

Life Long Learning (L3) for Farmers: A Pilot Project in Sri Lanka

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Abstract

Over 75% of the population of Sri Lanka lives in the rural sector. More than 70% of rural women are involved in subsistence agriculture and production but lack access to information and are relatively weak in economic empowerment. Several decades of public investment in agriculture, irrigation and community development have not achieved lasting success in rural development. New strategic initiatives are needed to harness engines of pro-poor growth to enhance livelihoods, increased incomes, address gender issues and ensure access to essential services among the poor.

The vision of Lifelong Learning (L3) for Farmers in Sri Lanka is to evolve a self-generating, self-sustaining and self-replicating livelihood improvement programme among rural communities using technology mediated open and distance learning. This concept envisages a global and local partnership between knowledge institutions, ICT centres and rural communities and a win-win situation for all stakeholders. The L3 Programme was launched in Sri Lanka in April 2007 and pilot phase is taking place in three villages.

It is a tri-partite model with mobilized rural community in the centre for facilitating participation and as a base for knowledge management in the community.

The rural community is linked to:

- a) location-specific institutional base through partnership with knowledge institutions with expertise in disciplines related to agriculture in a consortium approach.
- b) rural ICT centres with appropriate technology to facilitate self-directed learning which is financially viable, economically feasible and socially acceptable.
- c) banks for loans to farmers.

The L3 project is complementing the 'Gama Neguma' (village upliftment programme) of the Government of Sri Lanka thus deriving national support.

Presentation will share the experience thus-far gained in the three pilot villages.

INTRODUCTION

Commonwealth of Learning (COL), Vancouver, Canada is an intergovernmental organization created by Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge resources and technologies. COL has been emphasising the effective usage of open and distance learning for poverty reduction through food security and environment sustainability. In this regard COL has developed a Framework for Lifelong Learning (L3) for Farmers and all other stakeholders in agriculture through the use of open and distance learning. The aim is to evolve a self-sustaining and self-replicating process in which rural communities together with higher education, financial, insurance and marketing institutions exploit the potentials of capacity building for lifelong learning through information and communication technology based open and distance learning- TECH-MODE learning (Commonwealth of Learning 2005). The programme is being tested in South Asia, Africa and Small Island States.

CONTEXT

By contrast with its impressive human development record (Education 2005), economic growth and poverty reduction in Sri Lanka has been less noteworthy. Around 30% - 40% of

the total population in Sri Lanka is considered poor and 90% of them live in rural areas (Millennium Development Goals Report 2005). Agriculture plays a dominant role in the socio-economy of Sri Lanka providing for the livelihood of over 75% of the population, who live in rural areas (Dharmawardena 2001). Approximately little over one-third of the land area is under agriculture. Although in recent years sectoral composition of the economy has changed from that of an agriculture based economy to one dominated by the services sector, agricultural sector is an important determinant of Gross Domestic Product directly accounting for around one-fifth of national output and employing over one-third of the workforce. Indirectly the importance is greater than what the figure indicates because of the link between agricultural, manufacturing and services sector. The contribution of the agricultural sector to the Gross National Product shows a significant decline during the past two decades (Central Bank 2005). Capacity of the rural agricultural sector is inadequate to face challenges due to globalization. Micronutrient deficiency in the rural population also affects the efficiency of the people.

Rural women small holders make significant contribution to agricultural sectors but often lack the capital, labour, time, educational levels, access to information and communication technology, modern technology and interaction with agriculture extension system (Aluwihare – Samaranayake et al 2003). The agriculture extension services which provided much needed help in the form of field advice, innovation from scientists and researchers and sound commodity marketing principles to small holders have failed to meet the present demand (Dharmawardene 2001). Initiatives are imperative to improve learning for rural women to achieve the dual goals of sustainable food security and women's empowerment.

Current trend moves towards emphasis on appropriate information and communication-driven development for shaping a knowledge society. This would allow us to overcome the barriers of time, space and socio-economic factors and to bring a variety of learning resources to meet education and information needs of the rural sector. Significant growth of internet usage in recent years (Shironika Karunayake and Rupa Wijeratne 2006) and greater availability of information and communication technology networks and internet facilities penetrating rural sectors (Liyanage 2006) holds a potential to accelerate rural peoples access to learning. Sri Lanka is yet to fully utilise its immense potential of the distance learning approach for developing human resource for agriculture and rural development.

LIFELONG LEARNING FOR FARMERS PROJECT - A NEW PARADIGM FOR AGRICULTURE AND RURAL DEVELOPMENT

Scope

Agriculture is no longer just a traditional occupation. It is as knowledge based as is industry. Sri Lanka is looking at new initiatives and strategies to address the critical need to strengthen the agriculture extension system and appropriate rural credit system to address issues such as poverty reduction, livelihood security and sustainable development. Food and Agriculture Organization (FAO 2000, 2001) has identified information and communication technology based Open and Distance Learning and partnership linkages among agriculture education systems and distance learning systems at all levels as the best strategies to improve rural peoples learning thus enabling them to achieve sustainable gains in food and livelihood security. COL's Lifelong Learning for Farmers initiative was successful in South India. It is in this context that the Project was officially launched in Sri Lanka in April 2007.

The Process

The process is illustrated in Figure 1 (Balasubramaniam 2006).

Defining Key Themes

The key themes in the project include

- Technology Mediated Open and Distance Learning.
- Lifelong Learning.
- Partnership.

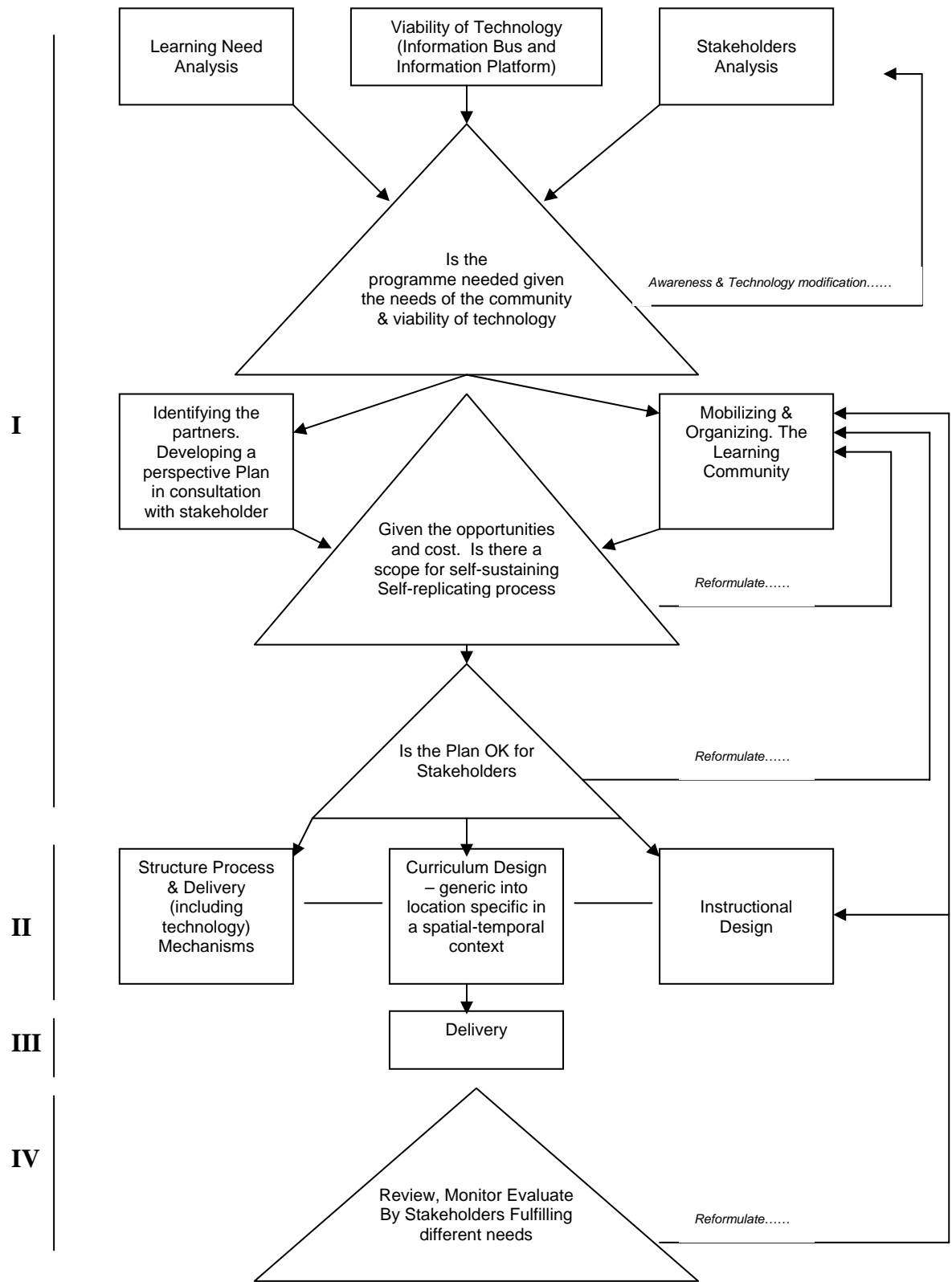


Figure 1 : Flow Chart of the Process

Technology-Mediated Open and Distance Education (Tech-MODE) for Learning

This encompasses open learning distance education, and ICT-mediated learning. It is an asset to universal education, lifelong learning, continuous updating and innovation which are needed for survival in the present age.

Open Learning is an approach rather than a system or a technique. The philosophy is based on the needs of the individual learner and not in the interest of the knowledge provider i.e. learner-centred. It takes into consideration that education and training must be all inclusive and reflect vastly diversified members of the community in terms of their learning needs, preferences and styles. It gives learners as much control as possible over what, where, when and how they learn. Open Learning uses the delivery method of distance education and facilities of educational technology.

Distance Education is a mode of teaching where the knowledge provider and learner are separated entirely or mostly in time and/or space and therefore have to use a variety of media (print or electronic) to communicate with each other. Concurrent with the ICT revolution distance education has evolved into a flexible learning mode, with interactive multimedia, internet access and computer mediated communication.

The phrase "Open and Distance Learning" combines both open learning and distance education. Technology-mediated open and distance learning has made possible more active and interactive learning experiences through for example peer tutoring and self-directed learning, experiential and real-world learning, resource based and problem solving learning, reflective practice and critical self awareness or any combination of these approaches (UNESCO 2002).

The underlying vision of Tech-MODE for learning is to touch the lives and change the attitude and behaviour of both people and society. These changes will develop a constituency that is informed, knowledgeable and self-aware and is capable of taking effective actions for sustainable social and economic development.

Lifelong Learning (L3)

Lifelong Learning implies continual learning throughout life i.e. "from the cradle to the grave". Jacques Delors (1996) viewed "learning throughout life" as the "heart beat of society [.....] one of the keys to meeting the challenges of the 21st Century". Life Long Learning takes place through natural learning, self-learning, non-formal learning and formal learning. Provision of technology based lifelong learning using multimedia, computer facilities and the internet as the core technologies is the backbone of L3 project.

Partnership

The project is based on the notion that partnerships are crucial to its success. Institutions recognized for contribution in a variety of specialisation relevant to the rural farming community are brought together for building partnerships/alliances to address the various dimensions of the project in a holistic manner. All of the partners will have vastly different levels of power and resources. They will through interactive learning understand each others' strengths and weaknesses and they will work together as equal partners in designing, implementing, interpreting, reporting and evaluation of the project. Effectiveness will depend on strength and inclusiveness of the partnerships which it is able to develop among stakeholders at all levels.

Social mobilization

Social mobilisation is a crucial aspect of a bottom up participatory development process. It involves villagers coming together and organizing themselves to address the issues in continuous learning, credit and marketing. It also enables the community to identify its own problems and facilitate the community to assume responsibility in planning, managing controlling and assessing the problem solving activities.

FRAMEWORK IN SRILANKA

The Project progresses through key steps as illustrated in Figure 1.

The Project involves four key stakeholders: the farmers; knowledge and information providing institutions forming a Consortium; information and communication technology providers, and banks.

Farmers

Rural farmers and landless labourers are the primary stakeholders and are central to the project. They are mobilised into organizations such as associations. The farmer associations are linked to the banks to encourage credit to the members under contract farming system and also linked to the buyers identified by the bank or by themselves which will help to create an efficient marketing system.

Consortium of Knowledge Providing Institutions

Institutions recognized due to their institutional mandate and contribution in a variety of specialisation that would help in agriculture and rural development work together in a Consortium approach. The consortium includes Universities under the University Grants Commission, Research and Development Institutions under the Department of Agriculture, Science and Technology institutions under Ministry of Science and Technology, Professional Associations such as; SriLanka Association of Distance Educators, Export Development Board, Private and Public marketing Agencies and relevant Provincial Ministries to address various dimensions of the Project in a holistic manner. Responsibilities of each consortium members is identified and clearly defined in the Project Perspective Plan and agreement reached to fulfil their responsibilities.

The consortium provides content based on the need and demand of the rural communities. The knowledge providers and the agricultural community learn from each other through interactive learning. The knowledge and information from the consortium partners are converted into locality –specific knowledge in an interactive self-learning form that rural farmers can directly use. The consortium will interact with the community regularly and contribute to specific knowledge identified by the community. This is a demand driven approach which would be the base for knowledge transfer.

Rural Information and Communication Technology (ICT) Centres

Networks to serve rural and semi-urban populations include 'Nenasalas', information and communication technology centres for the rural youth, Vidartha centres (Liyanage 2006), Cyber Extension Centres of Department of Agriculture (Dharmawardene 2001). Besides the use of computer and internet facilities for knowledge transfer and storage the centres provide meeting space and a forum for the rural community for peer interaction. They are also useful in helping villagers take advantage of information economy, access education, government information, health care and other services. Vidartha Centres aim to take science and technology to the rural areas providing a means of developing small and medium enterprises.

Although initial learning is by formal means self-directed personal-strategic learning among farmers, agriculture labourers and women is encouraged and promoted. Core learning in the formal method is modular for which credits will be granted contributing towards certification and qualifications from universities. This will help villagers in social recognition and career upgrading.

Banks

Banks form an important stakeholder in that they provide loans to farmers to increase their knowledge and agriculture productivity. The farmer-societies are linked to the bank. Rural Cooperative Society Bank and Hatton National Bank with branches in the rural sector are participating in the project. Farmers use the bank for credit, savings and insurance.

IMPLEMENTATION –A NEW MODEL

Initial Steps

The Open University of Sri Lanka with its Vision and Mission to enhance opportunities for adult lifelong learning of people and its gender sensitive approach had the opportunity to play an anchor role in creating awareness of and receiving commitment to Lifelong Learning for Farmers at the national level and tertiary institutional level and in facilitating the universities in Sri Lanka to engage themselves as the prime movers of the Lifelong Learning for Farmers Project.

The Open University conducted case studies and workshops in collaboration with FAO, (Wanasundera 2002; Aluwihare – Samaranayake et al 2003; C S de Silva et al 2004; Jayaweera 2004; Udayamali and Wanasundara 2004) on resource mapping on distance education resources in Sri Lanka including learning need assessment among rural women, economic empowerment of women and use of information and communication technology in selected rural villages. Active discussions with universities and various other institutions and government departments with a view to probe the feasibility of initiating Lifelong Learning Project in Sri Lanka proved positive.

These studies provided the necessary data in three villages for the initial steps (Figure 1) of the process viz:

- Stakeholder Analysis.
- Learner Need Analysis.
- Identification of partners with stakeholders and
- Social mobilization status of the villages

A solid platform for initiating the L3 Project in Sri Lanka in three villages was thus created.

Project Management

Uniqueness of the model in Sri Lanka is that the pilots are steered through by universities as in Table 1.

The managing University Partner of each of the village takes the role of

- promoting the concept.
- Forum of Consortium of Partner Institutions.
- builder of partnerships among various stakeholders including the farming community.
- facilitating the translation of knowledge identified by the community and provided by consortium partners into learner friendly interactive content.
- implementing and monitoring and evaluation of the programme in a participatory approach.

The Commonwealth of Learning Consultant, L3 Farmer Project – Sri Lanka functions as the National Coordinator, coordinating the Project with all the university partners. The Consultant is also responsible for conceptualizing the Project and initiating linkages and partnerships at the national level.

Project Villages

The existing experiences of rural community projects in three villages were consolidated and integrated into the Lifelong Learning for Farmers Project. Pilot Project areas are given in Table 1.

Table 1 : Pilot Project Areas in Sri Lanka

Village	District	Managing University
Weligatte	Hambantota	University of Colombo – Agro Technology Centre at Weligatte
Madya Nuwara Gampalatha	Anuradhapura	The Open University of Sri Lanka
Kaluthavalai	Batticaloa	Eastern University, Sri Lanka

Perspective Plans were prepared for each of the three villages in joint consultations with the respective villagers and other stakeholders. The Plan contains the objectives, inputs, operation details, outputs, outcomes and impacts. The roles of each stakeholder and the learning needs are defined in the Plan. It also contains the cost for implementing the Project.

Weligatte

It is one of the poorest and remotest village in the dry zone. 90% of the villagers cultivate banana using conventional and or tissue cultured plantlets. Literacy rate is 70%. Standard of living and level of education are very poor. Agro-technology and Community Service Centre of the University of Colombo is sited in the village. A small tissue culture laboratory in the centre trained poor young girls in the vicinity and employed eight of them to manage the laboratory and produce tissue cultured plantlets sold to the farmers. On integration of the existing status of Weligatte into Lifelong Learning for Farmers Project, villagers were mobilised to form a society, the society was linked to a bank, internet facilities were obtained and a Consortium of institutions were formed. The village has potentials of exporting banana and products.

Kaluthavialai

A poor village in dry zone. Literary rate is 75% with female literacy of 70%. Agriculture is the major occupation with 90% of males and 40% of females as cultivators. Small percentage are agriculture labourers. Intensive cultivation of vegetables are practiced in the village. One village society is in operation. On integration of the existing status consortium has been formed, village society is linked to a bank, village centre is being equipped to serve as the information and communication technology centre. Farmers are looking for opportunities to expand the domestic market of chillie and initiate tissue-cultured banana cultivation.

Madya Nuwara Gempalatha

A poor backward village in the dry zone with not much of basic needs. Literacy rate is 80%. 50% of the villages are cultivators and others engaged in animal husbandry. On integration of the existing status villagers have been mobilized to form societies and Open University multimedia centre is used for farmers' learning.

Potential Project Area

University of Jaffna and Ruhuna University are showing keen interest in initiating pilot projects in the North and South of SriLanka. Villages will be chosen from the "Gama Neguma" programme of the Government (Mahinda Chinthana 2006).

Outputs, Outcomes and Impact

Outputs

- Farmers empowerment in current information and modern agricultural practices through use of print and CD-ROMs.
- 1,000 person learning hours using Tech-MODE learning.
- 5,000 person learning hours – face-to-face.
- Research reports on problem solving issues of farmers.
- Availability of base line data as a reference point.
- Two-fold increase in the number of Farmers using tissue-cultured banana.
- Tissue-culture banana plantlets produced per month increased three-fold per month.
- Two-fold increase in trained girls in production of tissue-cultured banana plantlets.

- Two-fold increase of land under tissue-culture banana cultivation by 80% of farmers.
- Export of banana trials initiated.
- Increase in income from 5,000/= to 15,000/= per month for most banana cultivators.

Outcomes

- Livelihood improvement and better quality of life.
- Capacity building of farmers, landless labourers and young girls.
- More and strengthened partnerships and linkages.
- Increased access to learning opportunities.
- Societal empowerment of villagers.
- Self-replication trend in L3 model of Weligatte.
- Adoption and use of Tech-MODE by SriLankan University system as a viable model for improving livelihoods.
- L3 Farmers Programme, likely to complement the Government's "Gama Naguma" Programme.

Impacts

- Increase in income generation.
- Trends in self replication of project.
- Culture of continuous learning established.
- Socially and economically empowered communities.
- Better performance of rural credit.
- Improved livelihoods and standard of living.
- Universities' engagement in societies with a focus on' rural members' demand driven provision of content through Tech-MODE.
- Government's support for L3 Project.

QUALITY INTERVENTION

As stated by Robinson (1995) "Quality is a product of planning, monitoring, control and co-ordination". Quality interventions in L3 need to cover a number of aspects including philosophy, processes, knowledge delivery systems and products.

Best practices for each key area need to be identified through a consultative process and should be made an integral part of the Project. This activity is being pursued.

CHALLENGES

- The greatest challenge is to motivate the farmers to use Tech-MODE learning and as a method of gaining knowledge.
- Production of interactive self learning multimedia packages in national languages.
- Modification and introduction of new activities based on community demands.
- Maintain quality and effectiveness of the programme.

CONCLUSION

Lifelong Learning for Farmers Model in Weligatte is becoming a model for farmers from other villages and from other districts to come, see, believe and implement. The Project, with adequate focus and attention on all four key elements could offer a win-win situation for all stakeholders making it a self-generating and self-replicating process. This will complement the national "Gama Naguma" programme of the Government of SriLanka.

Clustering of learning topics into modules will enable the farmers to complete stipulated number of modules to qualify them for the award of Certificate/Diploma by the Agrotechnology and Community Service Centre of the University of Colombo at Weligatte. This will give recognition to farmers.

The enthusiasm and interest shown by the universities and the farming community is the Project's greatest strength. The project is aiming at developing tertiary education institution - based L3 Farmers Model which is unique for the project.

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