INTRODUCTION

The first country in South Asia to liberalise its economy, Sri Lanka stands out as an interesting example of a developing nation trying to incorporate information and communication technologies (ICTs) into an overall development and educational policy.

The country has faced formidable challenges. It has a powerful continental neighbour, India, and the society has been ravaged by civil war for nearly two decades. Despite these challenges, the country’s literacy exceeds 90 per cent, and the gender divide is a non-issue, thanks to the country’s consistent investment in health and education.
However, the war has retarded economic growth, resulting in high levels of poverty, unemployment, unrest, and crime. Thus, despite steady growth in educational indicators, problems of poverty, access and equity continue to dog this island nation. On the bright side, since the peace initiatives of 2002, there are definite signs of recovery and reconstruction in the island nation.

National policies, strategies and programmes

Policies, Strategies and Goals

In 1983, the first-ever Computer Policy for Sri Lanka (COMPOL) was formulated. The recommendations of the policy committee were accepted by the Government of Sri Lanka, and the Computer and Information Technology Council of Sri Lanka (CINTEC) was established by an Act of Parliament (Act No. 10 of 1984). The Act recognised policy recommendations and implementation as a major statutory function of CINTEC. The COMPOL recommendations, together with the recommendations made to the government by CINTEC from time to time, now form the current ICT policy.

In 1994, the Science and Technology Act was passed, and it became active in April 1998. This act repealed the CINTEC Act and replaced the Computer and Information Technology Council of Sri Lanka with the Council for Information Technology (although the well-known acronym, CINTEC, was retained). The 1994 Act provided for policy recommendations to be made by CINTEC to the government through the National Science and Technology Commission (NASTEC).

With the change of government in 1994, CINTEC began working on policy recommendations, and by 1996 it had completed most of the groundwork. It initiated a round table on ICT with the participation of all key agencies, which resulted in the formation of the National Working Group for the Exploitation of IT.

A draft of a national ICT policy was placed before the government for approval through 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 current policy envisions the growth of the country into a financial and service hub for the South Asian region with connectivity to the rest of the world. Colombo, under the vision, would become a multi-faceted service centre co-ordinating development at the provincial level.

Key Action Plans

Key action plans include the development of physical infrastructure, deregulation of the telecommunication sector, mobilisation of private sector investment, introduction of measures to protect intellectual property, capacity-building and provision of e-governance services.

Current level of ICT access and use

Sri Lanka has near total literacy, and access to education for all Sri Lankans is free up to the secondary school level. Gender disparities are not an issue in this island country. However, teledensity in Sri Lanka is low, with about 44 telephones per 1,000 people in 2001 and Internet use estimated at eight per 1,000. Judging by mushrooming computer vendors and training centres in Colombo and provincial capitals, computer usage seems to be spreading. Computers are used widely in the private sector for business applications with varying degrees of Internet connectivity and speed.

While a significant number of affluent upper- and middle-class families now own a computer, the cost remains prohibitive for most Sri Lankans. There is little access to computers in Sri Lankan schools and colleges and less in rural areas.

Internet access on a commercial basis became available for the first time in 1995. However, Internet use remains very low due to the high cost of computers, low bandwidth and low computer literacy. It is mainly the urban elite, businesses and private sector corporations who use the Internet. There is also an acute urban/rural disparity with respect to access to the Internet, and public Internet facilities are also limited.

Major initiatives

There are two dimensions to the use of ICTs in Sri Lanka: the extensive experience with community radio as a developmental tool and, more recently, the use of computer-based technologies and the integration of both kinds of applications in innovative ways.

Using Broadcast Technologies

Proactive government support and funds from international donor agencies enabled Sri Lanka to successfully experiment with community radio two decades ago. The
Mahaweli Community radio project from 1981 to 1989 served as the precursor for later applications of technologies coupled with participant communication techniques. Community radios were used as a means to mitigate the problems of relocation of local people into new areas of the country.4

Kothmale Community Radio Project.4 The Kothmale Community Radio Project (KCR) was a UNESCO pilot programme put into place to assist people living in rural Sri Lanka to make the most of new communication technologies and to create avenues to reduce the digital divide at the national level.

The project combines radio and the Internet to address the problem of rural access to computers and connectivity. It was set up as a mini-ISP (Internet service provider) with leased line connection to the Internet. It uses a 300-watt transmitter for a listening area of a 20 kilometre radius that comprises 52 villages, two large towns and a total population of 230,000 people.

The broadcasters use the Internet in research and production and local people access the Internet from the facilities at KCR. Internet-browsing by a presenter on behalf of listeners, called radio-browsing, also uses a community database and hosted websites as additional sources of information. Resource people from the community (lawyers, doctors, etc.) interpret the information.

Initial training programmes were implemented with the assistance of foreign experts. Now local people have picked up the skills and pass them on to each other.

Computerised community radio operations in remote Sri Lanka. Riding the wave of the experience with the Kothmale Community Radio Project, the Government of Sri Lanka established Uva Community Radio in Badulla, one of the most underdeveloped districts in Sri Lanka, with support from UNESCO and the United Nations Development Programme (UNDP). The purpose of the community radio is to facilitate increased community participation in designing, implementing and evaluating an area-based growth and equity programme that has poverty reduction as a major focus.5 As part of the project, rural broadcasters have been trained in using computer-aided programme production.

The Sri Lanka Environmental Television Project.3 The Sri Lanka Environmental Television Project (SLETP) offers the 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. As the Sri Lanka Video Resource Centre affiliated with the International Television Trust for the Environment (TVE), SLETP has had access to some of the best factual programmes produced around the world.

SLETP was started in 1995 by TVE and the Open University of Sri Lanka as a non-profit service to use the audiovisual and electronic media to raise awareness on environmental and development issues. As a non-formal educational effort, all SLETP programmes are scientifically accurate, journalistically produced and use engaging, non-technical formats.

The project’s strength has been in forming partnerships with television stations, universities, government agencies, training institutes and non-governmental organizations (NGOs). Television producers and programme managers turn to the SLETP for complete programmes as well as video footage that is not easily or commonly found elsewhere in Sri Lanka.

The Science and Environment Video Library provides non-broadcast users with access to nearly 500 video films that have come from TVE along with a multitude of other sources. The videos are regularly borrowed for screenings in schools and universities, community gatherings, public seminars, training programmes and for private viewing. For those interested in buying videos, SLETP sells high-quality tapes containing those programmes for which copyright and distribution rights have been cleared (usually SLETP’s own productions and all TVE titles).

Using Computer and Internet-Based ICTs

Secondary Education Modernization Project.6 The first initiative has come from the World Bank and the Asian Development Bank, which recently launched two separate plans to introduce computers to schools and teach computer skills to high school students. Together the plans will provide computer centres each with 10 to 20 computers for 2,300 schools during 2001–2006. The project will improve access for an additional 5,000 poor students annually by upgrading 100 existing schools.

The project is comprised of three components. The first is the modernisation of secondary schools through modern teaching methods coupled with evaluation to improve quality. The focus is also on developing computer literacy to narrow the digital divide. The second component will expand educational opportunity for poor students by increasing the number of full-time schools in the rural areas, and the third component will improve the delivery of educational services by providing training for relevant agencies.

International Childcare Trust.7 The International Childcare Trust is working in Sri Lanka to enhance the capacity of partner organizations through information-sharing and training opportunities. Its objective is to help partners in designing, implementing and managing projects in co-ordination with local people. In Sri Lanka, the projects include supporting children in local schools.
Knowledge and Information Systems of the Urban Poor. The aim of this research project, Knowledge and Information Systems of the Urban Poor (KIS), is to investigate how the urban poor access the information and technologies they need to improve their livelihoods, and to strengthen their knowledge and information systems.

Poor men and women living in urban informal settlements need knowledge and information to cope with risks and to improve their livelihood. Not knowing about their rights, the services they could access, plans for their areas or what options there are for tackling certain problems puts them at a disadvantage and increases their vulnerability.

The Pan Asia Networking Program Initiative. The Pan Asia Networking Program Initiative (PAN), a project of the International Development Research Centre (IDRC), has been designed to provide the physical electronic infrastructure for networking in the Asian region. A joint venture company 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. The joint venture company provides competitive and affordable Internet services in the country. It promotes networking between research and educational institutions, government bodies, the private sector and national government and international programmes that are concerned with economic and social development.

Training

There is evidence of utilisation of ICT in various sectors of the economy in Sri Lanka, but not much for instructional purposes. One project, the Training of Teachers in Information Technology, co-ordinated by the Ministry of Education and supported by UNESCO and the National Open School of India, seeks to bring together students, teachers, ICT professionals, research and development institutions and private sector organizations to upgrade the knowledge and skills of teachers and facilitators and to integrate educational technologies in their work. More broadly, it also aims at tapping the potential of new ICTs (including distance education methods) to provide more easily accessible and better teacher education and professional development.

Constraints on the use of ICT

Lack of awareness, resistance to using ICTs, inadequate communications infrastructure and limited collaboration between different regulatory and educational organizations are some of the constraints on the greater use of ICTs for education.

There is an urgent need to establish a government intranet and to provide Internet access to it. At present the Lankan Educational, Academic & Research Network (LEARN) provides an Internet and e-mail service to universities and a few research institutes, but does so with much difficulty owing to the lack of funds and the difficulties in obtaining stable communication links.

Appropriate changes to the existing legislation, introduction of new legislation and the development of the necessary infrastructure are urgently needed to obtain maximum benefits from technology. For international players to enter the Sri Lankan market, it is also necessary to enact laws for the protection of personal privacy and intellectual property.

Analysis

There are two dimensions to the use of ICTs in Sri Lanka. One is that small individual projects, such as the Kothmale Internet Radio in Sri Lanka project have serious bottlenecks that hamper sustainability. Initial funding for infrastructure development has to be sustained by a parallel investment for the upgrading of capital equipment and for operating costs. Thus, initiatives enabling local partners to develop private-public partnerships and business models to ensure sustainability are essential.

Capacity-building of teachers is critical if the current initiative to upgrade secondary school education through the use of ICT is to succeed. Faculties in the universities are computer-literate and are capable of providing the leadership for a sustained effort for the rest of the country. But often they are working in isolation from each other because of inter-institutional competition. Thus, any initiative undertaken should be spearheaded by a nationwide collaborative effort of several partners and should focus largely on providing teacher education to improve awareness, access and use of ICT by teachers.

NOTES

1 See www.esrilanka.lk/eg-policy-prel-draft-may06-03.pdf.
7 See www.sletp.org.
9 See www.ict-uk.org/srilanka.html.
10 See www.idrc.org/html/shelter/kis_research.htm
11 See www.idrc.ca/research/index_e.html.