



**Shilpa Sayura Foundation:
The Shilpa Sayura e-School
(Sea of Knowledge)
A Case Study**

Abstract

In February 2006, the *Information & Communication Agency of Sri Lanka (ICTA) e-SDI* program provided a grant of Rs. 5 million for *E-fusion Pte Ltd*, to initiate a pilot project for creating a digital educational system in the local language, and the deployment of 20 Nenasala Tele Center Communities to develop self learning capacity of remote, rural students of the Deep South. This funding helped *Shilpa Sayura*, a subsidiary of *E-fusion Pte Ltd* grow rapidly in the rural communities.

On 10th April 2010, founder of the *Shilpa Sayura Foundation* in Sri Lanka, Niranjan Meegammanna, was shocked to find out that he was not successful in his funding application for another 200 telecenters. With government funding that covers half of the foundation's project costs set to run out after the first 150 telecenters have been equipped, Niranjan was forced to consider alternative funding options and analyse the impact and sustainability of this project.

Background

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This poem, written by beneficiaries of *Shilpa Sayura's* programmes translates that "Shilpa Sayura is the rain that has showered upon a dry land faced with drought", reflecting the positive impact Information Communication Technology (ICT) has created in the lives of rural communities.

Shilpa Sayura is a non-profit organisation dedicated to using ICT and online tools to educate and empower Sri Lankans. The organisation uses e-Learning tools to develop the national curriculum, provide local language training, self-training programmes and telecenters to reach out to the poorest who have little or no access to formal educational resources.

Users of local languages have been inadvertently marginalised in the access to global knowledge - a requirement to survive in today's world. The utilisation of ICT as a tool in education has helped bridge this divide and build a firm foundation for future initiatives that removes disparities in access to basic education. The focus of the organisation has

evolved over time, with new beneficiaries. However, its core focus of providing knowledge in the local language, has remained. Over this period Niranjana and his team have diversified its applications into youth development, sustainable agriculture and women empowerment.

The Education Sector

Diogenes Laertius famously said that the foundation of every state is the education of its youth. The Sri Lankan government believes strongly in this and has made schooling compulsory for children from ages 5 to 13 years. Education is state-funded and offered free of charge at all levels, including university. The government also provides free textbooks to school going children.

Literacy rates and educational attainment levels have risen steadily since Sri Lanka became an independent nation in 1948 and the youth literacy rate stands at 97% today.¹ The government gives high priority to improving its national education system and access to education. The medium of language would be Sinhala, Tamil or English. English is taught as a second language.

Although, the picture seems quite rosy, rural education faces acute problems. People in Sri Lanka's rural areas lack teachers, books and educational resources leading to unemployment and poverty. While the government provides free schooling, only 2.7% of the national budget is apportioned to education. It also does not meet the needs of an ethnically and linguistically diverse population.

Rural schools have played a challenging role in the 1960's and 70's where economic and socio-cultural improvement was boosted, led by a huge influx of educated youth. Qualitative improvement in the education within rural areas during that period resulted in the weakening of rural to urban migration. This situation drastically changed during the late 80's, with the introduction of the Provincial Council Administration system where education had become a devolved responsibility to the provincial councils. As such, 90% of the schools were taken under the administration of the provincial government. Almost all the rural schools were categorised as provincial government schools with minimum resource

¹ <http://www.accu.or.jp/litdbase/policy/lka/index.htm>

and lesser funding. New reforms have also created a national school system where all the prestigious urban schools were taken under the control of the central government and provided with more funding and resources. National schools, with the high level of resource allocation from the government, as well as from wealthy parents, are better equipped with diversified extra curriculum programmes, competent teachers, computers and Internet infrastructure, English and foreign languages and science-based education, enabling the schools to maintain high quality standards of education. Thus, they attract more students, drawing on further resources. Motivated middle-class rural parents were then motivated to send their children to national schools in urban areas instead of provincial government schools. Children of poor farmers, however, remain in the rural schools, tending to drop out between 5–14 years old. UNICEF has indicated that in certain remote rural schools, the dropout rate for the age group is 85% - 90%.²

Shilpa Sayura

Shilpa Sayura was founded in 2000 led by Niranjana and a group of enterprising individuals from *E-fusion Private Limited* after extensive research on local language technologies. Having established their presence by working with the grassroots since 1992, they managed to develop the reputation and recognition of serving community, corporations and local language solutions of the government. They were also instrumental in the *Information & Communication Agency of Sri Lanka* formulating the e-Society Initiative; which developed the e-SDI grants program. *Shilpa Sayura* was the **first to get a USD50,000 grant from e-SDI**.

Shilpa Sayura is a non profit organisation administered by a ten member board. The members come from diverse groups who participated in the initial *Shilpa Sayura Project*. They consist of teachers (2), students (2), telecentre managers (3), private sector (2), technology community group (1). The members have ensured a flat organisational structure and keeps a low average age of just 29 years. An open principle in operations have also helped *Shilpa Sayura* stick closely to the vision they set out to achieve.

The uniqueness of the project is that it is the first local language programme implemented in Sri Lanka. The team envisions transforming 600 existing telecenters to a new domain of digital knowledge that develops rural education in Sri Lanka, facilitating better learning

² http://www.unicef.org/srilanka/reallives_2619.htm

amongst rural youth. Research has also shown a positive impact on examination results amongst rural youth who use such e-learning centres. The system focusses on the student's weakest academic areas, which include Math, Science and English. It also expands the topics of study to include sustainable agriculture, renewable energy, health and environment.

Changing focus

From just educating children in rural communities, this initiative has included programmes that educate farmers and family members of the original beneficiaries. Niranjan pointed out with vivid narration that it was only a matter of time for the organisation to embark on this natural progression. The multi-dimensional relationship that *Shilpa Sayura* has with its students, teachers, parents (youth, farmers, women, community) has led to an encouraging take-up and local support. Assistance for promotions, generating community support and volunteers at different levels have also been readily offered. Being organic by nature, the organisation has changed its focus slightly to address important issues that would have greater impact for these children. Going beyond just educating them, *Shilpa Sayura* sets out to improve the community-at-large within the boundaries these telecenters operate in.

The resolution of its pilot project forced them to think of sustainable efforts to maintain the project's team and its momentum. They envisioned a shared project ownership model that involved bringing in representatives from all stakeholder groups of developers, teachers, professionals, telecentre operators and students to establish the *Shilpa Sayura Foundation*.

Like all NGOs, *Shilpa Sayura* has found it difficult to work with the government. Aside from the rigorous selection process, monitoring and evaluation methods, they had to deliver what was promised in their initial proposal.

However, the guidance of ICTA proved crucial in addressing the changes needed to cater to differing field conditions. In a multi-stakeholder participatory environment, the challenge to accommodate stakeholders involved changing some aspects of project designs. The guidance of ICTA was instrumental in supporting this effort and making the transition easy.

Impact Analysis

Impact analyses plague many projects. The basic concept involves the free provision of the *Shilpa Sayura* e-Learning Platform to all Nenasala Telecenters, and to provide the capacity of e-learning services to rural students. Growing in volume and effectiveness of pedagogies, the current system already includes 12 subjects, over 12,000 lessons at at least 5,000 tests..

Shilpa Sayura has been fortunate to have its impact analysis done by Finnish officials as part of the Stockholm challenge³ that took place in 2008. Research revealed that *Shilpa Sayura* has helped much in peer-to-peer learning and has played a complementary role to the national education. Significant improvements in examination performances and the change in learning cultures of communities, were reflected in the research findings. It is encouraging to note that the initiative is addressing its goals it had set out to achieve.

Indeed, there is a great demand from more telecenters as well as from rural schools for the *Shilpa Sayura* e-Learning Service. Local support capacity for an islandwide expansion has to be ramped up to meet this increasing demand. It is also important to continue the evaluation process for curriculum and content development. Therefore, the leadership needs to keep abreast with new technology developments, enforcing proper operational and leadership practices to take *Shilpa Sayura* forward.

Merely increasing the numbers of its centres would not mean being a more successful. Literacy rates have to improve with better employment opportunities for its students to justify the increased needs for telecenters.

Shilpa Sayura's board should look into developing a standard measure of Key Performance Indicators (KPI) based on UNESCO's recommendations.⁴ Many tools now exist for measuring the impact of ICT in education. These come in mediums such as online questionnaires, printable forms, charts and frameworks. Respondents can be similarly diverse: teachers, administrative staff, educational leaders or even the students. Amongst various issues, self-assessment based tools often assess staff skills in technology, levels

³ <http://www.shilpasayura.org/uniportal/news/info.asp?xp=380&xi=433&xl=1&o=0&t=>

⁴ <http://www.unescobkk.org/index.php?id=662>

of ICT integration into lessons, student improvement due to ICT use and change in their attitudes. With *Shilpa Sayura* having established its presence and growing in Sri Lanka, developing their own standards for impact analysis would increase the regularity of data gathering. They should also audit and verify the reliability of their findings with the help of a third-party consultant.

A study by *InfoDev*⁵ has attempted to address some misconceptions about the use of ICT. The use of ICT has often been thought to bring significant changes to classroom practice. This was evident from school surveys conducted in 26 countries with a series of case studies conducted in 27 countries in Europe, Asia, North America, South America, and Africa. These studies show that the innovative classroom use of ICT depends not just on the availability of computers in schools, but also on other factors such as administrative support, teacher training, and supportive policies.

The report highlighted significant barriers to widespread classroom ICT-supported change in developing countries. Reasons such as lack of time in curriculum and school day, lack of skilled personnel, lack of power and ICT infrastructure, including were given. National policies can address many of these barriers and make a difference in the widespread use of ICT to change classrooms. When countries coordinate and commit to introducing computers, changing curriculum, pedagogy, and providing teacher training, changes within classroom practices will be more likely widespread. Governmental support is therefore crucial for *Shilpa Sayura* to continue its great work.

Funding Issues

Like every other organisation in the field, *Shilpa Sayura* continually has issues with funding. Staying true to offering content free, *Shilpa Sayura* has been rewarded with prestigious international awards. The first was the 2007 I4D award in India. The 2008 Stockholm Challenge award proved to be a big challenge, but achieving it helped create the intellectual network to Stockholm University. This tie-up was greatly beneficial to *Shilpa Sayura* as it helped them gain knowledge on improving processes.

⁵ <http://www.infodev.org/en/Project.3.html>

A promise of a total new experience for all those involved, and the provision of enhanced e-learning services in local languages to students, youth, farmers and women won *Shilpa Sayura* the prestigious Lien I3 award in 2009. This award, a shared prize money of SGD 1 million provided the much needed funding needed to up-scale and remain sustainable.

Every award has stepped up the learning curve but has helped improve *Shilpa Sayura's* processes. The tight application deadlines and transparent selection processes for these awards helped refine their organisational efficiency. The close association between *Shilpa Sayura* and *E-fusion Pte Ltd* raised eyebrows, but its success and subsequent development of the organisation have answered those questions.

Role of Community

A strong aspect of *Shilpa Sayura* is the relevant content they create and it has been found that their content on *Modern and Sustainable Agriculture* has benefitted rural farmers, especially women engaged in agricultural work. Surveys have highlighted an encouraging response from the community acknowledging that the project is innovative and that they would like to see the programme expand. As a result of the existing use of the *Shilpa Sayura* programme, telecenters have grown in popularity, increasing their revenue. Some telecenters are now engaged in content development for *Shilpa Sayura*. Other centres also want access to such premium content.

Although revenue opportunities have been created for the unemployed volunteers working as content developers, teachers and telecentre operators, this priced resource can be better tapped on.

Increased funding would be crucial to the long-term sustenance of *Shilpa Sayura*. With the need for more telecenters and greater budget for hardware procurement, means have to be established for greater funding. *Shilpa Sayura* could create sustainable project communities with families of beneficiaries to help produce products that can be sold as part of the *Shilpa Sayura Foundation's* merchandise. Tying up with local authorities, such handicrafts can be sold as souvenirs. They could also consider generating products that local companies would like as corporate gifts. This would help create employment and generate income for the families. More importantly, it would increase the brand awareness of *Shilpa Sayura*. This model has been adopted in the Women's Skill Development

Programme (WSDP) in Kathmandu, Nepal and has helped improve the livelihood of the community.

It is also important to put in place a feedback mechanism to better understand the needs of the local community. Brighter students could also be involved in content creation, increasing ownership of the project. It is encouraging to note that an open forum has been set up for participants to discuss and contribute towards *Shilpa Sayura's* efforts in developing content.

With inflating levels of costs, it is important for the organisation to keep its operating costs low. Better means of content and equipment procurement should be sought and tie-ups or long-term partnerships established can help mitigate rising operational costs.

Conclusion

Shilpa Sayura has set the year 2015 as their special development goal. They have worked tirelessly to address problems stated by their millennium development goals. Primary education for all, sustainable agriculture, health, women and entrepreneur empowerment are some of the goals that *Shilpa Sayura* is working towards.

Despite its relative young age, *Shilpa Sayura* has developed into a reputable educational development initiative and a catalyst for social change. Good relations with the government, funding solutions and regular impact assessments should be continued to increase the credibility of the organisation. As highlighted above, there are serious steps that have to be tackled in the near future to ensure its long-term sustainability. With able leadership and concerted efforts taken to analyse the impact of projects, *Shilpa Sayura* would certainly flourish and be a leading light for other education based projects.

Exhibits (Attached)

1. Questions prepared for Niranjana
2. Annual report of *Shilpa Sayura* 2011

Exhibit 1

Shilpa Sayura Foundation Questions for Interview with Niranjana Meegammana

Target Group

1. Shilpa Sayura has a diverse target group. How has this affected the impact?
2. What was the reason you setup this organisation?
3. How has your focus changed over the years?
4. Is there a common theme that runs through the various projects that your organisation does?

Decision Making/Organisational Culture

1. Are you the only one who makes decisions? Who else?
2. Could you explain the hierarchy of organisation. Is there a chain of command?

Funding

1. Why did ICTA deny funding?
2. Due to diversification of company focus?

Growth Related

1. What are the growth issues you are facing at the moment?
2. Where do you see your organisation in 5 years time?
3. Has there been any collaboration or new project that you have had to turn down? Why?
4. Which was the most successful collaboration that you can think of?
5. Has anyone questioned the link between your company and Shilpa, since Shilpa is an offshoot of your business venture?
6. How would you measure impact of the various projects?

Things to get/clear

1. High Resolution Logo (For Report)
2. Company Report from Last Year
3. Picture of yourself
4. Are there any things that cannot be mentioned?

Prepared by
Sugumaran Devaraja



Shilpa Sayura Foundation
Developing 21st Century Youth

Annual Report 2010



www.shilpasayura.org

Preamble

In the face of emerging global challenges, from climatic change, health, economic crisis and cultural issues, education remains the foundation for innovation for the advancement of human kind. Information and Communication Technology (ICT) help us to find new ways to teach people and improve the quality of education to initiate social changes through life long learning. Hence it is important to know the future imperatives of ICT that can be used in developing people to face the 21st century challenges and to respond to crucial problems in access to education with scalable and replicable ICT innovations.

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1.0 Shilpa Sayura Foundation

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Shilpa Sayura Foundation inspired with the vision of “Developing Youth for 21st Century”, Implements innovative projects using ICT as a platform for development for empowerment of underserved youth providing tool, knowledge and training to face emerging socio-economic and environmental challenges.

Shilpa Sayura Foundation aim is to expand youth development in social change by forming urban youth leadership groups to engage in environment sustainability, improving health, cultural integration and employment generation for underserved youth. Shilpa Sayura works with network Telecentres in Sri Lanka to help develop youth through local, national and global partnerships. Provides free e learning tools, digital learning content, capacity building and training for national education, sustainable agriculture, and women empowerment, improving health, entrepreneurship and vocational skills for youth.

Shilpa Sayura Foundation started in 2006 with Shilpa Sayura Project funded by Government ICT Agency. The partners of the Shilpa Sayura Pilot registered Shilpa Sayura Foundation in 2009, to up-scaling and replicating of the pilot success. Shilpa Sayura has been recognized as a global example winning seven international awards of I4D 2007, GKP 2007, Stockholm Challenge 2008, Diskobolos 2008, WYSA 2008 (Runner up), e-India 2009, Lien I3 Challenge 2009, including Best Corporate Citizen CSR awards in 2008 and 2009.

Shilpa Sayura by creates of local language e learning environments in Telecentres and schools to enable learner centric self guided learning for youth addressing knowledge gaps of community to reach Millennium Development Goals. Since 2006 Government ICT Agency, Stockholm Challenge, Lien Center for Social Innovation has funded 5 initiatives with the value over 200,000 USD.

2.0 Vision

To empower underserved youth with 21st Century Skills using ICT based educational systems and participative development

3.0 Mission

Empowering of youth with inspiration, knowledge, skills and leadership to face emerging socio-economic and environmental challenges through global partnerships. Initiating social innovations to increase inclusion, participation, collaboration and engagement of youth in sustainable development. Provide information and technologies, enabling communication and expression, developing education and employment, ensuring gender equality and cultural integration, improving health and living conditions among youth.

4.0 Management

Shilpa Sayura Foundation is managed by an elected board of directors of 10 members who are diverse in professions and skills. . Projects are lead by youth, advised and trained by senior members. All projects are planned and run on budgets by grants. They are separately accounted, audited and M & E reports produced. The Management method is flat structure, open and inclusive to involve members in the projects, train them for higher responsibilities of the foundation and to serve on the board. The foundation is governed on the by laws of the constitution. The board holds regular meetings to review progress and plan development activities.

Board Members of Shilpa Sayura

	Name	Age	Gender	Education	Profession
1	Yamuna Rathnayake	45	Female	Ad. Diploma in ICT Diploma in English	ICT & English Teacher
2	Nirajan Meegamma	42	Male	Degree in ICT Ad. Diploma in Engineering	ICT, Engineering and Development Expert
3	Subash Dhanajaya	26	Male	Diploma in IT	Software and Systems Engineer
4	Poornima Meegamma	18	Female	Advanced Level	Project Coordinator
5	Srimal Iresh	20	Male	Advanced Level	Web Designer
6	Kavindya Baddegama	18	Female	Advanced Level	Student
7	Yapa Chandralatha	31	Female	Diploma in ICT	ICT Teacher/ Telecentre Manager
8	Murali Krishna	28	Male		ICT Trainer/ Telecentre Manager
9	Wasala Ranjan	43	Male	Diploma in ICT	Content Manager
10	Surnaga Jayakodi	24	Male	Undergraduate	ICT & Electronics Expert

5.0 Advisors of Shilpa Sayura

Gamini Gurnawardena

Executive Member of Japan Sri Lanka Technology Cultural Association, Sri Lanka
Civil Engineering, ICT and Management Expert

Peter Mozellius

Senior Lecturer, Stockholm University, Sweden
E Learning and Telecentre Research Expert

Professor Gihan Dias

University of Moratuwa
Local Language, Communications and Internet Expert

Chitranganie Mubharaque

Head of Society Development Initiative, ICT Agency, Sri Lanka

Shreen Shroor

Country Director, Ashoka Foundation, USA
Community Development and Social Entrepreneurship Expert

Tissa Senaratna

CEO, e fusion Pvt Ltd
ICT and Management Expert

Yasa Karunaratna

President, South Asian IT Confederation, Former President, Computer Society of Sri Lanka
ICT Expert & A pioneer of ICT in Sri Lanka

Dr, K. P. Hewagamage

Head, National e Learning Center, University of Colombo
E Learning Expert

Rasika Wikaramage

Head, IT Security Management, G4S Security, Canada
Systems and Security Expert

6.0 Success stories and growth

E School Project

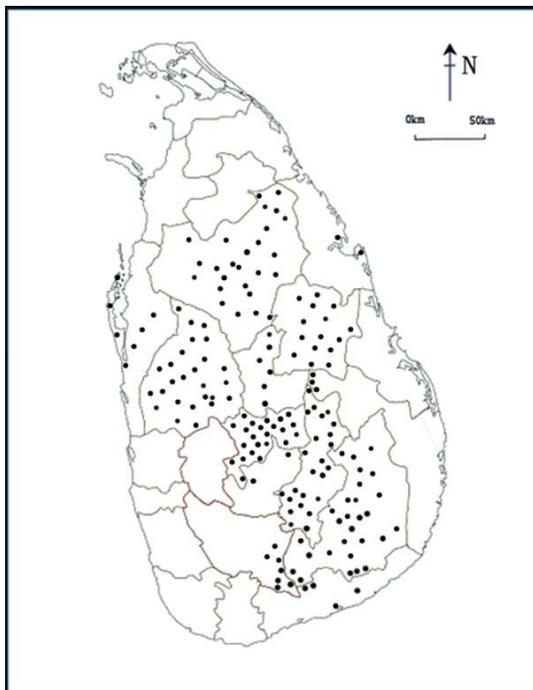
Shilpa Sayura e School Project was implemented in 2010-2011 was funded by Lien Center for Social Innovation. This project upgraded Shilpa Sayura project funded



by Information and Communications Technology Agency (ICTA) of Sri Lanka. The development involved upgrading of e learning system and increasing of content from 8000 lessons to 12000 lessons, including 5000 test questions. The content was created in Sinhala and Tamil Languages

and video lessons to learn ICT and Math. Advanced Level Art, Commerce and primary curriculum was also included in the content. Completed system was implemented in 60 Telecentres and Schools in Badulla, Monaragala, Ampara, Kandy, Kurunegala, Polonnaruwa Districts.

Funding SGD 85,000.00.



Shilpa Sayura implemented Telecentres – 2011 March

Shilpa Sayura Online <http://e.Shilpasayura.org>



Shilpa Sayura System designed to run on a local server. A version was developed to run online and promoted to 600 Telecentres Island wide. In house funded from the savings in E School Project.

Children in the Floods Initiative <http://childreninthefloods.blogspot.com>

during the torrential rain disaster in January and February 2011, Shilpa Sayura Team travelled to disaster areas to assess the impact and launched the <http://childreninthefloods.blogspot.com> web site to report the impact to the



public to engage them in disaster response.

As a result of online communication we were able to raise relief support to locations that had most damages from the disaster. The information produced in blogs, photos and videos were published online and many disaster relief agencies and president office used them for their activities. This emergency response initiative carried out for 3 months. The website used free online services and self funded by the volunteers of Shilpa Sayura Foundation.

Adobe Youth Voices



A Partnership Created with Adobe Youth Voices to train 100 youth in creative media production on social issues. Program to be implemented from May 2011. Two educators were trained by Adobe Foundation including, 30 Licenses of adobe Software and Funding of USD 2500.00

Formation of Youth Empowerment Society (YES)

Based on learning from "SIX in the City" organized by lien center form Social Innovation Singapore, a project concept was designed to develop Urban Youth in



Kandy. A Small youth group formed by Youth directors of Shilpa Sayura Foundation meets every Monday afternoon to learn about city issues and develop their leadership skills with the assistance of adults. A partnership created with Sri Vishaka Society of Kandy, provided a meeting place for students. YES

project idea submitted to UN HABITAT youth award competition has been selected for funding in 2012. In house funded.

Internet School for Farmers project



<http://agri.info.lk>

this project funded by Internet Society (ISOC) implements an online school in Sinhala and Tamil Languages for learning sustainable agriculture. The content obtained from University of Peradeniya and Agriculture department of Sri Lanka. Major work of this project is planned for

year 2011-2012 periods. Funding USD 10,000.00

7.0 Acknowledgements

Acknowledgements should be given to Board as well as advisors of organization. Also we need to mention the Funding Agencies, Corporate & Government Departments who have funded the organization through various projects and communities who helped us.

We like to acknowledge the support of **ICT Agency, Sri Lanka** and **e Society Team** for their continues support in Shilpa Sayura Project.

E fusion pvt Ltd had been our backbone of technology, funding and resources. We like to thank them for transferring the copy right of the content produced in Shilpa Sayura Project to the Shilpa Sayura Foundation under creative commons license.

Lien Center for Social Innovation had been a great motivator who helped us to become sustainable with Lien I3 Funding which helped us founding Shilpa Sayura Foundation, Upgrading of Application and content base. We want to pay a special gratitude to its board members, Director and staff including Sharifah Maisharah Binte Mohemed for the inspiration to reach higher goals in social innovation

Telecentre Community Association as our partners on field implementations had been a major strength of our success.

We like to acknowledge the support of **Stockholm University, Sweden** for their support in evaluation and field research.

We greatly value the contribution made by **volunteer group of Shilpa Sayura** who assist us creating of content, technology development and field implementation. We would not have achieved our success without their contributions that helped us to reduce implementation costs. We also like to mention the support of **Ashoka foundation, Sri Lanka, Ceylon Chamber, Sri Vishaka Society, National institute of Education, University of Colombo, CIC Agri Businesses Pvt Ltd, Nenasala Telecentre Network of Sri Lanka, Many Schools and Teachers.**

We also like to acknowledge **CSDMS, India** and **Center for Sustainable Social Development, USA, IDRC, Canada, Internet Society, Sri Lanka** for opportunities created to present Shilpa Sayura Research Papers in international forums.

Shilpa Sayura YES - Youth group had been a constant inspiration for the foundation to expand its impact and implement new ideas.

We pay our gratitude to the Telecentre operators who made special voluntary contributions to implement Shilpa Sayura in their communities. They are many, as and their supporters are many. This photo is to remember their support in Shilpa Sayura Initiatives.



8.0 Research Studies & Evaluation

Extracts from Papers

"Shilpa Sayura by creating a new means of access to education helped improving of quality and performance in rural education" ⁴

"Shilpa Sayura and Telecentre local language e learning model as an innovation emerged through information and communication for development for increasing access to education by marginalized rural youth which can hope to improve examination performances and reduce school drop-offs." ⁴

"Shilpa Sayura and Nenasala Telecentres have enabled new forms of participation of rural youth in national education by creation of local language e learning environments in isolated rural communities." ¹

"In Sri Lanka the Shilpa Sayura project has provided content in local languages which is extensively used and appreciated." ⁵

1. Can open ICT4D shape future of rural education? Innovations in Sri Lanka Telecentres

Meegamma, N., Dhammasara, K., Krishna, M., Sampath, R.,
Open ICT4D 2010, Ottawa, Canada

2. Women Empowerment in Rural Areas through the Usage of Telecentres - A Sri Lankan Case Study

Hansson, H, Gaiani, S., Meegamma, N., Mozelius P
e India 2010, Hyderabad, India

3. Telecentre Tripod- Technology, Tools & connectivity

Meegamma, N.,
e India 2010, Hyderabad, India

4. Local language e learning at rural Telecentres - An imperative of ICT for increasing access to education,

Meegamma, N, Dhammasara, K., Samarawikrama, C., Saman K.,
Future Imperatives of Communication and Information for Development and Social Change, 2010, Bangkok,

5. Critical Issues for e-Learning Telecentres in Sri Lanka and India,

Gaiani, S., Hansson, H., Meegamma, N., Mozelius. P., M-2009, Maastricht , 2009

9.0 Case Studies

A. Elearning at Telecentre changes lives of young priests



Thalakumbura Telecentre located in a Buddhist temple, in Badulla district, Sri Lanka, is run by volunteers keeping it till late night to serve over 100 youth learning at the Telecentre sharing 3 computers. Students walked to the Telecentre from villages as far as 4km. Among learners were young priests who studied in the religious school Pirivena. They were not able sit for G.C.E O/L examination as the religious school did not cater much advanced national curriculum. Hence they were

marginalized with the opportunities to enter senior secondary level leading to higher education in universities.

Five young priests self and group learning from Shilpa Sayura local language resource at Telecentre were able to pass G.C.E O/L national examination in 2008. Telecentre and Shilpa Sayura collaborative created them an open learning environment to access national education. “We prepared for the examination learning from Shilpa Sayura” said young priests. This performance improvement resulting from learning behavior modification of rural youth is an example of social change enabled by local language e learning at the Telecentres. “After the success of young priests more young people are using Telecentre” said head priest. Although the young priests were a special social group with different life objectives, shared limited resources with other learners for self and peer to peer learning which transformed them to a “self help learning society” of social cohesion providing an evidence based example for developing world how Telecentres and local language digital content could be used for rural education development.

Impact

Shilpa Sayura and Telecentre combination helped changing of the lives of young priests by enabling access to national education through local language e learning²³. The Telecentre became a sustainable and valuable education resource for the local community.

Challenges

Rural Telecentres are facing challenges with limitations in infrastructure with the increasing of learners demanding access to education. The poverty in rural areas is challenging Telecentres to continue social purpose driven free services models, needing external assistance for social change through ICT.

Lessons Learned

Shilpa Sayura like local language e learning resources at Telecentres can help increase rural youth participation in national education

B. Telecentre enables education at homes

Hingurukaduwa is an isolated village faced with education challenges due to poor transport, communication and energy



problems. “The education opportunities for our youth are very limited due to isolation” said Telecentre manager, who started the Telecentre with a used computer in 2002 to teach ICT and English to the village youth. The Telecentre through social entrepreneurship obtained used computers from corporations and placed them at village homes with Shilpa Sayura to be shared by 5-6 students for

e learning which formed 20 “neighborhood learning groups” which they called an “e village”.

The enabling of e learning at homes benefited students live far from Telecentre, specially young girls who were restricted outside travel by local family culture. The small e learning groups formed by students created a “learning society” in village, which also included parents who learned to use computers from their children. The e learning groups also shared educational CDs and books from Telecentre library. The technical support was provided by a group of volunteers who were early beneficiaries of the system. The senior students conducted ICT classes at Telecentre in week ends and evenings are an example of how learners can become teachers for peer to peer learning. At the group discussion the parents appreciated the “e learning enabled at homes” and agreed that the children are improving in school performance. A student said “learning with Shilpa Sayura at home, I was able to improve my standing in the school”.

The Telecentre provided their services free and also operated a micro scholarship program supported by donors. Paying for learning is an innovative concept we found at Hingurukaduwa Telecentre. One of the good examples is a case of a youth who wanted to study in Science stream in G.C.E Advanced level, but could not do so as the village school only had teachers for Art subjects and poverty was a barrier to attend a school outside the village. The Telecentre scholarship helped the youth to learn java programming and obtain an internship in Shilpa Sayura development team. In another case two youth who developed software for learning English won “National Young Computer Scientist” award in 2007, a remarkable achievement in the rural context. Our studies in village school showed that students learning at Telecentres are performing better than others as well as examination performance had been improved.

Impact

The Telecentre by enabling local language e learning at village homes created a new form of rural youth participation in national education which resulted increased access to education

and improvement of their performance in examinations.

Challenges

increased demand from rural youth for e learning at homes is creating challenges to Telecentre to maintain a totally free services model under shrinking donor assistance, hence up scaling and replication of the innovation is a challenge.

Lessons learned

Enabling of local language e learning at village homes using shared computers can create “neighborhood learning groups” enabling new forms of participation in national education by isolated rural youth. This innovative model can be replicated in large scale to increase access to education and empower marginalized rural youth.

C. Telecentre builds capacity of ICT education in schools

When ICT was introduced as a subject in Sri Lanka G.C.E O/L examinations in 2006, students living in Madagama, in Monaragala district, were marginalized as they did not have trained ICT teachers. A teacher of the local school said, “I am teaching only office applications to students” stating the knowledge constraint faced in teaching ICT curriculum.

The average of pass rate of G.C.E O/L in 2006 in the area is 34.08% which is a very low rate compared to national pass rate of 51.3%. When the condition of general education is such, introducing ICT as a subject was a major challenge for schools to serve student needs. A student said “I want to learn ICT for future employment” stating a strong reason for rural students to consider ICT as an important subject.

Nagala Telecentre situated 20 km away from Madagama, decided to address the ICT education problem of Madagama. The G.C.E O/L ICT curriculum is a two year study covering theory and practice in programming, number systems, logic gates, computer hardware, networking, computer security, internet, web designing, animations, office applications and ICT in society which goes beyond basic computer literacy training usually provided at Telecentres. Madagama Telecentre was started by bringing one of the three computers at Nagala Telecentre and sharing another computer belonging to an unemployed youth at Madagama, which created a local ICT employment opportunity.

Over 50 students and several teachers joined the Telecentre to learn ICT for G.C.E O/L curriculum after an awareness session conducted at local school. Madagama Telecentre introduced a blended learning model using Shilpa Sayura self and group e learning model and instructor guided teaching. “Shilpa Sayura had all the content needed to teach O/L ICT” Telecentre manager said. Group sessions held at Telecentre helped peer to peer learning through knowledge sharing. A student said that “all content were made available in electronic form helped self learning at my own pace”. Telecentre also helped training of local teachers in ICT providing Shilpa Sayura ICT content to the school. “Telecentre created learning opportunities for students that were not available before” said the principal of the local school.

In August 2009 the first group of students who learned at the Telecentre taking ICT subject

in mid term test “showed an improvement of performance” said teacher in charge of ICT. Among students learning at the Telecentre, 11 students sat for GCE O/L examination in December 2009 and passed ICT subject. The enabling of learning national ICT curriculum at Telecentre and the capacity building of local school voluntarily by the Telecentre is an example of creating “learning societies” through social entrepreneurship which also shows the potential of Telecentres to partner with local schools to improve ICT education in marginalized rural societies, which is also a means of increasing value and sustainability of Telecentres.

Impact

The marginalized students whose school lacked the capacity for ICT education were able to improve performance at school and pass ICT subject in national examination through e learning at the Telecentre. The Telecentre and school collaboration increased learning opportunities for youth and strengthened the school’s capacity for teaching ICT.

Challenges

Learning ICT in rural societies is a challenge. Telecentres who are able to bridge this gap are facing challenges in finding capital infrastructure.

Lessons learned

E learning and collaboration of Telecentres with local schools can help bridging of the disparities in access to national education. This experience can possibly be replicated island wide to address the problem of lack teachers for teaching of national ICT curriculum

D. E learning at Telecentre improves examination performance

Siyambalanduwa is one of the highest poverty communities in Uva province. The education



constraints are reflected from 63.16% of the candidates failing G.C.E O/L examination in 2006. “Young people are failing examinations is a major issue in our community” said the head priest of the temple. The Telecentre started in 2006 was closed down due to lack of community participation. The Telecentre was re-opened in June 2008 with the introduction of Shilpa Sayura. The Telecentre facilitated local language e learning for Math, Science and ICT

creating a new learning opportunities for the village youth. “I improved my Math using Shilpa Sayura” said a student learning at the Telecentre.

Among the students who learned at the Telecentre, 102 students sat for G.C.E O/L examination in 2008 and 80 students (78.4%) were able to pass the examination. This is a significant impact on change of performance enabled by the Telecentre comparing to 36.84% pass rate in the district. “The impact has been resulted from the local language e

learning at the Telecentre” said Telecentre manager. Learning English was constrained in Siyambalanduwa due to non availability of English teachers. The Telecentre obtaining a service of an English teacher located 250km away in Colombo, used Skype video conferencing to find a new channel to receive English knowledge. “Learning on Skype improved my English speaking” A student said. Users have quickly adapted to the new experience of learning from distance enabled by ICT. The e learning deployment approaches used by Telecentre were blended with self and group learning, distance learning and teaching under an open hut at the Telecentre. Local language content was used as the center of focus of self and group learning. This case provides an example on how ICT could be used innovatively deliver knowledge to isolated rural youth affected with constrained access to national education and improves their performance in examinations.

Impact

Local language e learning has transformed the Telecentre to a community e school, and helped social change by improving of rural youth examination results. Video conferencing technologies helped transferring of knowledge for youth constrained with access to learning English.

Challenges

Knowledge of English is a barrier in rural societies to access global knowledge. Therefore it requires increasing of local language content in all disciplines to engage them in life long learning for social change. Connectivity is a challenge in rural communities to use ICT as a means to increase access to education through distance learning.

Lessons learned

Local language e leaning at Telecentres can be used to improve examination performance of rural youth and help sustaining of Telecentres. ICT can be used as an effective tool to deliver knowledge to isolated distance rural communities.

10.0 Scaling up

Shilpa Sayura E School Project having successfully implemented we are seeking opportunities to create local, national and international partnerships to up-scaling its experiences. The up-scaling potential is as follows

1. Spreading Shilpa Sayura through School's Network into 6000 Schools.
2. Production of Shilpa Sayura in Tamil Language
3. Replicating Shilpa Sayura Experiences in India, Butan, Nepal and Bangladesh
4. Transforming Shilpa Sayura to open source and Open Content

The up-scaling challenges are communications, equipment, partnerships and funding.

11.0 Advocacy and Communication



Shilpa Sayura maintains a website at <http://www.shilpasayura.org> and a community portal at <http://shilpasayura.ning.com> and Shilpa Sayura Video channel and youtube.com for informing public and donors about the activities and progress of projects.

Google groups maintained to enable inter Telecentre communication. Research papers published at international conferences and case studies in telecentre.org.

We used electronic communications mostly using mobiles, Skype and other online tools. Those methods are more environments friendly and faster than traditional mediums.

12.0 Directors' Report

In the year 2011 - 2012 we will continue to expand Shilpa Sayura e School Project with content and reach more rural students through Telecentres. One of the major activities planned is to implement Adobe Youth Voices Program in which we plan to train 200 youth in creative multimedia production to highlight social issues. The YES initiative plans to engage large number of youth in leadership and urban living. The sustainable agriculture learning initiative aims to reach rural farmers and women through Telecentres. We hope to create more partnerships with other non profits. We need to communicate our needs and impact created by our work to potential donors to get assistance. Now we have established a good e learning platform we need to reach more youth who are connected while we reach youth who are not connected through Telecentres.

There is a need for teaching Advanced ICT and Media Skills to youth to flourish in the future. We need to focus on content for learning advanced ICT and Media Skills in Shilpa Sayura. Programs need to be planned with partnership of Schools and teachers and making awareness among parents is important. Due to the shrinking economic conditions we need to increase our local support base and seek local support from sponsors. Performance arts is a potential attractor of talented youth, hence suggest to explore opportunities that can engage youth in social development through performance arts combining it with youth media.

13.0 Governance

In the governance of Shilpa Sayura Foundation, we need to involve more youth leadership by providing opportunities to youth to take leadership in implementing projects through local fund raising. The board aims to delegate more powers to sub committees lead by youth. The boards also suggest creating two board positions to youth who are benefitted, so that their voices and ideas can be heard at the board level. In the financial management board suggests project based budgeting and keeping organizational overheads low using online meetings.

Risks

The end of e Sri Lanka project by ICTA will create adverse impact on Telecentres and e society projects, hence Shilpa Sayura Foundation need to seek external assistance and fund raising through special programs for increasing sustainability. This also requires reduction of costs internally and sharing of resources with other non profits. Projects implemented will be reviewed constantly and measures will be taken to manage projects with in time and budget.

Reserves

A fixed deposit should be build from project savings and allocating part of revenue to continue operations for an extended period in the event of a significant setback affecting core income.

14.0 How donors can help Shilpa Sayura?

We invite donors to visit our projects, talk to beneficiaries and experience the impact of our efforts. Such self evaluation can help determine the extent of their support to upscale our success to reach more underserved youth in Sri Lanka as well as Asia. Although financial support is much appreciated, we also welcome other kind of small donations of ICT equipment and any material that can be useful to youth.

Following support is highly appreciated

1. Travel grants for International training and conferences
2. Used notebooks for youth
3. Sponsoring Web Hosting and Servers
4. Payment of Project and Tech Support Team Salaries
5. Sponsoring Internet Access for Telecentres
6. Sponsoring visiting professionals to Telecentres
7. Sponsoring small youth projects with grants
8. Providing internship opportunities to youth leaving school
9. Allocating CSR time of staff to do volunteering with Shilpa Sayura
10. Obtaining Shilpa Sayura Training Services to train staff ICT skills

15. Financial Summary

Income and Expenditure Statement 2009 Nov - 2010 March

Name	Income	Expense
Accommodation		21955.11
Communication		69992.73
Food		141188.97
Equipment		1234191.10
ICT Services		207860.00
Learning Resources		68521.00
Maintenance		157425.00
International Travel		298059.00
Postage		740.00
Professional Services		934344.00
Refreshment		39718.00
Rental		142000.00
Salaries		2582478.00
Staff Benefits		18240.00
Local Transport		393678.57
Utilities		34450.98
Scholarships		2500.00
Training		85000.00
Banking Charges		12212.10
Loans		500000.00
Donor Funding	9476161.50	
Advertising		25300.00
Auditors & Secretaries		30000.00
Depreciation		411397.03
Bank Deposits		2156857.75
	<u>9476161.50</u>	<u>9476161.50</u>

Balance Sheet 2011 March 31

	Assets	Liabilities
Opening Balance	10000.00	
Fixed Assists	822794.07	
Loans		500000.00
Accounts Payable		240000.00
Fixed Deposits (Cash)	2156857.75	
	<u>2989651.82</u>	<u>740000.00</u>
Balance	<u><u>2249651.82</u></u>	

A new beginning always awaits ...



www.shilpasayura.org