Reflection of 'access' in ICT4D evaluation: The case of Nenasala telecenter initiative in Sri Lanka

D.L Chamila Jayashantha and Usha Raman

Abstract

As the world moves towards information society, countries started to extend access to information and communication technologies to their populations. Telecenters have been seen as an important means of bridging the digital divide; providing access to appropriate information required for social and economic development. Hence development of rural information kiosks has become increasingly popular development initiative, increasing in number worldwide. In Sri Lanka, e-Sri Lanka strategy, acknowledged affordable access to ICTs will ensure more effective, citizen centered and business friendly government, empowerment of the rural poor, women and youth. It envisioned a 'community-based open access workstations' program called Nenasala, to ensure availability of affordable basic communication services, access to social services, e-commerce and mobilization of local knowledge. Evaluation work in the development sector has evolved through a revolutionary path, as a practice as well as profession. The taxonomy of evaluation is multipronged, can be seen categorized based on different perspectives, criterions, inputs used, and perhaps the phase of intervention being evaluated. But there is as yet no widely accepted systematic evaluation procedure for telecenter programs. No shortage of evaluative frameworks for ICT for Development, but, none is completely satisfactory for measuring access to ICTs. Therefore alternative evaluative frameworks are increasingly required or existing evaluative criterions should be redefined to cater to the specific requirements of telecenter initiatives, for instance to measure the extent to which beneficiary groups are effectively and meaningfully engaged with ICTs. This paper gives a brief overview on evaluation of development aid, and then moves on to discuss what is missing in evaluating 'ICTs for Development' initiatives. While introducing the 'Nenasala' telecenter initiative in Sri Lanka, it reviews the magnitude of reflection of access in three consecutive evaluations commissioned to study the telecenter program.

***Keywords**: Evaluation, Access, Nenasala Telecenters, e-Sri Lanka*

Evaluation of Development Aid

Evaluation work in the development sector has evolved through a revolutionary path, as a practice as well as profession, since what is widely considered to be

the first aid evaluation report, Development projects observed, by Albert Hirschman in 1967. Cracknell (2000) isolates four phases of the trajectory of aid evaluation since then, based on contemporary features, tools and techniques, developments, rigidities and problems. The four phases are; the early development (1960s to 1979), explosion of interests (1979-1984), coming of age (1985-1988), and aid evaluation at the crossroads (1988 to the present). Cracknell also admits what Rebein (1996) postulates, that aid evaluators have much to contribute in the areas of feedback and project management, but they also have much to learn in terms of theoretical approaches to evaluation and methodological diversity (Cracknell: 2000, 39p). Despite there having been some contradictory or perhaps competing purposes of evaluation, its major role has been to determine the quality of any action, interaction, reaction, invention, program or any human enterprise by formulating a judgment. According to the Center for e-Governance (2007), evaluations are commissioned to serve a variety of purposes; sometimes to look at implementation success, i.e., to assess if the systems functioning as they are designed to, or to determine the extent to which the specified outcomes have been achieved. Some evaluative studies focus on sustainability and replicability of the interventions, while others measure the benefits delivered to agencies, donors for example, and benefits to the clients or end-users, who are often described as 'beneficiaries'.

This paper begins with a brief overview on evaluation of development aid, and then moves on to discuss what is missing in evaluating 'ICTs for Development' initiatives. Paper also examines how the 'Nenasala' telecenter initiative in Sri Lanka attempts to connect the unconnected, largely in the poor, rural and other forms of marginalized contexts. Finally, it reviews the magnitude of reflection of access in three consecutive evaluations commissioned to study the telecenter program.

Evaluation is the systematic and objective assessment of an on-going or completed project, program or policy, its design, implementation and results (OECD: 2010). According to Tufo (2002), evaluation involves assessing and judging the value of a piece of work, an organisation or a service. Its main purpose is to help an organisation reflect on what it is trying to achieve, assess how far it is succeeding, and identify required changes[i]. In order to offer a way to determine whether an initiative has been worthwhile in terms of delivering what was intended and expected, evaluations, in general, fulfill several conditions. These include: measuring the program's outcomes and impact, informing future program planning and design, providing important internal lessons for those conducting programs, ensuring transparency and accountability, and providing broader lessons about good practice (Staff: 1995-2012)[ii].

The taxonomy of evaluation is multipronged. From a traditional taxonomic perspective, formative evaluations provide information that help to improve a product or process, now known as midterm reviews, interim evaluations, or ongoing evaluations. In contrast to this, summative evaluations, also known as ex post evaluations or maturity evaluations, can occur just after a program is implemented in full (i.e., effectiveness evaluation), or several months to years after implementation. These provide short-term effectiveness or long-term impact information that help decide whether or not to replicate a product or process. Based on the predominant input used in the assessment, evaluations are categorized into process evaluations, outcome evaluations or impact evaluations. Process evaluations usually measure how a program has been implemented and whether it has produced the intended results. Outcome evaluations identify changes immediately after a program is implemented and help establish whether the specified or desired changes have occurred. Impact evaluations interrogate the long-term effects of an intervention on both intended and unintended beneficiary groups.

Evaluations can be incorporated into any stage of a development activity, and can take different forms. Cracknell (2000) defines baseline studies also as a form of evaluation, while other forms include, as seen above, ongoing evaluations, inter-phase evaluations, built-in evaluations, self-evaluations, ex post evaluations, and impact evaluations. Considering the nature of evaluator employed, he further differentiates evaluations into two categories; internal and external. To quote Cracknell (2000), "accountability purpose of evaluation is to answer such questions as 'does aid work?', and 'how effective is development aid?', while the lesson learning purpose selects successes and failures with a view to learn why some actions were successful and others not and to ensure relevant lessons are learnt" (55p).

Segone (2004) acknowledges the need for widely shared evaluation criteria to guide the appraisal of any intervention or policy. He points out standard OECD-DAC evaluation criteria, which include relevance, effectiveness, efficiency, impact and sustainability. However, in practice, many different approaches as well as improvisation of standard criteria may be often seen. For instance, cost-benefit analysis remains a separate assignment in terms of development research, rarely seen in ICT for Development initiatives (Center for e-Governance: 2007), but measuring cost-effectiveness is often integrated with evaluations. Evaluation also analyses 'relevance', which is refers to the process of examining whether the objectives of the project were appropriate to deal with the problem (Cracknell: 2000, quoting the World Bank). According to OECD (2010), relevance can be defined as the extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor. Cracknell (2000) suggests that it is required to establish whether the objectives of the projects were achieved, which is called 'effectiveness', and then to find out if

the objectives were achieved at the least cost, which came to be called "efficiency". According to OECD (2010), effectiveness means a measure of the extent to which an aid activity attains its objectives, and efficiency here is an economic term used to assess the extent to which aid uses the least costly resources possible in order to achieve the desired results. To quote Segone (2004) impact is basically the results of the intervention; intended and unintended, positive and negative, including the social, economic, and environmental effects on individuals, communities and institutions. In OECD's (2010) view, sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding – or external support – has been withdrawn. In this framework, projects need to be environmentally as well as financially sustainable, while also having the potential to be widely replicated or adapted. Evaluation therefore is a means of assessing whether resources should continue to be expended in a particular way for a specific duration.

Evaluating ICT for Development: What is missing?

Telecenters have been seen as an important means of bridging the digital divide; providing access to appropriate information required for social and economic development, so acting as a conduit to the information world (ITU: 2003, Saith: 2008). Hence development of rural information kiosks has become increasingly popular development initiative, increasing in number worldwide with the commitment of large amount of resources from wide array of stakeholders. Telecenters are supposed to provide opportunities for many, beyond the immediate users – the owner, the community liaison group, the operator, the funders, those who wish to learn from it or replicate it, as also groups concerned about unintended outcomes of opening a digital window to global economy and culture. Different operating models and funding models of rural telecenters can be seen, private-public partnerships being one of the very familiar examples in terms of operating models. But there is as yet no widely accepted systematic evaluation procedure for telecenter programs. Consequently, the reported outcomes of a majority of these projects remain anecdotal and have not been substantiated by systematic evaluative engagements.

From a macro perspective, ITU (2003) reviews few predominating frameworks that measure the performance of access at the national level, Network Readiness Index of World Economic Forum, Information Society Index of International Data Corporation, annual index of Economist Intelligence Unit, "Infostate" Index of Orbicom for example. The review, however observed, while a number of existing indices go some way to meeting this need, almost all of them concentrate primarily on developed economies, and many do not systematically use internationally comparable indicators (99-100pp). ITU also admits that there is no shortage of ICT indices but, none is completely satisfactory for

measuring access to ICTs, most are not specifically targeted at measuring ICT access, and some have methodological snags or are susceptible to distortions due to the use of qualitative variables and transparency and comparability are compromised. Aalami and Pal (2005) quote Keniston, Director of MIT India, who postulates, that we know almost nothing about the factors that make for effectiveness or ineffectiveness of grassroots ICT projects in developing nations, because of the dearth of empirical studies and substantiated cases; stories are built almost entirely on an empirical vacuum. As the Center for e-governance (2007) observes, standard evaluative framework has not been specifically used for ICT investments by the public sector in developing countries. In the alternative, the rates of success or failure have been merely measured of these ICT initiatives. Evaluations tend to showcase positive outcomes of investments, hence have become a popular form of administrative study among the aid agencies. Such evaluations tend to use a very small, purposeful sample, although they do use a variety of approaches, such as surveys, expert opinion, ethnographic studies and internal assessments. It is argued that lack of rigor in sampling makes the results difficult to generalize over the entire population of clients (Center for e-Governance: 2007). Similarly, different studies of the same project using different methodologies showcase these very outcomes differently, thus reducing the credibility of the results. Further, evaluations are not so inclined to assess the impact on all the stakeholders nor do they cover short term, long term, direct, indirect, intended and unintended impacts. In order to meet the requirements of project documentation formulated by implementing or donor agencies, such exercises are often aimed at establishing the difference made by ICT use, so paying less attention on process evaluation. Therefore, alternative evaluative frameworks are increasingly required or existing evaluative criterions should be redefined to cater to the specific requirements of telecenter initiatives. Aalami and Pal (2005) in their attempt to devise an impact assessment tool for telecenter initiatives, identify three critical problems with evaluating telecenters. According to them, first, telecenters reside in a nebulous space between entrepreneurial ventures and development projects. This means a multiplicity of indicators are required to assess the project – both qualitative and quantitative. Second, impact occurs across scales, from the individual, community, regional, national to international, the study of which requires a geographical lens. Third, telecenter projects are a form of human development infrastructure, for which evaluation is highly time-dependent (p7). The alternative evaluation methodology they suggest consists of two subsequent stages, first, a pre-project evaluation, in order to study whether an area is an appropriate location for a telecenter project, and secondly, evaluation after one-year implementation to see if the telecenters have accomplished the stipulated goals over a period of time. In terms of methods or tools, they identify surveys (both household and economic) and interviews with selected informants.

Two consecutive meetings of WSIS respectively held in Geneva (2003) and Tunis (2005) admitted that measuring the contribution of ICT to development continued to be a major concern, despite a few attempts by development agencies. For instance, in 2002, UNESCO initiated a project to develop performance indicators which could be used to monitor and assess the impact, grouped into five areas; namely, ICT-based policy and strategy, ICT infrastructure and access, curriculum and textbooks, teaching process and outcomes, and learning process and outcomes (UNESCO, 2007). But it is obvious that such initiatives were not fully capable of overcoming existing difficulties to monitor and assess the impact of ICT for development, in the absence of internationally accepted standards, methodologies and indicators to demonstrate effectiveness. To quote WSIS, section E.28 of 2003, "A realistic international performance evaluation and benchmarking (both qualitative and quantitative), through comparable statistical indicators and research results, should be developed to follow up the implementation of the objectives, goals and targets in the Plan of Action, taking into account different national circumstances."

In response, the Partnership on Measuring ICT for Development was formed in 2004, which brought institutions like Eurostat, ITU, OECD, UNCTAD, UNDESA, the UNESCO Institute for Statistics (UIS), UN Regional Commissions, and the World Bank together to develop methodologies with realistic metrics and to establish internationally comparable and policy-relevant indicators in order to track the progress of countries towards digital inclusiveness (UNESCO: 2009). A list of core ICT for development indicators put together by the Partnership for evaluative purposes was endorsed by the UN Statistical Commission in 2007. However, these outcomes or core recommendations do not seem to have been incorporated at the operational level; instead ICT for Development initiatives continue to be framed around the traditional evaluative approaches of development aid.

Connecting the unconnected: ICT access to rural poor through *Nenasala*

Importance of access has been discussed since the early rounds of development communication discourse (Narula: 1991,2002)[iii]. Today, with the advent of new media, access to information technologies is one of the targets listed under UN millennium development goals (United Nations: 2005),[iv] The UN economic and social council (ECOSOC), Commission on Science and Technology for Development (CSTD) and ITU are among the leading stakeholders of the global agenda (United Nations: 2011)[v], with hundreds of civil society organizations (NGOs) aligned with the mission from both the global north and the south. It has been argued that while access to networks is fundamental to addressing the digital divide, mere access does not always lead to greater or more effective use of ICTs and services (Crede and Mansell : 1998). The crucial and fundamental

role of access in promoting development, enabling social transformation (Dutton: 2004) for example, has fuelled the implementation of ICT for D initiatives and allied policies (Hanna: 2007).These initiatives and policies had aimed to ensure both access to networks technologically, and enable the other socioeconomic conditions to make possible people's engagement with those networks. For instance, access issues are seen to have been widely discussed in policies of poverty alleviation and digital divide, from global to grassroots level (WSIS action lines: 2004, Harris: 2004, UNESCO's key principles for WSIS).

In Sri Lanka, two predominant ICT policies, namely e-Sri Lanka strategy (2002), which Rainford (2009) views arguably one of the most comprehensive in the south Asian region and possibly among Asian countries, and later the e-Government policy (2009), posit that greater and more affordable access to ICTs will ensure more effective, citizen centered and business friendly government, empowerment of the rural poor, women and youth. The reliance placed on technological access as a poverty alleviation tool, with an island-wide telecenter program envisioned as a 'community-based open access workstations' program, points to the vitality of access in uplifting poorest populations in Sri Lanka. The aforementioned telecenter program called *Nenasala*, has been designed to ensure availability of affordable basic communication services, access to social services, e-commerce and mobilization of local knowledge. In many ways, this conceptualizes access in a way that goes rather beyond the traditional level of theoretical access. According to Hanna (2007) the *Nenasala* telecenter program is expected to ensure availability of affordable basic communication services, official services and community information in rural and disadvantaged areas; enhanced access to social services, private sector services; e-commerce services; as well as support to local industry development, leading to higher employment and entrepreneurship in rural areas; and finally, mobilization of local knowledge and empowerment of target groups through community-driven development (56p.) Nenasala is, in the view of Jensen (2007), one of the largest and most sophisticated programs for supporting public access to ICTs in the world.

However, as Selwyn (2004) has rightly declared, access is a "woefully ill-defined" term with regard to ICTs. He quotes Wise (1997) who maintains that access tends to refer to the provision of physical artifacts, in policy terms. This exceptional attention on improving the physical conditions of access has undermined the importance of the strategic context of access, which Selwyn (2004) calls "meaningful use or engagement with ICTs". The latter underpins issues of time, cost, quality of technology, environment in which it is used, as well as qualitative concerns of privacy (Davids: 1993, Selwyn et al: 2000, quoted in Selwyn: 2004). He also reiterates what Van Dijk (1999) had earlier asserted, that material access to technology is useless without the requisite skills, knowledge and support to use it effectively.

Against this backdrop, what needs to be evaluated is the extent to which beneficiary groups are effectively and meaningfully engaged with ICTs. In addition, one would also consider the range of different circumstances where meaningful access might take place; how it is patterned according to socioeconomic factors, income levels, geographical conditions, gender, or ethnicity; what factors promote meaningful access and what impede the same; short and longer term outcomes and impacts of meaningful access.

Reflection of 'access' in Nenasala evaluation

ICTA, after its first benchmark set to launch one hundred Nenasalas by the end of 2005, did not undertake any significant evaluation into issues of Nenasala project until 2007. Later in 2007, it commissioned a few formative evaluation studies to assess the policy, design, implementation and results of the telecenter program, and sought information to improve it. The first evaluation was fielded, as mentioned earlier, in 2007, and carried out by an independent consultant employed by the World Bank, which was the principal donor. A private consultancy firm carried out the second evaluation, in 2008. The latest evaluation, in 2010, was also handed over to a private consultancy firm. For the purpose of this analysis, three reports generated through the aforementioned three evaluative inputs were treated as the data sources. The project's goals, specific objectives, study design, selected and relevant informants, nature of data have been collected of each evaluation were reviewed in order to identify the magnitude of issues of 'access' reflected. There was also an attempt to analyse the above, against the particular context, for instance the respective stage of the Nenasala program, in which the evaluation was carried out. Besides this of individual evaluation, overarching patterns and trends of related to defining and addressing issues of access into evaluation questions through three evaluations were also examined.

First evaluation, aimed to review provision of public access to ICTs through *Nenasala* telecenter program. As of the time of this evaluation, ICTA had managed to establish four hundred and thirty (430) telecenters. Of these, thirty eight (38) telecenters (approximately 10% of the total) were selected from across the country. The sample was visited in *'two loops'*, first from Colombo to Northeast part of the island and the second from Colombo south east also covering western coast. Data gathering tools included interviews, both formal and informal discussions, and impromptu drop-in visits to *Nenasala* sites.

Being the first formal evaluative intervention with *Nenasala*, it has, perhaps inadvertently, concentrated on internal organizational factors that underpin access, among the many other aspects evaluated. For instance; speed of access,

number of workstations relative to size of '*client catchment area*', reliability of electricity, level of helpfulness of managers, location of center in relation to population density, space, cost of maintenance, range of services provided including low cost telephony are predominant organizational factors. Additional factors of interest were internet bandwidth speed and workstations sampled for websites visited, assessed using the *STG CacheAudit*[vi] software tool. Besides, significant attention was paid to connectivity; for instance the evaluation recommends an assessment to measure the impact of telecom operator roll-out of low-cost terrestrial broadband. However, the evaluation does not examine external factors that underpin 'access'; different perspectives of 'users', for instance socioeconomic, cultural and geographical conditions for example. Among the factors of success or failure, this evaluation reviews a mixture of factors. It is an interrogation of general organizational factors that might bring in more 'customers' to the 'venture of *Nenasala*' and that presumably makes the intervention sustainable. Highlighting both the problems and possible solutions, this analysis lists as limitations the lack of local content and applications, lack of awareness of available online resources, high electricity cost, untapped potential of connectivity, language difficulties, untapped potential of voucher system, lack of support for local language fonts, unreliable electricity, lack of signage, limited connectivity, lack of physical assets, opening hours, size of the venue, insufficient workstations, internet access management software. Most of these factors are directly or indirectly linked to the concept of access, but rarely seen described in a manner that can be used to improve access.

The *second evaluation* was carried out when ICTA was halfway through its target of one thousand (1000) telecentes. As mentioned in the evaluation report, the terms of reference expected consultants to carry out an ordinary evaluation. According to ICTA[vii] (2008), the purpose of this assignment has been to identify necessary variables, collect the appropriate data, and generate a comprehensive evaluation report on the current situation of *Nenasalas* established. It was expected to provide information on the current operation and utilisation of *Nenasalas*, to what extent the objectives of these establishments have been achieved, and their level of sustainability. Additionally the ICTA sought to use the information to learn lessons, and also to provide information on possible adaptations of future approaches for establishing more *Nenasalas*. The study was conducted through a sample of fifty *Nenasalas*, amounting to 10% of the total telecenters. However, even though it is described as a 'scientific study incorporating both qualitative and quantitative methods, it has used two questionnaires, one for *Nenasala* operators and the other one for users, and the analysis remains entirely a quantitative depiction.

The concept of 'access', through this particular evaluation has been acknowledged intermittently in the mainstream processes of *Nenasala*, so that it

is reflected inconsistently in the outcomes of evaluation. However, in comparison with the previous evaluation, the second one has attempted, albeit in a limited manner, to review both internal and also few external factors that underpin access. In order to review the trends of access, the study has mainly interrogated 'access' through several perspectives, among many other general conditions of evaluation. Within this, the technological infrastructure of telecenters, skills of *Nenasala* staff, trainers in particular, profile of consumers, frequency of usage, most used ICT services, trends of accessing internet and price competition are the major factors examined. In this examination, the evaluation sought information on; users' demographics, different levels of computer expertise of respondents, hardware items found, different types software packages available, training courses conducted, management staff, internet sessions and usage hours, purpose of access, access to government information and allied services by users, government websites accessed by users, availability of services and equipment at the homes of users, frequency of *Nenasala* visits, different types of services used or anticipated, and finally the inputs for telecenter improvement.

The *latest evaluation* was commissioned after establishment of six hundred (600) *Nenasalas*. This was an outcome evaluation, a type of evaluation to determine what results were generated from a program and its consequences on people. According to ICTA[viii] (2010) the objective of this outcome evaluation was to examine and validate what results of *Nenesala* project had so far been achieved and how and why these results were or were not achieved. Moreover, it aimed at identifying if the intended beneficiaries have better access to services, whether the services are affordable and competitive with the other telecenters in the country, so that the access may be better conceptualized in future planning phases. Further, three out of the seven specific objectives of the evaluation, did acknowledge different facets of access in varying magnitudes. For instance, the first objective was to learn the change in terms of community access to and use of basic communication services and office services in rural areas. The third and the fifth objectives aimed at to study the changes in terms of on-line access to government and private sector information, services and associated benefits, and to identify the barriers that reduce the use of ICT and office services provided, respectively.

Consultants have used 'outcome mapping' and 'logic models' based evaluation approaches to design and implementation of outcome evaluations. The logic model based evaluation approach, in their opinion, has the power of articulating the logical relationship between inputs, activities, outputs and outcomes of a project. It has emerged as an alternative tool to conventional project evaluations and impact assessments to overcome the difficulty in measuring change and its attribution to project activities and outputs. It has the power of visualizing, detailing and sequencing the wave of changes in the behaviors and conduct of

boundary partners[ix] as result of facilitating role of a project to new resources like ICT equipments and services. In order to carry out the study, the consultants have adopted multistage stratified random sampling technique. Stratification was done based on the ownership. The sample size was three hundred (300) *Nenasalas*.

Issues of access were conceptualized and built into the study at the formulation stage of the evaluation. Nine out of the nineteen key research questions identified by the consultants reflected direct issues of access. Research questions have attempted to bring to the surface several probing perspectives.

- how has the access to and use of information communication services changed and why
- what needs to be done in order to maximize the access to ICTs by rural communities and benefits of access
- contributing factors of rural access to and use of ICTs
- how have the rural dwellers gained on on-line access to government and private sector information and services changed
- nature of democratic and equitable access
- what type of information has been accessed more
- demographic profile of users and their specific information needs.

Contrary to the previous attempts, a wide spectrum of respondents have been involved in data collection, not only *Nenasala* operators, *Nenasala* users, community leaders, relevant organizations, but also non-users. The aforementioned probing perspectives have been triangulated against data of, ICT infrastructure; location of *Nenasala* with distance travelled by users and their mode of transportation, travel time; physical infrastructure of the *Nenasala*; demographic, educational and professional profile of staff; signage of *Nenasala* facility and services; demographic profile of users; type of *Nenasala*; duration of accessing ICTs and other services against number of sessions; purpose of access; gradual changes and trends occurred in access; accessing different information sources including government sites; and possibilities of replication of *Nenasala* model. Notwithstanding analyzing the existing nature of access, the evaluation has moved ahead to isolate barriers to access and users' suggestions to improve access. The same variable has been subjected to multiple analyses through various control variables, so has provided a considerable space for different interpretations. However all interpretations, of

access in particular, implies that 'sustainability' of rural telecenters is correlated to successful 'access'.

Conclusion

ICTA, according to its telecenter program, envisioned the establishment of one thousand *Nenasalas* by the end of 2008. However, till date, around seven hundred have been established. Unconfirmed sources affirm the benchmark will be extended to two thousand telecenters, but as of now the issues of reach and number seem to be the focus of most attention. However, three evaluations, case studies rather, examined above, represent three different stages of the program, but differ in terms of evaluative approaches, depth of assessing various elements of *Nenasala*, and terms of references formulated by ICTA for the evaluator. None of the evaluations analyzed above was carried out for the sole purpose of evaluating issues of access, but advertently or inadvertently access is differently reflected in these three studies. However, towards the latest study, commissioned in 2010, 'access' seems to emerge as a principal issue, around which the total evaluation has been designed, with another topical concern, sustainability. Given the significance of access in rural telecenter initiatives, even in the event of a general evaluation being commissioned, access can be incorporated if it is properly conceptualized at the stage of evaluation planning.

However, it is significant that all three evaluations failed to generate qualitative information to support the main findings and their recommendations, instead exhibiting an excessive dependence on quantitative analyses. For instance, in the *second evaluation*, there was a plan to interview five visitors from each selected telecenter. However, due to various reasons, ranging from temporary closure to non-operation to lack of visitors of certain centers, it was impossible to find the expected 250 users from those selected centers, only 170 users could be met; in fact, a single user cannot be found in a considerable number of telecenters. This situation has not been convincingly explained in the report. Three evaluations have revealed some issues that require further research. For instance, as shown in the *third evaluation*, a significant linear decreasing trend was detected[x] in total internet hours during the eleven months immediately preceding the evaluation. This is an alarming situation and an immediate action to investigate the underlying causes of this decline and urgent remedial actions is recommended. But it is questionable if a reflective learning process has been put in place in order to study contemporary developments of the program.

Despite these drawbacks and gaps, it must be acknowledged that there is a gradual convergence of assumptions and methods tending towards 'access'. As ICTA's telecenter program evolves, these evaluations [reports] are required to be further condensed and taken forward, if they are to be converted into

programmatic inputs that can improve the notion of 'access' in policy (or strategy) and practice of ICTA's telecenter program.

References

Aalami. J. R & Pal. J., (2005), *Rural telecenter impact assessments and the political economy of ICT for development (ICT4D)*, BRIE working paper 164. Source: www.brie.berkeley.edu/publications/WP%20164revised.pdf Accessed: 27.08.2011

Center for e-Governance., (2007), *Impact Assessment Study of e-government Projects in India*, Indian Institute of Management, Ahmedabad, India

Cracknell, Basil Edward., (2000) *Evaluating development aid, Issues, problems and solutions*, Sage publications (New Delhi), Sixth printing (2008)

Credé. A & Mansell. R., (1998). *Knowledge societies in a nutshell: Information technology for sustainable development.* prepared for the United Nations Commission on Science and Technology for Development and the International Development Research Centre IDRC, Canada. Source: http://web.idrc.ca/openebooks/858-9/ Accessed: 13. 08.2011

Dutton. William H., (2004) Social Transformation in an information society: rethinking access to you and the world, UNESCO, Paris

Hanna. Nagy K., (2007) *From Envisioning to Designing e-Development: The Experience of Sri Lanka*, World Bank Publication, Washington DC

International Telecommunication Union., (2003), World Telecommunication Development Report: Access Indicators for the Information Society, ITU, Geneva

Information & Communication Technology Agency of Sri Lanka (ICTA), (2008), *Nenasala Interim Survey Final Report*, A survey carried out for ICT Agency of Sri Lanka by MG Consultants (Pvt) Ltd, Colombo, Sri Lanka, (Unpublished Document)

Information & Communication Technology Agency of Sri Lanka (ICTA), (2010), Telecenters in Sri Lanka: The Nenasala Project, Outcome Evaluation Report of Nenasala Project, By Skill International Private Limited, Colombo Sri Lanka (Unpublished Document)

International Telecommunication Union., (2003), World Telecommunication Development Report: Access Indicators for the Information Society, ITU, Geneva

Jensen. Mike., (2007) *Nenasala Review*, A Report Done on Behalf of the World Bank, Colombo, Sri Lanka (Unpublished Document)

Narula. Uma, (1994), *Development communication: Theory and practice*, (Second reprint 2002) Har-Anand publications, New Delhi, 18-115 pp

Organization for Economic Co-operation and Development -OECD, (2010), *Evaluating Development Co-operation: Summary of key norms and standards*, Second Edition, OECD DAC network on development evaluation, Source:

http://www.oecd.org/development/evaluationofdevelopmentprogrammes/dcdndep/41612905.pdf, Accessed on: 18.01.2013

Rainford. Shoban., (2009), *e-Sri Lanka: An Integrated Approach to e-Government Case Study*, Source: www.apdip.net/projects/e-government/.../casestudies/SriLanka-Rainford.pdf Accessed: 01.09.2011

Saith. A, (2008), "ICTSs and poverty alleviation: hope or hype?" in (eds.) Saith A, M. Vijaybasker, V. Gayathri, *ICTs and Indian Social Change: Diffusion, Poverty, Governance*, Institute for Human Development, Institute of Social Studies, SAGE, New Delhi, 113-159pp.

Segone, Marco., (2004), "The oversight and M&E function" in (ed.) Marco Segone, *New Trends in Development Evaluation*, Evaluation working papers (Issue No. 05), Intenational Programme Evaluation Network (IPEN) and UNICEF, Romania

Selwyn N., (2004) "Reconsidering political and popular understandings of the digital divide" in *New media and society* 2004; 6 (3): 341-362.

UNESCO., (2007), *ICT in Education in the Asia-Pacific Region: Progress and Plans*, UNESCO Asia and Pacific Regional Bureau for Education, Bangkok

United Nations (2011), *Implementing WSIS outcomes: Experience to date and Prospects for the future*, United Nations Commission on Science and Technology for Development, USA

United Nations (Department of Economic and Social Affairs, Division for Public Administration and Development Management), 2005, *UN Global E-government Readiness Report 2005 From E-government to E-inclusion*, United Nations Publication, New York

WSIS (2003). "WSIS Plan of Action". Geneva: ITU. Source: ITU. http://www.itu.int/dms_pub/itus/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf. Accessed on 19.01.2013

Notes

[i] See http://www.evaluationtrust.org/evaluation/evaluate (accessed on 18.01.2013)

[ii] See http://www.icap.org/PolicyTools/Toolkits/EvaluationToolkit/2WhatIsEvaluation/tabid/441/Default.aspx (accessed on 18.01.2013)

[iii] (Narula: 1991,2002) reviews the insights of Vittal (1981), who postulated the access to communication channels governs people's participation in development programmes, Dhawan (1982) stated even if media channels are available both intentional and unintentional blockages to development messages through these channels can be an impediment to development, and also discusses the views of Khan (1973) mass media are usually not available where they are needed, even if available and received usually do not carry the kind of information that might aid development, content may not situationally relevant, even if functionally relevant information is available the infrastructure and input may not be.

[iv] United Nations Global E-government Readiness Report, 2005, From E-government to E-inclusion

[v] United Nations Report - Implementing WSIS outcomes: Experience to date and Prospects for the future, United Nations Commission on Science and Technology for Development
[vi] STG Cache Audit is an advanced, easy to use tool to extract information from the Internet Explorer cache (see http://www.stgsys.com/audit.asp for more information)
[vii] Evaluation report by MG Consultants
[viii] Evaluation report by Skill International Private Limited
[ix] Boundary partners are those individuals, groups, and organizations with whom the programme interacts directly and with whom the programme anticipates opportunities for influence. Most activities will involve multiple outcomes because they have multiple boundary partners (see, ICTA: 2010)
[x] Refer figure number 8:13, ICTA 2010