio Visual Resource Centre which has a facility for individual/group viewing.

The University uses a Virtual Learning Management System (LMS) called Moodle; this e-learning platform enables students to access course content through the internet irrespective of their location, and it also allows students to discuss subject matters with a network of fellow students and tutors. Using this LMS, students can even upload their assignments and arrange counseling sessions with their tutors.

The OUSL library maintains a vast database of books and e-journals. In 2006, the Virtual Resource Centre (VRC) of the library was established to provide online access to the electronic information resources available at the library. For the maintenance and upgradation of IT infrastructure at the University, an Information Technology Division has been established. The IT division is also responsible for maintaining the integrity and security of the university network and student database. (http://www.ou.ac.lk/)
**Shilpa Sayura Project**

To address the issue of lack of digital content in local languages, the ICTA launched Shilpa Sayura Project to create digital content based on school curriculum in Sinhalese to help students prepare for national examinations. The content is available for eight subjects at telecentres. ICTA is also addressing issues related to standard fonts and keyboards in Sinhala and Tamil and is translating English into local languages to ensure higher participation.

UNESCO, in co-operation with the Sri Lanka National Commission for UNESCO and the Sri Lanka National Institute of Education, convened the "ICT-Integration and Tele collaboration" hosted by the National Institute of Education; which was a workshop to train participating teachers on how to integrate ICT into teaching. The ICT in Education programme, under the Asia-Pacific Programme for Educational Innovation for Development (APEID), has implemented three inter-related projects, which aim to build the capacity of teachers and teacher educators to integrate ICT into teaching. Two of these projects, "Training and Professional Development of Teacher Educators in the Effective Use of ICT for Improving Teaching and Learning" and "Strengthening the Use of ICT in Schools and SchoolNet in the ASEAN Context" are supported by Japanese Funds-in-Trust (JFIT). The third project, the "Next Generation of Teachers" project is supported by JFIT, Microsoft, Cisco Systems, Smart Technologies Inc., and GTCO.

The UNESCO ICT Education Unit initiated the Next Generation of Teachers (Next Gen) Project. The project aims to provide trainee teachers with skills in the operation of ICT, help them to integrate ICT effectively into teaching, and utilize ICT to enhance preparation of teaching materials.

**Intel Teach Program**

Intel Teach Program was initiated in Sri Lanka in 2006 in order to strengthen the capacity of teachers on using technology in the teaching learning process. Intel Teach in-service program is currently conducted in Western, Central, Uva and Sabaragamuwa provinces in Sri Lanka. For pre-service training, Intel recently launched the Intel Teach pre-service program in National Colleges of Education (NCoE). Intel will also work with the Sri Lankan government to undertake various initiatives to increase broadband penetration in the country and deploy connectivity like WiFi.

**The Pan Asia Networking Program Initiative**

The Pan Asia Networking Program Initiative (PAN), a project of the International Development Research Centre (IDRC), provides electronic infrastructure for networking in the Asian region to ensure affordable Internet services. It is a joint venture company that was set up to operate Internet-related services in the country. It is registered with the Board of Investments in Sri Lanka and is jointly owned by several partners including IDRC. It promotes networking between research and educational institutions, government bodies, the private sector and national government and international program that are concerned with economic and social development.
8.4. Constraints

For an effective ICT penetration in the education sector, there are number of factors that need to be addressed. The following is a list of areas where considerable effort is needed for the successful deployment of ICT in education sector.

**Lack of Trained Manpower:** There is a dire need for proper capacity building. Teachers need intensive training not only in computer literacy, but also in how to integrate educational software into classroom activities and the school curriculum.

**ICT Literacy:** ICT as a subject needs more financial support than the other subjects. Cost of establishment of computer laboratory is considerable amount for a developing country.

**Language Barrier:** Proficiency in English language remains poor. It is important to increase proficiency in the language to see a better communication system prospering in the country.

**Digital Divide:** The problem of a greater urban rural divide needs to be addressed in order to see a successful penetration at every sector.

8.5. Insights

In Sri Lanka at the policy level there is a recognition of the potential of technology for improving education and more generally the socio economic condition of people. The National Policy for ICT in Education (NAPITSE) 2002-07, the e Sri Lanka Programme 2003, and the recognition of 2009 as the ‘Year of ICT and English’ highlight the importance placed on mainstreaming ICTs at all levels of society in Sri Lanka.

While government efforts at introducing ICTs in education are more focused at the secondary school level, non formal education programs and community awareness programmes through community learning centres called Nensalas and initiatives like Radio Kothmale are more widespread.

More emphasis is required on creating appropriate content in local languages and providing adequate training to teachers and students to enable them to integrate ICTs in their teaching learning practices.

Although Sri Lanka has made advances in ICT infrastructure over time, significantly increasing connectivity and dependability, the country will need to strengthen this sector further in order to transform itself into a knowledge based economy. The high cost of connectivity prevents people from using ICT. To ensure a better availability the government of Sri Lanka needs to take this issue into consideration. The government should consider revising the telecommunications law to address the issues of fair competition within the sector.

A better management system would further pace up the entire system and ensure a stable development. The key stakeholders should be aware of what can be achieved and by when, and
should be informed about the many issues and challenges that need to be overcome. Smaller projects that are initiated by individuals or groups should be encouraged in a proper way. A better public private partnership can enhance such initiatives spearheaded by small groups.
8.6. Select Bibliography


- Withanage, Dilanthe, November 2003, Bangkok “e-Sri Lanka. The Use of ICTs for Poverty Reduction” The present situation and future aspects of ICT’s role in poverty alleviation.


Links to Initiatives

Government Links

- National Institute of Education: www.nielk/
- University Grants Commission: www.ugc.ac.lk/
- National Science and Technology Commission: www.nastec.lk/
- Information and Communication Technology Agency of Sri Lanka: www.icta.lk/

Schools and Education Institutions

- Open University of Sri Lanka: www.ou.ac.lk/

Private Companies


Other Important Links

- Sri Lanka Environmental Television Project: www.sletp.org/
- Nenasala Project: www.nanasala.lk/
- Kothmale Community Radio: www.kothmale.org/