



**E-Government for Women's Empowerment
in Asia and the Pacific**

**The E-Government Institutional
Ecosystem in Sri Lanka from a
Gender Perspective:
A State-of-Art Analysis**



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Abbreviations

CINTEC	Computer and Information Technology Council of Sri Lanka
GIC	Government Information Centre
ICT	Information and Communication Technology
ICTA	Information and Communication Technology Agency
MMS	Multimedia Messaging Service
NARESA	Natural Resources, Energy and Science Authority of Sri Lanka
NGO	Non Governmental Organisation
RTI	Right to Information
SLCERT	Sri Lanka Computer Emergency Response Team
SMS	Short Message Service
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USAID	United States Agency for International Development
VGK	Vishva Gnana Kendra (Knowledge Centres)



1. Introduction

The beginnings of a holistic strategy that aimed at using ICT to impact all sectors of Sri Lanka can be traced to the opening up of the economy to market forces in 1977. With the private sector given a lead role in development and a nascent software industry starting to emerge, a National Computer Policy was developed in 1983 by the Natural Resources, Energy and Science Authority of Sri Lanka. In 1984, an Act of Parliament then established a national statutory apex body of information technology, the Computer and Information Technology Council of Sri Lanka (CINTEC), which operated directly under the President.¹ In line with its vision, CINTEC focused on several key areas: legal aspects of ICTs, training and education, increasing ICT access island-wide, public sector computerization including the launch of www.gov.lk,² and the development of Unicode for the two local languages, Sinhala and Tamil. The work carried out by CINTEC laid a firm foundation for the development of the ICT sector that would take place decades later.

There were no major policy changes from 1983 to 2002 although several draft policies that focused on the development of the software industry, based on the Indian model, were produced. Progress was slow during this time as the country

plunged into political turmoil. Although a Ministry for ICT was established existence in 2000,³ large scale funding was not available and e-government activities were "... often restricted to the computerization of departments, mostly the result of the efforts of groups of individuals with a vision to use ICT to improve workplace practices".⁴ Some government departments such as the Department of Immigration and Emigration were nevertheless early adopters of e-government.⁵

One area of early government intervention was the ICT training and education of citizens (starting with tertiary education in 1967). However, it was only in the 2000s that a concerted effort was made to improve the digital literacy of the population. An early precursor to digital literacy efforts was the Kotmale⁶ Community Radio set up in 1989 to carry development messages to communities relocated due to the construction of a large-scale irrigation project.⁷ The Internet was introduced in 1995 to Sri Lanka by Lanka Internet. The Internet Exchange started by CINTEC spearheaded the development of Unicode and web content in the local languages of Sinhala and Tamil. In 1998, the Kotmale Community Radio and Internet Project (KCRIP), the world's first multipurpose telecentre using mixed media, radio and the Internet, was initiated by the government with financial assistance from UNESCO and other international agencies. This

1 Council for Information Technology (CINTEC). Website, Retrieved from <https://web.archive.org/web/20040730190829/http://www.cintec.lk/> 21 January 2016.

2 CINTEC provided "infrastructure for widespread connectivity among and within organizations in order to communicate, share information and transfer knowledge". Assistance was provided to the public sector through advisory and consultancy services. Retrieved from <https://web.archive.org/web/20040803002438/http://www.cintec.lk/public.htm>, 21 January 2016.

3 Fourth Parliament was dissolved after one year in 2001.

4 Rainford, Shoban ESri Lanka: An Integrated Approach to e-Government Case Study Retrieved from <http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan040596.pdf>, 21 January 2016.

5 Ibid

6 Kotmale is located in the central hill country approximately 193km from Colombo.

7 Mahaweli Irrigation Project



project also had the distinction of: being the first to provide Internet facilities to remote areas outside Colombo; introducing a mobile telecentre/ broadcasting unit known as eTUKTUK; encouraging people's participation and involve community youth in developing content; and being the first effort to use dynamic routers instead of fixed routers. Radio and television programmes were used to popularize the Internet while the Sri Lanka Broadcasting Corporation introduced "radio browsing" - reading content from the Internet over radio.⁸

Although CINTEC was of the view that e-Commerce and e-Learning should be adopted fast to develop the country and introduce rural youth to the benefits of new technology, poor telecommunication facilities, high Internet charges and unaffordable hardware precluded the vast majority from acquiring the requisite skills. Consequently, starting in the early 2000s, CINTEC embarked on setting up Internet kiosks, which then became known as Internet cafes or cybercafes and telecentres. *Vishva Gnana Kendra* (VGK) (Knowledge Centres) were set up in communities in several regions, the first of which was located at Dambulla.⁹

The contribution of the NGO sector to the development of the ICT eco-system and enhancement of digital capabilities of citizens, especially women, prior to 2000 is noteworthy. One of these NGOs was Sarvodaya that worked in villages and included

women in their programmes for information dissemination through telecentres.¹⁰ Another was the Centre for Women's Research that set up connectivity-enabled community resource centres in several villages outside Colombo.

In 2002, the government of Sri Lanka embarked on the development of the ICT sector and the re-engineering of e-government programmes. The Information and Communication Technology Agency (ICTA) was incorporated in 2003¹¹ as a government-owned, private limited company to "provide leadership, to energize the process of using ICT for reform and economic growth, and to create a more dynamic organization outside the rigidity of the government bureaucracy that is more flexible and responsive to such a fast changing technology as ICT".¹² A project integrating a comprehensive ICT vision and planning into the development process, 'eSri Lanka: An ICT

⁸ Wijayawardhana, Harsha 2016. My involvement in the evolution of Internet in Sri Lanka and Sinhala Unicode with a discussion on Impact of Internet on Sri Lankans. Colombo (forthcoming)

⁹ Dambulla is located in the North Central Province 150km from Colombo.

¹⁰ The Sarvodaya Shramadana Movement that works in over 14,000 villages island-wide set up telecentres, starting in 1997, as nodes for community development using a combination of technologies and methodologies. It initiated the Virtual Village Project in a traditional village community to provide 'last mile connectivity' and support livelihood development, with support from the International Development Research Centre. The virtual villages consisted of tele-huts that were networked to district telecentres of Sarvodaya using, for the first time in Sri Lanka, wireless technology, and providing free access. Another important aspect of this project was the incorporation of gender issues into the project and including a women's organization - the Centre for Women's Research (CENWOR) in the project steering committee. The project worked in partnership with the University of Colombo that provided technical inputs; and the University of Peradeniya that conducted research on socio-anthropological aspects of the project. CENWOR also contributed to the inclusion of women in the ICT sector through research and advocacy, training of women's organisations, and undertaking action projects by setting up community information resource centres in several districts.

¹¹ Information and Communication Technology Agency Act, No. 27 of 2003.

¹² Rainford, Shoban Ibid.



Development Roadmap' was launched in 2005, funded by the World Bank as part of the government poverty reduction strategy, which was a key priority area of its country assistance programme.¹³

The vision of eSri Lanka was "to harness ICT as a lever for economic and social advancement by taking the dividends of ICT to every village, to every citizen, to every business and to re-engineer the way government thinks and works." It included a series of programmes for strategic policy and regulatory reforms towards achieving socio-economic development across multiple sectors of the economy and society, expansion of the broadband network throughout the country, re-engineering government (e-government), and the establishment of *Nena Salas*¹⁴ (telecenters) in remote areas to achieve its vision. It also aimed to enhance the competitiveness of the country's private sector, by opening up opportunities for investment in outsourced IT-enabled services, and implementing several rural ICT initiatives through grants. The project, extended three times, concluded in December 2013. In its final report, the World Bank¹⁵ stated that the project had achieved its objectives because of

strong government support, a robust implementing agency, and its emphasis on expansion of services into under-served areas. It stated further that the momentum created by the project had to be maintained to continue ICT development in the country.

The second phase of the eSri Lanka project 'SMART Sri Lanka' began in 2014 to respond to the challenges in the Mahinda Chinthana.¹⁶ The government's ten-year development policy provided an overall framework for government planning up to 2019/2020. SMART Sri Lanka aimed at boosting the country's transition to a knowledge-based economy and information society, and enabling it to emerge as a key knowledge hub in the region. To achieve this aim, a 'Whole of Government' approach offering one common window for all services was adopted; and therefore, specific strategies were designed in the following areas: Smart Government, Smart Jobs, Smart Industries, Smart Information Society, Smart City, Smart Leadership and Smart Project Management.

However, in January 2015, there was a change of government, and the implementation of SMART Sri Lanka was put on hold, although projects that had began prior to 2014 were continued. The process of developing a new ICT policy commenced in March 2016. Its objectives are similar to those proposed under the eSri Lanka project: ICT is a major driving force for national development. Strategies and action plans highlight an enabling infrastructure, a legal framework, information security and

13 There were appraisals, negotiations, and debates within the World Bank about the project but the subsequent formation of multi-disciplinary teams at the World Bank and in Sri Lanka took the process forward, Hanna, Nagy K. (2007) *From Envisioning to Designing E-Development. The Experience of Sri Lanka*. Washington: World Bank.

14 Built on the earlier community information resource centres, *Viswa Gnana Kendra* (Village Knowledge Societies).

15 World Bank 2014. *Implementation Completion and Results Report (Credit 3986 CE) on a Credit and Grant in the Amount of SDR 29.2 million (US\$ 55 million Equivalent) to the Democratic Socialist Republic of Sri Lanka for a ESri Lanka Project*. World Bank South Asia Region Finance and Markets Global Practice.

16 Ministry of Finance and Planning 2010. *Mahinda Chinthana-Vision for the Future*. Colombo, Department of National Planning.



standards, human resource development, e-government, and the use of ICT in trade and commerce, industry, and global competitiveness.¹⁷ The new policy is aligned with the goals of the eSri Lanka project.

Thus, the eSri Lanka project was instrumental in developing the ICT sector and introducing e-Government with the overall vision to use ICT for national development. The groundwork for post 2002 developments had been laid by CINTEC as early as 1985. Despite instability, the apex agencies charged with the responsibility of implementation were able to achieve most of the targets that had been set for the project. A lacuna was the lack of recognition of gender issues and proactive measures to address barriers to women's access to technologies.

2. Gender in e-Government Programme Design

When the eSri Lanka project was being designed, Sri Lanka had committed to women's empowerment. It had prepared the Women's Charter (1993); put in place an institutional framework for women's advancement comprising a Ministry of Women's Affairs, a National Committee on Women and a Women's Bureau; acceded to the United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994; and become a signatory to the final outcome document of the Beijing Platform for Action (BPFA) of the Fourth World Conference on Women (1995). Sri Lanka was also a participant at the World Summit on the Information Society (2003) and subscribed to the WSIS commitments to furthering women's empowerment and participation in the information society.

The eSri Lanka project was designed with the participation of a broad group of stakeholders to ensure ownership, knowledge transfer, capacity building, local innovation, sustainable institutional change and responsiveness to local conditions. However, despite the state's commitment to women's empowerment, the national machinery for the advancement of women, or representatives of other agencies such as the Sri Lanka Bureau of Foreign Employment¹⁸ were not represented in the stakeholder group.¹⁹

¹⁷ ICTA 2016. Policy framework. Retrieved from <https://www.icta.lk/policy-framework/> 31st April 2016.

¹⁸ The Sri Lanka Bureau of Foreign Employment is responsible for large numbers of low skilled women who migrate for overseas work

¹⁹ Discussion with a key stakeholder at ICTA, 8th February 2016.



The appraisal document for the eSri Lanka project did not take into account gender issues and the disadvantages faced by women, or gender stereotyping and social norms that impede women's empowerment. The document mentions women as one of the different categories of the population that the project should focus on ((ii) empowerment of the rural poor, disabled, women, and youth... and (v) providing "training opportunities for women and youth".²⁰), but they are not a separate category

The outcome indicators too are gender neutral as the following examples show:

1. "5,000 beneficiaries in each targeted community using telecenters on a regular basis, to improve their communication opportunities and access to services (health, education, employment, and government services)",
2. "10,000 jobs created in software services and ICT-enabled services industry",²¹ an indicator that fails to acknowledge that the unemployment rates for women have been double that for men, over the years.

As a result, data collection for monitoring was not sex-disaggregated. This has made it difficult to assess/evaluate the impact of the eSri Lanka project on women.

The absence of gender mainstreaming in the design of the eSri Lanka project reflects the wider marginalization of women in e-government frameworks, despite stated commitments to gender equality. Women tend to be lumped together with other vulnerable groups such as the disabled in the various programme components of the eSri Lanka project instead of including gender as a cross-cutting issue. The lack of sex-disaggregated indicators to measure impact on women also exemplifies the lack of recognition of gender specific barriers that women encounter in accessing technology and digitalized governance systems.

Nevertheless, although there was no representation in the project stakeholder group, women and women's groups were included in the focus group set up by ICTA for the eSociety Fund.²² The Fund included a Community Assistance Programme characterized by a 'bottom-up' approach, and a programme for scaling up community projects at the national level.

2.1 Commitment to Computer Literacy

Two streams of ICT skills development have had an impact on women's digital literacy. First, the incorporation of ICT education in the formal education system at secondary, tertiary and postgraduate levels, and in vocational training; and second,

²⁰ World Bank 2004. Project appraisal document on a proposed credit... South Asia Region, Washington, p. 3.

²¹ Ibid, Table 1 p.4.

²² The Fund is an initiative that aims at facilitating access to ICT amongst the most vulnerable groups in the country, and narrowing the digital divide between urban and rural areas. According to a Sri Lankan Internet pioneer, the gender digital divide was recognized by the Head of CINTEC and some attempts were made to initiate projects to include women.



enhancing ICT literacy of the general population especially those in under-served areas. Policy documents such as the 1983 National Computer Policy and the draft policy on the development of the software industry developed for the Cluster initiative of United States Agency for International Development (USAID) had identified the need for a qualified pool of human resources to sustain technological and economic development of the country. Nevertheless, the impetus for 'universal' computer literacy came from the 2005 eSri Lanka project.

Milestones in computer science education and literacy were: the introduction of computer science in tertiary education in 1967; the introduction of information technology to the school curriculum in 1984; setting up of computer resource centres in 1994 by the National Institute of Education targeting around 700,000 school leavers annually to develop basic IT skills; offering of diploma courses to the non-formal sector in 1984; introduction of the National Certificate in Computer Applications at basic, intermediate and advanced levels by the Department of Examinations in 1995;²³ the launch of the National Policy on Information Technology in School Education in 2002; and the teaching of General Information Technology (GIT) in grades 12 and 13 the same year, and its extension in 2004 as an elective subject in a limited number of schools, and at the G.C.E. Ordinary Level in 2007. More recently, the Asian Development Bank developed a Gender Action Plan under its Education Sector Development

Programme (2013-2018), to increase the participation of girls in technology subjects in grades 12 and 13.

Several developments could enhance the access of girls to opportunities to acquire ICT literacy. For example, School Net, an online educational system, connects up to 1500 schools in Sri Lanka,²⁴ eVillage²⁵ schools have also been set up in selected schools. These initiatives can promote girl's access to ICT due to gender parity in enrollment at primary and secondary levels, and as more girls continue to higher grades than boys.²⁶ In 2005, for example, girls also outperformed boys at public examinations at all levels.²⁷

However, inequalities in the school system affect the learning outcomes of girls (as well as boys). Only about a fifth of the schools have G.C.E. Advanced Level classes (students in the age cohort 17-18 years). Lack of/inadequate budgetary allocations to meet the cost of electricity and maintenance and upgrading of computer facilities is a constraint that leaves out a considerable number of schools especially in remote rural areas. For individuals

23 Induruwa, A. S. 1999. Information technology development in Sri Lanka. *Journal of the National Science Foundation Sri Lanka*. 27 (3)

24 http://www.labour.gov.lk/web/index.php?option=com_content&view=article&id=288&Itemid=339&lang=en

25 E village programmes were launched by selected schools under the Secondary Education Modernization Project.

26 Mainly due to the availability of employment opportunities for boys at that level. Jayaweera, Swarna 2014. Education and training of women in Review of the Beijing Platform for Action – Sri Lanka 1994-2014. Colombo, Centre for Women's Research; http://www.ibe.unesco.org/sites/default/files/Sri_Lanka.pdf; <http://uis.unesco.org/country/LK>

27 UNESCO 2010/11. World Data on Education VII Ed. http://www.ibe.unesco.org/sites/default/files/Sri_Lanka.pdf



from low income households, unaffordable electricity and Internet charges deny access to the study of ICTs.

Despite these constraints, the proportion of women undergraduates studying computer sciences in Sri Lanka between 2005 and 2011 was 40 per cent.²⁸ This increase can be attributed to a change in entry requirements for computer science courses which enabled girls who had been disadvantaged due to subject selection at the Advanced Level to gain entry to this course. The introduction of external degrees was another factor. It also resulted in expanding opportunities for girls from non-urban and disadvantaged areas. Another factor that has contributed to more and more females entering this field of study was the change in parental attitudes to girls working in technical fields due to the recognition of the potential of ICT related employment,²⁹ and because IT literacy is required for employment even in rural areas.³⁰ Despite these positive developments, and lack of entry restrictions for women enrolling in these programmes, practical constraints such as evening classes, mobility restrictions, and transport problems resulted in high dropout rates, especially in the external degree programme.

The 2005 eSri Lanka project articulated a national strategy for ICT literacy, training and education. The specific objectives of this

strategy were: ensuring that Sri Lanka acquired the necessary human resources to achieve the eSri Lanka vision; building an IT-competent population; and making Sri Lanka a global leader in ICT learning. The eSri Lanka project was also expected to have a catalyst effect on the ICT training sector by increasing citizen demand for high quality ICT education.

Human resource development was undertaken at various levels: through mainstreaming ICT education; increasing the intake of undergraduates into ICT programs; teacher training; equipping schools with ICT facilities; using ICT as an enabler for broad-based multi-layered education and tertiary education; introducing ICT for corporate learning; focusing on training for ICT-enabled services in sectors that employ a large number of women; and increasing tax and fiscal incentives for conducting ICT literacy programmes.

In addition to utilizing the network of existing training institutions, ICTA (the agency steering these efforts) drew on the Nena Sala network³¹ that promoted and offered ICT courses to rural communities. ICTA's e-Learning Network was also engaged in the effort through this separate but related project. E-learning was initially launched at five distance learning centres, with plans to extend them to the entire country. Specialised knowledge centres that were set up (the *Vidarth*a (Technology) Resources

28 The Association of Academies and Societies of Sciences in Asia (AASSA), 'Women in Science and Technology in Asia' page 12 <http://www.interacademies.net/File.aspx?id=28016>

29 Jayaweera, Swarna & Wanasundera, Leelangi 2006. Gender and ICT. A study carried out for the Institute of Social Studies Trust, New Delhi.

30 Ibid

31 Nena Sala (tele-centres) and e-Library Nena Sala - a smaller version of the Nena Sala, were established in underserved areas to take "the benefits of ICT to the people". One thousand centres that follow a community model where some services are provided free with a few paid services to maintain the sustainability of the centre were to be set up throughout the country.



Centres and *Vishva Gnana Kendra* (Knowledge Centres)³² forerunner to *Nena Sala*,³³ *eLibrary Nena Sala*,³⁴ and *Easy Seva*,³⁵ were also engaged in providing basic ICT skills.

In 2006, ICTA launched the 'e-Citizen' learning programme, designed to provide a qualification in basic ICT skills consisting of two recognized ICT qualifications, the International Computer

Driving Licence (ICDL)³⁶ and e-Citizen.³⁷ Both courses were provided at subsidized rates and there were other incentives as well for participants. In the preliminary phase, the 'e-Citizen' project sought to engage 100,000 citizens; and estimated that an additional 400,000 would master basic ICT skills by 2009. These estimates were projected with a view to achieving the target of an ICT literacy rate of 60 percent among rural communities. In 2015, a further step was taken to upgrade *Nena Sala* IT education and training by linking up with the Vocational Training Authority of Sri Lanka that could provide students a nationally recognised certification.

None of these training programmes targeted women or provided for women's quotas. However, under a programme conducted under 'e-Diriya', the national ICT literacy initiative of Sri Lanka launched in 2011, ICTA with support from the Sri Lanka Samurdhi Authority³⁸ and the Ministry of Education reached out to 23,000 women Samurdhi welfare beneficiaries. This was a one-time training programme conducted as part of Telecentre.org Foundation's global campaign of empowering rural women with ICT, the Women's Digital Literacy Campaign.

ICTA also has been conducting 'training of trainers' programmes for *Nena Sala* operators. An example of such a programme is Intel Easy Steps, which enables participants to acquire certification

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- 32 Another telecentre model. ICTA. *NenaSala* project (National Telecentre Project). Retrieved from <https://www.icta.lk/projects/nenasala-project-national-telecenter-project/>. 20th April 2016.
- 33 *Vidarth*a Resource Centres reach the targeted population through community mobilization and the establishment of *Vidarth*a Societies at the Grama Niladhari (the lowest level of administration) division. Information is given directly to the community by the technical and field officers while training is also conducted at community level. This programme has the backing of three national level research institutes –the Institute of Industrial Technology, Arthur C. Clarke Centre for Modern Technologies and the National Engineering Research and Development Centre. Rural Agricultural Knowledge Centres/ VGKs use the electronic media to disseminate information to extension workers as well as to farmers. The model adopted by these two venues appears to be effective in disseminating information to disadvantaged communities and especially to women whose literacy levels are low, who do not have the capacity to take advantage of digital technology to access information, have time constraints and are not information literate. The critical issue facing under-served communities is that of increasing productivity, improving the quality of their products and moving out of poverty, and subsistence level existence by increasing their income levels. The availability of content that is generated by the relevant national level research institutes and its dissemination by these two venues leads to the increase in improvement in the quality of life of low income families through increase in productivity and incomes. The majority of users of the VRC were women while men were more frequent users of VGK.
- 34 A component of the *Nena Sala* network in remote rural areas in religious institutions and some public libraries. Retrieved from http://www.nenasala.lk/index.php?option=com_content&view=article&id=93&Itemid=579&lang=en. 6th May 2016.
- 35 *EasySeva* is a private public partnership model to provide last mile connectivity using wireless technology. Its main aim is to develop entrepreneurs. While these centres did provide training, a study done in 2008 showed that in all public access venues studied, except the VRCs, women were a minority of users.

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- 36 Includes 76 hours of training. <http://www.comminit.com/la/node/135195>. It develops computer skills at beginner intermediate, advanced and professional levels. <http://www.testit.lk/>
- 37 A 36-hour course in basic computer skills.
- 38 Samurdhi is the national poverty alleviation programme in Sri Lanka



as 'Senior Trainers'.³⁹ The Nena Sala training has been considered useful, though women operators are a minority, accounting for only 28 percent of telecentre operators in 2013.⁴⁰

According to the World Bank (2014),⁴¹ the Nena Sala programme contributed 'significantly to mass literacy' with a monthly usage exceeding 700,000.⁴² A final evaluation of the Nena Sala programme conducted in 2013, that surveyed 210 out of the 700 centres, found that women constituted 38 percent of users.⁴³

While the World Bank study did not include sex-disaggregated data and the subsequent evaluation did not attribute any reasons for the lower usage of Nena Sala centres by women, micro-studies have found that significant barriers⁴⁴ hamper women's access to the Nena Sala services.⁴⁵ For example,

Kottegoda⁴⁶ has recorded the request for women-only centres from the predominantly Muslim eastern province, emphasizing that regional differences in gender relations and norms need to be considered when introducing technology and conducting training programmes.

An initiative that contributed to the improvement of computer literacy was the introduction of local language computing through the development of Unicode Sinhala and Tamil fonts. It is now estimated that there are more than 400 Unicode compliant tri-lingual government websites. e-Service websites and many other independent sites have also become more widely accessible to the public, because of their Unicode compliance.

These multi-pronged efforts at imparting ICT knowledge resulted in an exponential rise in the computer literacy rate, from four percent in 2004 to 24.9 percent in 2015.⁴⁷ The Department of Census and Statistics defines a computer literate person (aged 5-69) as one who can use a computer on her/his own. However, Samarajiva⁴⁸ contends that the literacy rate is likely to be higher, as the current definition does not include those who access the Internet through tablets and smart phones. Also, ICT penetration among individuals will be a multiple of household penetration.

39 ICTA and INTEL take digital literacy to the grassroots. *Daily FT* 15 December 2013. <http://www.ft.lk/2013/12/05/icta-and-intel-take-digital-literacy-to-the-grassroots/#sthash.7M4mlUoq.dpuf>

40 GreenTec Consultants (Pvt) Ltd 2013. Combined Telecentre and eSociety - Final evaluation. Final report Volume 1 Colombo, ICTA.

41 World Bank 2014. Implementation, completion, and results report on a credit and grant ... to the democratic Socialist Republic of Sri Lanka for a ESri Lanka project. Volume 1. Report No: ICR-0000939.

42 Ibid. No sex disaggregated data was available.

43 GreenTec Consultants (Pvt) Ltd 2013. op.cit.

44 These include locational factors, hours of opening, sex of the Nena Sala operator, safety of the venue, cultural constraints and the reluctance of parents to allow girls to mix with boys at the centre, and lack of relevant content in local languages.

45 Jayaweera, Swarna, Sanmugam, Thana and Wanasundera, Leelangi 2006. Gender and information technology in Sri Lanka: inclusion or exclusion? Colombo, Centre for Women's Research; Wanasundera, Leelangi 2008. Public access to information and ICT, Phase report prepared for the University of Washington, Centre for Information and Society, Seattle; Kottegoda et al. 2012. Women and the new media in the margins of Sri Lankan state. Bangalore, IT for Change.

46 Kottegoda, Sepali et. al., op.cit.

47 Department of Census and Statistics 2015. The data has not been disaggregated by sex. Since data is available only for computer literacy and the policies, plans and programmes refer to computer training or IT training this section will be using the narrow definition of computer literacy.

48 Samarajiva, Rohan (2015) Computer literacy in Sri Lanka continues to be difficult to pin down. Retrieved from <http://lirneasia.net/2015/12/computer-literacy-in-sri-lanka-continues-to-be-difficult-to-pin-down/comment-page-1/>. 5th January 2016.



Consequently, computer literacy can be expected to be higher than what has been reported. Further, it is important to measure digital and information literacy, in addition to computer literacy.⁴⁹

Computer education that commenced in the late 1960s in the universities, a policy focus on training and skill development that started with the establishment of CINTEC, and the implementation of the eSri Lanka project resulted in more than a doubling of the computer literacy rate in a decade and a half. Official statistics indicate a narrow gap between male and female computer literacy rates at the national level. However, there are pockets of disadvantage and significant barriers to women's access to training and skill development. Women continue to be a minority of users at the public access points that provide training.

2.2 Connectivity Architecture

Digital rights for women can be ensured only if there is connectivity. The population of Sri Lanka remains a highly rural population. According to the Sri Lanka 2012 Census of Population and Housing, 77.4 per cent of women lived in rural areas and an additional 4.5 per cent in the Estate areas.⁵⁰

However, connectivity has had an urban bias. Nevertheless, since the reforms of the 1990s, the urban-rural divide has been closing. Increasing household incomes, with GDP per capita reaching an all-time high in 2014.⁵¹ Expanded mobile network coverage, with as much as 90 percent of the population now covered by 2G networks and 70 percent by 3G and a limited number with 4G, and increasing competition between the mobile operators resulting in a lowering of prices for consumers (Sri Lanka has the lowest monthly price in the world for mobile telephone services)⁵² have all had a positive impact in increasing connectivity of the population. In 2015 the government launched the Google Loon project to provide high speed, affordable Internet access to all citizens in the country.⁵³ ICTA has plans to set up 10,000 Wi-Fi hotspots around the country "so that every Sri Lankan will be able to get online irrespective of their physical location".⁵⁴ The government is to link 3,500 government buildings in 25 districts via the Lanka Government Network 2.0 facilitating document sharing within government and with citizens. Storage will be on the cloud. Privacy concerns are to be addressed by the setting up of a security operation centre for cyber-crime.⁵⁵

49 Digital literacy is the knowledge and ability to use a range of technology tools for varied purposes. A digitally literate person can use technology strategically to find and evaluate information, connect and collaborate with others, produce and share original content, and use the Internet and technology tools to achieve many academic, professional, and personal goals.

50 Census of Population and Housing Sri Lanka 2012 <http://www.statistics.gov.lk/PopHouSat/CPH2011/Pages/Activities/Reports/SriLanka.pdf>

51 <http://www.tradingeconomics.com/sri-lanka/gdp-per-capita>

52 The International Telecommunications Union (ITU) has observed that the country has "some of the most aggressive prepaid mobile-cellular offers in the world". 'Measuring the Information Society Report', ITU, Geneva, 2015

53 Kotelawala, Himal 2015. Sri Lanka creates universal Internet access world history with Google Loon. *Daily FT* 29 July. Retrieved from <http://www.ft.lk/article/451797/Sri-Lanka-creates-universal-Internet-access-world-history-with-Google-Loon#sthash.SUqbsGYV.NOqnRyqH.dpuf>. 3rd March 2016.

54 Ibid

55 Lanka Government 2.0 to connect over 3,000 govt. buildings. *Daily FT* 29 July. Retrieved from <http://www.ft.lk/article/451797/Sri-Lanka-creates-universal-Internet-access-world-history-with-Google-Loon#sthash.SUqbsGYV.NOqnRyqH.dpuf>. 3rd March 2016.



Mobile phone coverage has out-paced the growth and use of fixed-line connections. In 2015, there were 27.4 million mobile connections in the country, a sum exceeding the total population.⁵⁶ However, the number of unique mobile subscribers is estimated at 60-80 per cent of the population.⁵⁷ Though country-wide sex-disaggregated data on mobile phone access is not available, small-scale research studies suggest that women's access to mobile technology is also significant⁵⁸ and comfort levels in using a mobile phone is high.⁵⁹

In 2016, there were 118.5 mobile subscribers per 100 inhabitants and 32.5% of the population was using the Internet. Broadband internet subscription rates were, however, only 4.1 subscribers per 100 inhabitants.⁶⁰ Given the low usage of fixed broadband, mobile operators are increasingly attempting to bridge asymmetries by providing value added services especially in health and learning, agriculture, and GovSMS,⁶¹ which are services that will benefit women. However, significant barriers to expansion of mobile connectivity exist. They include, in addition to coverage not-spots, lower e-readiness, fewer income earners, and lower

household incomes in rural areas.⁶² Similarly, low household income as well as limited competition and high price are also reasons for the slow expansion of fixed line connectivity.

Currently, the Internet is mostly being accessed via feature phones. Increasing IT literacy, the availability of short term/flexi options that cater to lower income customers who are unable to commit to long term contracts, as well as marketing by telecom operators to develop profitable sources of revenue are expected to further increase the use of mobile phones. However, smart phones account for just ten percent of total mobile use. In this scenario, rural users, especially women whose incomes are even lower than that of men, may not be able to own a smart phone.⁶³

Connectivity to the majority in rural areas therefore will have to be through public access venues that will take into account the barriers that women face in accessing these public spaces. Currently, such connectivity to these areas is provided by the 720 *Nena Sala* centres, nearly 300 eLibraries, specialised centres and a few public libraries. With expansion of e-government services, more venues will be required for easier citizen access. An institution that could be considered is the extensive public library network, which a 2008 study found was the most popular information venue "as compared with technology equipped venues that had been established" and that women had trust and confidence in them. These could be leveraged to service

56 We Are Social. 2015. Digital, Social and Mobile Worldwide in 2015. Retrieved from <http://wearesocial.com/uk/special-reports/digital-social-mobile-worldwide-2015>. 21st January 2016.

57 GSMA Intelligence 2013. Analysis: Country overview: Sri Lanka. Retrieved from <https://www.gsmaintelligence.com/research/?file=131003-sri+lanka.pdf&download>. 31st January 2016.

58 LirneAisa 2005. ICTs and bottom of the pyramid. Retrieved from <http://lirneasia.net/projects/icts-the-bottom-of-the-pyramid/>. 15th January 2016.

59 Wanasundera, Leelangi 2008. Ibid.

60 ITU Statistical Database <http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>

61 Usage data is not available.

62 GSMA Intelligence 2013. Ibid.

63 In 2013 smart phone sales were just 10 percent of hand set sales. Ibid.



rural areas by upgrading and converting them into spaces with connectivity.⁶⁴

3. Legal framework underpinning e-government and implications for gender equality and women's empowerment

3.1 Legal basis for e-government

The legal basis for the government e-transformation process was provided by the Electronic Transactions Act, No. 19 of 2006,⁶⁵ the Financial Regulations No. 447/2010 issued under the Act, the Electronic Transactions (e-Population Register) Regulation No. 1 of 2013, and a series of similar regulations that gave legal effect to other e-government activities including e-Services such as e-Revenue License System. Several other e-laws on computer crimes, evidence, intellectual property, and payment devices fraud⁶⁶ complement this Act.

Section 10 of the 2006 Electronic Transactions Act states that no one has the right to insist that any government entity "should accept or issue, any document in the form of electronic records or effect any monetary transaction in electronic form". On the

⁶⁵ Based on the United Nations Commission on International Trade Law (UNCITRAL) Model Law on e-Commerce (1996) and the Model Law on e-Signatures (2001).

⁶⁶ Computer Crimes Act, No. 24 of 2007; Evidence (Special Provisions) Act, No.14 of 1995; Evidence (Amendment) Act, No 10 of 1998, Evidence (Special Provisions) Act, No.32 of 1999; Intellectual Property Act, No. 36 of 2003; Payment Devices Fraud Act, No. 30 of 2006.



other hand the law is silent on whether citizens have a right to refuse to engage in electronic transactions.

This is cause for some concern as computer literacy is less than 30 percent for both women and men. In this context, any move by a governmental agency to completely replace offline methods of service delivery with digital methods would compromise the rights of citizens who are not digitally literate. However, so far, all government agencies which have opted for digitalized services have continued to make traditional (non-digitalized) options available to citizens. Key stakeholders consulted for this study were of the opinion that as services go online, citizens without the requisite digital literacy skills could seek assistance from the relevant government institution, the *Nena Sala*, and other public access venues to access such services. Even if there is a further increase in computer/ digital literacy levels of the population, it is incumbent upon the government to devise methods to ensure the inclusion of citizens without digital literacy skills in service delivery.

The Central Bank issued Sri Lanka Mobile Payment Guidelines Nos. 1 and 2 of 2011 regulating two money products. In 2012, it took a step towards financial inclusion of the unbanked by permitting Licensed Service Providers to provide mobile money services to clients who do not have a bank account.⁶⁷ eZ Cash is reported to have serviced nearly two million customers up

to mid-2015, and benefited migrant workers including women migrants.⁶⁸

If e-government includes citizen participation in governance, then information is essential for such participation. Citizen's right to information (RTI) and e-government are two sides of the same coin and RTI should have been built into the e-government programme. A draft right to information bill that had been presented in 2004 was passed in a revised form in July 2016 and as of 2016 was awaiting certification by the Speaker.⁶⁹

3.2 Right to privacy

The vision of the Sri Lankan Government is to make Sri Lanka an e-literate nation; hence the eSri Lanka project aimed to bring the "benefits of ICT to all citizens". A main component of the project was re-engineering of government, especially in interaction with citizens. Automating government processes and services can be "extremely advantageous in the light of public convenience yet it

67 Fernando, Jayantha 2013. E-transactions to m-transactions. Serving the next generation customers. Retrieved from http://www.apbsrilanka.org/articales/25_ann_2013/2013_12_Jayantha%20Fernando.pdf. 5th April 2016.

68 Hathiramani, Jagdish 2015. eZ Cash users to reach 5mln by 2016. Sunday Times May 31, 2015. Retrieved from <http://www.sundaytimes.lk/150531/business-times/ez-cash-users-to-reach-5-mln-by-2016-150883.html>. 15th January 2016.

69 Wijayawardena, W. A. 2016. The RTI Bill: A defeat of public aspirations for transparency in the Central Bank? Colombo Telegraph March 28. Retrieved from <https://www.colombotelegraph.com/index.php/rti-bill-a-defeat-of-public-aspirations-for-transparency-in-the-central-bank/>. 8th January 2016.



may entail grave ramifications concerning privacy... as electronic public records become easily accessible to the public".⁷⁰

In this context, privacy should be a fundamental right of the people. However, while the Constitution of Sri Lanka (Article 10) guarantees the right to free speech and publication, and the Supreme Court has upheld on several occasions that freedom of expression applies regardless of the mode of expression, which could be interpreted as applying to electronic communications, there is no explicit recognition of the right to personal privacy in the Constitution. The Sri Lankan legislation does not provide for the legal recognition of the right to privacy in any general sense, except in some limited situations which are not sufficiently extensive to cover rapid technological developments.⁷¹ There are also no specific laws that protect individual privacy and collection of personal information. However, the Telecommunications Act, No. 27 of 1996 makes the interception of communications (telephone conversations, text messages and emails, as well as audio) and their disclosure an offence. The Act also prohibits extra-judicial surveillance of personal communications. The Computer Crimes Act, No. 24 of 2007 protects computer users from unauthorized access to computers and unlawful interception of data. It also creates a potential threat to privacy by empowering a public officer involved in an investigation to tap any "wire or electronic communication", or obtain any

information from a service provider (with a search warrant from a Magistrate).

3.3 Personal Security and Bodily Integrity

Online violence is a serious impediment to women's access and use of the Internet and by extension, online public services. Even the limited data available on cyber violence in Sri Lanka shows that women's personal security and bodily integrity are compromised on the Internet. For example, according to the Sri Lanka Computer Emergency Response Team (SLCERT), in 2013, females accounted for 30 percent of Facebook users but about 66 percent of the complaints relating to offences committed on social media networks were filed by women.⁷² SLCERT discontinued the collection of sex disaggregated data after December 2013. The Police Department responsible for the investigation and prosecution of cybercrimes also collects data on cybercrimes but again, there is no sex disaggregation. This is symptomatic of the trivialization of such violence against women.⁷³

Women are subjected to a range of violence online: sexual harassment and abuse; distribution of naked images through

70 Marsoof, Althaf 2008. Social Science Research Network The Right to Privacy in the Information Era: A South Asian Perspective,' Scripted December. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1578222. 7th February 2016.

71 Ibid.

72 Sri Lanka Computer Emergency Response Team 2013. Cyber Guardian. Retrieved from <http://www.slcert.gov.lk/cyberGuardian.php#hide2014>. 14th January 2016.

73 University Grants Commission, Federation of University Teachers' Association and Care International. Preventing sexual and gender based violence. Strategies for universities 2015. Retrieved from <http://www.ugc.ac.lk/downloads/publications/SGVB.pdf>. 5th January 2016.



web sites, social media platforms, peer to peer networks, SMS and MMS; nuisance calls/obscene images through SMS; and hate speech, blackmail, extortion and 'sextortion'; commercialization of nude images; and pornography. Online violence such as bullying, harassment and stalking using cloud services are reported to be increasing but tracing and gathering evidence against offenders is now becoming extremely difficult.⁷⁴ Such online violence denies women the opportunity to use online resources, making them disinclined to use services that could make a positive difference to their lives. The state agencies involved in empowering women are yet to take any meaningful steps to make digital spaces safe for women.

4. Status of e-Government Services

The three-year Re-engineering Government Programme of the eSri Lanka project that commenced in 2009⁷⁵ had identified five projects (ePensions, eForeign Employment, eMotoring, eCitizen ID, and eProcurement) to be completed in three years.⁷⁶ However, although a large number of medium and small scale e-service programmes had been implemented successfully, in 2012, these complex, time consuming projects were at various stages of completion.⁷⁷

There were many reasons for the slow progress of eTransformation projects. In the first instance, ICTA was a government-owned company with a cross-national mandate. The head of ICTA did not have a rank equivalent to a Ministry Secretary and was an 'outsider'. It had been designated the apex policy making body for the eSri Lanka project but the National Administrative Reforms Council (ARC) was designated the apex policy making body for the 're-engineering government' programme. The Steering Committee of the ARC comprising senior public officials of critical departments did not meet to provide policy guidance.⁷⁸

74 Stakeholder interview with Harsha Wijayawardhana, a professional from the University of Colombo School of Computing, 4th April 2016.

75 United Nations Economic and Social Commission for Asia and the Pacific n.d. What is Good Governance? Retrieved from <http://www.unescap.org/pdd/prs/projectactivities/ongoing/gg/governance.pdf>. 7th January 2016.
76 World Bank 2004. Project appraisal document. Ibid.
77 Deshapriya, Wasantha 2012. Forever pilots-e-transformation projects are at crossroads. Retrieved from <http://www.engage.icta.lk/?p=417> 14th January 2016.
78 Galpaya, Helani 2015. Challenges of implementing egov programmes. LirneAsia. Retrieved from http://lirneasia.net/wp-content/uploads/2015/03/S12_2015-03-Nepal_FordCouse_Galpaya_eGovImplementation.pdf. 14th January 2016.



These projects are huge in scope, involve many agencies,⁷⁹ and project management is problematic. Changes in the scope of the project, changes in personnel, and political issues also contributed to delays.⁸⁰ There were few institutional drivers at national and policy level. Heads of Department, who were crucial to the successful implementation of the e-government programme, by and large, did not appreciate the value of such a transformation, and often lacked the vision, the knowledge, and the support of skilled staff⁸¹ to implement e-government programmes.⁸² Importantly, there was internal resistance among IT staff to changes proposed. This was one of the reasons that led to the withdrawal of the Sri Lanka Bureau of Foreign Employment from the eEmployment programme after two years, and with about a quarter of the work completed. This lack of commitment of the agencies adversely impacted e-government programmes that required internal change. The e-transformation project duration was three years, starting from 2009. However, in 2012 all the major e-government projects were still at the pilot stage.⁸³ As a result, Sri Lanka's ranking on the UN E-government rank dropped from 94th position in 2005 to 115 in 2012.⁸⁴

In the two years after 2012, ICTA concentrated on eServices programmes that do not require major internal transformation (Virtual Business Transformation) but use already existing data and information to provide e-services. The intent was to achieve at least one aspect of e-government: the creation of more user friendly, accessible, multichannel based citizen services. In 2015, there were over 100 interactive information services, 20 e-paying services, and three e-connect government services. The award-winning Government Information Centre is one such service. The implementation of these services resulted in Sri Lanka being ranked at the 74th position in the UN e-government Survey of 2014,⁸⁵ climbing 41 places since 2012. But, as Deshapriya⁸⁶ observes, these projects contributed to "an artificially higher ranking in the E-gov index" as they are confined to "looking at temporary improvements and giving up the chance for re-engineering government".⁸⁷

All the electronic services (eServices) and electronic information in Sri Lanka are delivered via Lanka Gate (LG), the main web interface that connects users to eServices and serves as a primary access point for citizens, non-citizens, businesses, agents, and government employees to a range of government organisations and businesses. As of 2016, nearly 200 virtual server spaces are provided to about 40 different projects under LG.

79 For instance, ePopulation Register programme involved 330 district secretariats in addition to several ministries.

80 Wasala, W.M.A.U. & Abeygunawardena, R.A.B. 2014. University of Colombo Proceedings of the Annual Research Symposium, Colombo.

81 Ibid

82 Lack of support for reform and change was identified as a high risk to achieving results. World Bank 2004, Project appraisal document. p. 14.

83 Deshapriya, Wasantha 2012. op.cit.

84 United Nations E-Government Survey 2012. Retrieved from <https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2012-Survey/Statistical-annex.pdf>. 26th January 2016.

85 United Nations E-Government Survey 2014. Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Annexes.pdf. 26th January 2016.

86 Deshapriya, Wasantha 2012. op.cit.

87 Ibid.



An eParticipation portal titled 'engage' to "engage citizens for obtaining their inputs on various national level initiatives" was initiated in 2016.⁸⁸ It has several discussion boards. The forum consists of stakeholders representing the public and private sector and IT experts. Although a grievance handling mechanism through the Government Information Centre (GIC) was available, its use had been poor with only 690 using this facility in 2013. This could be attributed to "the lack of trust" and lack of publicity as well as the slow/inadequate response to the complaints lodged.⁸⁹ A Citizen Forum has also been introduced on the GIC website.

A recent noteworthy initiative is the web portal titled Girls in ICT,⁹⁰ inspired by the ITU Girls in ICT. The portal seeks to "empower women in the ICT sector" by providing information and resources for them to pursue a course of studies and a career in the sector.

5. Women and E-Government Programmes

5.1 eTransformation programmes

As was indicated earlier, the eSri Lanka project was gender neutral in design and there are no programmes that specifically addressed critical needs of women. Of the five eTransformation programmes proposed, the ePensions; eCitizen and eForeign Employment were of direct relevance to women. The ePensions programme benefits retired women employees from the government sector and widows who are eligible to receive a monthly pension, by eliminating processing delays and having the pension credited to the bank account of beneficiaries. The eCitizen project has contributed to the development of the Population Registry and the issue of a unique ID number that can be used across government agencies. This helps in cutting down the number of visits required for entitlements-processing to government offices, which benefits women immensely, by reducing the time they have to spend on accessing entitlements and preventing further stress on their work day, which is already longer than that of men.⁹¹ Considering that over 22 percent of households are women-headed, the tangible benefits for single women and women who are heads of household cannot be

⁸⁸ <http://eparticipation.gov.lk/>

⁸⁹ MG Consultants (2011) Outcome Evaluation Survey for Government Information Centre. Final Report. Colombo.

⁹⁰ Telecommunications Regulatory Authority of Sri Lanka 2016. Girls in ICT Retrieved from <http://192.248.22.120/trcict/> 2nd May 2016.

⁹¹ Rathnayaka, R.M.S.D. & Weerahewa, J. 2015. An Analysis of Gender Differences in Intra-household Time Allocation of Rural Farm Families in Sri Lanka. *Tropical Agricultural Research* 26 (4) Retrieved from tar.sljol.info/articles/10.4038/tar.v26i4.8129/galley/6215/. 2nd January 2016.



discounted.⁹² Further, women are no longer subsumed in the household, as the eCitizen project maintains records for an individual. The eForeign Employment project had potential to benefit women who migrate overseas for work.⁹³ However, as noted earlier, this initiative was discontinued.

5.2 Government Information Centre

The Government Information Centre (GIC) was launched in 2006 as a public/private sector partnership to provide information on government services through a single location using multiple channels. It acts as a digital intermediary through interactive multilingual informational services and web interfaces. Information on 287 organizations and 2500+ services is available from the GIC website. Of the institutions that cater to women's needs, the GIC website includes contact information for the Ministry of Women and Child Affairs, and the Women's Bureau of Sri Lanka, but not for the National Committee on Women. A few services are searchable, notably 'making a complaint about rape' and 'infringement of labour laws'. Digital intermediary services are also not available for these three institutions due to

the slow uptake of digitization.⁹⁴ However, detailed information is available on the GIC website of the services provided by the Sri Lanka Bureau of Foreign Employment (SLBFE) while the intermediary services also direct the caller to the Bureau's 24-hour hotline.

Up to end January 2016, there were 8.8 million⁹⁵ hits on the GIC website.⁹⁶ While sex disaggregated data is not available in the GIC annual report for 2013, a 2011 study⁹⁷ found that female callers were just 21 percent, during the one-month period from mid-December 2010 to mid-January 2011 for which data was available. The majority of callers were public sector and private sector employees, students and entrepreneurs, with informal sector workers and other marginalised groups hardly using the service. Use by Tamil language speakers was also minimal. This could primarily be attributed to the lack of prioritization of e-readiness of the population,⁹⁸ lack of awareness of services among citizens, lack of access to ICT hardware, and the reluctance to use public access venues even if there was awareness.⁹⁹

92 Twenty-two percent of households are headed by women. Department of Census and Statistics, 2013. Household Income and Expenditure Survey 2012/13. Retrieved from <http://www.statistics.gov.lk/hies/hies2012preliminaryreport.pdf>. 13th January 2016

93 Women comprised 40 percent of the total departures in 2013 but 78 percent of complaints were from women. Sri Lanka Bureau of Foreign Employment 2014. Table 1. Departures. Retrieved from <http://www.slbfe.lk/file.php?FID=170> Table 45 <http://www.slbfe.lk/file.php?FID=177>. 16th January 2016.

94 http://gic.gov.lk/gic/index.php?option=com_content&view=article&id=32&lang=en and also verified by calling 1919.

95 Includes multiple visits by a single user.

96 <http://www.gic.gov.lk/>

97 MG Consultants 2011. Final_Report_-_Outcome_Evaluation_of_GIC. Retrieved from gic.gov.lk/gic/pdf/. 29th December 2015.

98 Davidraju, Reggie 2004. Planning e-government start-up: a case study of Sri Lanka. *Electronic Government* 1(1)

99 MG Consultants 2011. Ibid.



5.3 Health services

Technology-based service improvements in the health sector are beneficial to women. Some of these include the Hospital Health Information Management System, a communicable disease surveillance and analysis system focusing on quick dissemination of information to respond to outbreak of diseases; e-hospitals; a bilingual medical information portal that contains more than 2000 authenticated medical related articles in Sinhala and Tamil language; and a trilingual content portal which provides high quality information on first aid.

The current focus is the registration of all patients; capturing the discharge diagnosis and streamlining data collection processes of maternal and child health and immunization; and the pilot testing of a unique identifier, the Personal Health Number (PHN), which will allow for continuity of care and life-long health records, leading to the capture of number of patients as opposed to episodes. Women, who are also responsible for children and the aged in the family, benefit from a reduction in waiting time; access to hassle-free services; and availability of past medical history in the system, which eliminates the necessity of remembering details or preserving records of previous conditions.

5.4 Reproductive health

The Happy Life service of the Family Planning Association of Sri Lanka¹⁰⁰ provides sexual and reproductive health (SRH) knowledge and awareness, particularly among youth, and the opportunity to discuss SRH issues in confidence. Counselling services are accessible through multiple channels. In 2014, approximately 70 per cent of an approximate 15,000 users of the services were males who were using the service for themselves as well as on behalf of their spouse or partner. This raises the question of how this service is addressing gender power relations in negotiating access to reproductive health.

100 http://www.fpasrilanka.org/index.php?option=com_content&view=article&id=152:happy-life&catid=78&Itemid=682&lang=en



6. Conclusion

The marginalization of women in the overall project of e-government and ICT development is symptomatic of the marginalization of the national machinery for women within the institutional arrangements of governance and the lack of political will for using a rights-based approach for women's empowerment. While the holistic programme of digital expansion has benefited women, greater utilization of e-government services has been stymied by the lack of programmes to address critical issues that prevent women from claiming their citizenship rights.

Key insights about e-government in Sri Lanka, from a gender perspective, are summarised below.

Gender a non issue in the design of eSri Lanka project

The eSri Lanka project was meant to be a holistic, inclusive project that integrated IT to achieve growth, peace and equity. As citizens, women should also benefit from it. However, the project lacked a strategic gender perspective or commitment to gender equality. Consequently, it did not take proactive measures to overcome the systemic disadvantages that women face. The result was a gender-neutral policy, and a missed opportunity for mainstreaming gender issues into a major development programme.

The lack of a gender perspective in the overall project also precluded the collection of sex disaggregated data to assess

its outcomes and impact on women. The evaluation studies contracted by ICTA contained minimal sex disaggregation and hardly any gender analysis.

Digital literacy makes headway

The inclusion of IT into the school curriculum had a positive impact on girls, as they have equal access to education and schooling is compulsory up to 16 years. Computer training programmes have contributed to a substantial increase in professional cadres as well as 'craft level personnel'.¹⁰¹ The major thrust for citizen acquisition of ICT skills was through the *Nena Sala* programme. Other training programmes had also been implemented by ICTA but except for a system of quotas for women participants in a few programmes, information about other facets of gender-responsiveness in training programmes was not available. Although the World Bank stated that the *Nena Sala* programme had contributed to "mass literacy", information on its impact on women's digital literacy was not available. Computer literacy has increased in the country but inequities between age cohorts and geographical locations as well as in educational attainment and English language proficiency exist. More and more people are using devices such as mobile phones, smart phones or tablets to access the Internet. Although women may own or have access to mobile devices, little attention has been paid to information literacy.

Local language initiatives such as the availability of Sinhala and Tamil web and mobile platforms along with keyboard layouts is a

¹⁰¹ Those with technical and vocational training.



notable achievement in increasing digital literacy and extending access to the vast majority of citizens.

E-Government services expand but women's critical needs still to be addressed

Several core projects such as e-Pension, e-Population Register, digitalization of birth, marriage and death certificates, and e-Revenue License have benefitted all citizens by improving the delivery of government services. One of the critical issues facing women is gender-based violence and administrative procedures that discriminate against women. The three government agencies that comprise the national machinery for women are still not fully integrated in the re-engineering programme, as the computerization of back end processes have not been completed. Information on these critical issues is not disseminated on the websites.

Legal framework needs to be revisited

Privacy, security, freedom of expression, and the right to receive and impart information are human rights, which are also women's rights offline and online. The Constitution guarantees freedom of expression and non-discrimination, but not the right to receive information and the right to privacy. The issue of online violence against women in all its ramifications still has had no comprehensive legal response. Particularly since the launch of the 2002 eSri Lanka project, several laws have been enacted to facilitate e-government and make computer crimes (illegal online activities) an offence, but in the absence of the guarantee of basic digital rights, women's participation in e-government will be less than optimal.

7. Recommendations

With rapid technological developments bringing about structural changes, it is imperative that strategic interventions are made for women and girls to realise their transformative potential. Some recommendations towards this are detailed below.

1. Strategic vision for gender and e-government

As gender equality cannot be achieved through gender neutral policies the strategic vision in e-government should be to leverage ICT policies to address issues of gender inequality and discrimination. In designing e-government programmes and services, existing laws, rules and regulations that discriminate against women should be amended. The national machinery should be proactive in engendering the ICT policy of the new government. While some e-transformation programmes and e-services are useful to women, the national machinery should be directly involved in identifying and planning services that directly benefit women.

2. Enhancing women's access to connectivity architecture

Ensuring universal access to the Internet is the vision of the government, keeping in line with the Sustainable Development Goals (SDGs) on enhancing access to enabling technology, especially ICTs, for the empowerment of women, by 2020. The number of mobile phones in the country has increased dramatically. They have become a tool not only for accessing the Internet but also for reinforcing social capital, especially



for women. While strategies should be adopted to use mobile broadband, it is also necessary to ensure that barriers to affordability of smart phones are addressed along with pursuing the expansion of fixed-line connectivity. Public access points should be affordable and safe, and venues should be opened across the country, possibly using existing networks such as public libraries, to enable women to access government e-services and government information.

3. Enhancing women's digital capabilities

Computer literacy is an area in which Sri Lanka can be deemed a success story in terms of empowering marginalized sectors of the community. All educational institutes should identify barriers to entry, and motivate women and girls to pursue high-income-yielding career options in the ICT sector in order to reach policy and decision-making levels. Digital literacy should be introduced into the school curriculum from year one or two, thus opening up digital opportunities for all. A forgotten demographic that should be included in digital literacy training programmes is older women.

Digital literacy programmes should be accompanied with programmes for enhancing information literacy, a crucial skill to identify the most appropriate source(s) for the information they require.

4. Enhancing women's uptake of e-services

Although most of the existing e-services are useful to women, women-focused information is minimal. Development of content

targeting women's critical needs, one of which is the prevention of, and effective redress against, violence should be undertaken.

Women's political representation is one of the lowest in the region. ICT solutions should be used to enable them to organise and find alternatives to have their 'voices' heard.

ICT champions at the local level can serve as role models, content creators and supporters for women's empowerment.

Women are not a homogeneous group. Research is required to assess the information needs and uptake of ICTs by girls, young women, disabled women, women with different sexual orientations, the elderly, and women living in different geographical locations.

One critical gap to be addressed is in making women aware about safe use of the Internet and safeguards for privacy. The boundary-less nature of digital technologies also gives rise to potential risks for violation of privacy and human rights. In Sri Lanka, there is an immediate need for laws on data privacy and the right to information to safeguard citizen rights in the digital age. State-led partnerships should be developed with mobile operators to provide free information services to women, for example on laws dealing with gender-based violence and services for victim-survivors.



5. Including the digitally illiterate in e-services

The government should develop a programme to ensure that those who do not have the capacity to use e-services are not excluded from digital services. These could include the assignment of special staff at government institutions, public access venues or setting up kiosks in areas where other public access venues are not available. Women could act as information intermediaries and run these kiosks.

6. Mapping gender outcomes of e-government programmes to improve design

As statistical data is important to improve any service, it is essential that the collection of sex-disaggregated data is built into all ICT programmes and projects. National data collection institutes should review definitions relating to technological developments and online violence against women.

As the implementation of ICT programmes takes place at departmental levels, different departments need to coordinate and collaborate for the success of system-wide programmes. Government-wide awareness programmes should be conducted on the significance of adopting e-governance practices and their inherent advantages to the functioning of a department and government as a whole. At the same time, programmes to bring about attitudinal changes towards women should be undertaken at all levels of government.

7. Allocating resources and monitoring e-government activities

The Ministry of Women and Child Affairs and the National Committee on Women should be proactive and become part of stakeholder groups in policy making and programme development. This would enable them to ensure that gender budgeting is introduced into all major programmes, time-bound targets set, and regular monitoring undertaken against targets. They should also allocate resources from their budget to develop services that include training and content development. These two agencies should monitor the e-government activities of the ministries/departments responsible for women's affairs at provincial, district and local government levels, especially in installing safe and secure access points such as public libraries for which local governments are responsible.