INTRODUCTION

Agriculture is the primary sector for the Indian economy. It is economically and socially vital for India as it contributes 23 per cent to GDP, feeds a billion people and employs 66 per cent of the workforce. However the status of the vast majority of the farming communities is filled with misery. Illiteracy, socio-economic backwardness, vagaries of monsoon, increasing input costs, lack of timely credit and unfavorable market conditions has deprived them of their livelihood securities. Added to it, arable land is shrinking as urban expansion, Special Economic Zones (SEZ), corporatization of agriculture has gobbled up thousands of acres of farmland and has eroded the livelihood resources of the poor farmers. This unfavorable trend and livelihood threats needs to be halted and efforts must be made to expand farmer’s access to livelihood resources. By enabling farmers to have increased access to resources (physical, natural, human, social and financial) the present situation can be remedied. As Chakraborty, et al., (2009) argued, people should be made responsible for their own development in this process. Sustainable livelihood approach envisaged that people should not merely participate, but be in charge of their own development. Life Long Learning attempts to provide this expanded access to livelihood resources by adopting this livelihood approach.

CONTEMPORARY LIVELIHOOD CHALLENGES

The present agrarian crisis has trapped the marginal and small farmers in a cycle of disadvantages. One disadvantage inevitably leads them to other disadvantages and the farmers become the mute victims of this “clusters of disadvantage” (Chambers, 1983). According to Chambers the poor households were caught up with ‘five clusters of disadvantages, i.e. poverty, physical weakness, vulnerability, isolation and powerlessness’. He has also explained as to how these clusters were interlocked among themselves. This interlocking was termed as ‘deprivation trap’ (Chambers 1983: 109, 112). This vividly portrays the situation of marginal farmers in India. When the situation of marginal farmer is superimposed on the Chamber’s deprivation trap one gets the above figure. The figure depicts the interrelationships among the various aspects of deprivation and how one deprivation makes the other deprivation inevitable. Accordingly the experience of marginal farmers is one of inadequate livelihood resources. This livelihood insecurity reduces their bargaining power in all spheres of their life especially in the sphere of financial institutions and markets. This reduced bargaining power exposes them to vulnerabilities like poverty, malnutrition, increased debt etc. This, in turn leads to loss of entitlements creating increased livelihood insecurity and heightened powerlessness.
This view of deprivation trap is further confirmed by Narayan (2002) whose study affirmed that ‘poverty consists of many interlocking dimensions’. Accordingly poverty implies dependency, lack of power and lack of voice. This extensive study of 40,000 poor people from 50 countries corroborated the notion of Chambers and the status of marginal farmers. Marginal farmers in India, therefore, are caught in a deprivation trap that keeps robbing them of their space and renders them powerless.

PROVIDING ACCESS TO RESOURCES

Assets are vital for poorer communities and for farmers assets are indispensable. They are the stocks of resources that equip people to use economic, social, and political opportunities, to be productive, and to protect themselves from shocks. Assets may (Narayan 2006) include land; housing, livestock, good health, education and other life-enhancing skills. Possessing such assets will, no doubt, increase their capacity to make better choices but also serve as safety nets in difficult times. Therefore, access to a single asset, such as ownership of land or education, can affect a person’s or group’s ability to have better access to other assets. For example, education (a human asset) often gives an actor greater access to information (itself an asset) and at times improves his or her capacity to envision alternative options (a psychological asset). Similarly, for groups of people, collective savings (a financial asset) can give access to enhanced productive assets. In other words access to one asset provides them with the capacity claim other assets. Therefore, a farmer with a good educational asset has a better access to information and this in turn can enable him to bargain for better terms of trade. If the same farmer has an expanded social network his/her ability to bargain for better social space is accentuated.
CENTRALITY OF HUMAN CAPITAL

Human capital, generally, refers (Becker 1993) to skills, knowledge, experience, education, training and aptitudes that are embodied in individuals. Among these, knowledge is the core of human capital and vital for development. Hence, knowledge becomes imperative to make human beings utilize their own potentialities integrating with the new opportunities. Unfortunately, rural people, who remain excluded in the contemporary development process, do not have adequate access to scientific knowledge that is essential for their livelihood promotion. People’s access to knowledge is limited due to inadequate economic resources, lack of educational opportunities, less exposure to new technologies, poor communication facilities and structural denials. Amartya Sen (1999) termed this as ‘unfreedom’ of the people and goes on to argue that ‘development requires the removal of major sources of unfreedom like poverty, poor economic opportunities, systematic social deprivation, neglect of public facilities etc. Hence it is imperative to enhance the knowledge and skill base of the farmers to increase productivity, achieve sustainable livelihood security and halt distressed migration. Equipping farmers with knowledge and skill takes place in a specific socio-cultural milieu and thus learning itself, is very much conditioned by the existing cultural fabric. It is to be ensured that learning inevitably occurs within a social context and should enable people to transcend factors that condition them. The capacity to go beyond the factors of conditioning is one of the obvious advantages of the human person (Freire 1998). According to Balasubramanian, et. al., (2006) the process of learning should empower and liberate agricultural communities from socio-economic constraints by facilitating the communities to create socially and financially sustainable self-directed lifelong learning systems that will enable them to gain new knowledge and skills for increasing their farm production and productivity and for accessing local and global markets more equitably’.

LIFE LONG LEANING FOR FARMERS

The concept of Lifelong learning assumes special significance in the life of deprived communities and in the dictionary of Commonwealth of Learning (COL). The COL conceived the Life Long Learning for Farmers (L3 Farmers) as a way of creating a paradigm shift in the concept and practice of extension’ (Sir. John Daniel, et.al, 2007). Since the prevailing extension system is unable to cover and provide quality service to the farming community there is a need to look for various new strategies which could complement and strengthen the extension system (Balasubramanian et. al. 2007). This situation of mismatch between the need and the supply of extension services necessitates the development professionals to evolve an alternative to remedy the mismatch. COL believes that L3 for farmers will not only fill the vacuum but also enhance the bargaining power of the farming communities. For COL the process of Life Long Learning for farmers is based on the following six principles:

a) Facilitating self-directed personal strategic learning can enhance the quality of extension and create a demand-based development process.

b) Technology-Mediated Open and Distance Education and Learning, which is abbreviated as “Tech MODE” that plays a major role in self-directed learning.

c) L3 for farmers assumes that mobilising the farmers and building cognitive social capital are essential preconditions for promoting self-directed learning.

d) Combining modern ICT and local mobilisation can integrate the vertical and horizontal transfers of knowledge.

e) This new approach to extension must be placed firmly in the context of the entire social and economic value chain. The various stakeholders such as financial institutions, marketing agencies, industries and research institutions in that value chain need to come together to create a win-win-win framework. This helps communities to move away from the perpetual dependence on donor-supported programmes and to adopt a self-sustainable, self-replicating, and self-generative extension process.

f) The demand from rural communities for an integrated package of information to facilitate local knowledge management requires the knowledge creating institutions to work as a consortium to provide holistic locale-specific information.
NETWORKING STAKEHOLDERS

A unique aspect of L3 for farmers is its emphasis on bringing all the stakeholders onboard for a dialogue. According to COL this process involves four key partners.

![Networking Stakeholders Diagram]

1) **Farmers**: People (farmers) are at the centre of development in any model. The social work practice would build the capacities of the rural farmers through establishing farmers’ association/network and helping them create their own vision for development.

2) **Learning institutions**: A consortium of development institutions brings together expertise in agriculture, veterinary science, open learning and technology, serving as an information resource for farmers.

3) **Information and communications technologies (ICT) kiosks**: These commercial ICT kiosks link the farmers to this consortium and also provide other useful information such as health information, weather forecasts, educational opportunities, etc. The centres facilitate the transfer of information from scientific and research institutions to rural farmers.

4) **Banks**: Commercial banks are encouraged to provide loans to farmers who have increased their knowledge, capacity and productivity thanks to information from the consortium and ICT kiosks.
PROCESS OF L3 FOR FARMERS

According to COL, L3 for farmers is a process that empowers vulnerable rural men and women by enabling them to (1) gain knowledge; (2) create their own self-directed learning process; (3) organise themselves to solve problems of marketing their products and food security; (4) improve their living conditions and (5) increase their freedoms and independence through government support. This process can be conceptualised as Learning, Forming and Transforming. While gaining knowledge through self-directed learning process is named as Learning, organizing themselves to solve their day today problems is termed as forming. Improving their living conditions and increasing their independence is conceived as transforming. In other words, L3 by educating (learning) the farmers attempts to bring them together (form into organization) to initiate the process of livelihood transformation.

SOUTH INDIAN PARTNERS OF COL

Lifelong Learning for Farmers was introduced as a pilot project in four villages in southern India in 2004. The success of this initiative led to the launch of Lifelong Learning for Farmers in Sri Lanka in 2007. The programme is also being adopted and introduced in Jamaica, Kenya, Mauritius and Papua New Guinea. Having based itself on the above premises the COL partnered with ReddiyarChatram Seed Growers Association (RSGA), a CBO in Dindigul district; VIDYAL an NGO in Theni district and Arul Anandar College, a university affiliated college, in Madurai district in the State of Tamilnadu. This paper primarily highlights the experiences and impact of L3 for farmers in the neighborhood of Arul Anandar College.

THE SETTING

Arul Anandar College (AAC) is located in the local administrative area of Chellampatty Panchayat Union, in the district of Madurai in the South Indian State of Tamil Nadu. Predominantly this area is inhabited by a specific community called Piramalai Kallar Community, which is classed under Most Backward Community by the Government of Tamil Nadu. People of this community depend mainly on agriculture in a semi-arid agro-climatic condition. Frequent monsoon failures and the consequent economic hardships lent avenues for the emergence of different socio-cultural problems such as female infanticide. Observing the high incidence of female infanticide this area is declared by the government of Tamil Nadu as female infanticide area. The next major population belongs to Scheduled Caste Communities that supply human labour to the land-owning Piramalai Kallar Community. Communal discriminations, uneconomic farming and traditional cultural practices pushed these people in a state of abject poverty. The establishment of AAC as an institution of higher learning helped the fortunate youth to pursue college level education. However, a sizeable section of the local farmers still live a life of penury.

LEARNING: BETTER ACCESS TO HUMAN CAPITAL

The process of learning began in Karumathur region with the inauguration of Light on the Wall, a touch screen kiosk for promoting learning among farmers of this region and to enhance their productive level. 'Light on the Wall' conceptually as well as contextually typifies the knowledge dissemination through a wall-mounted touch screen. Characteristically the touch screen kiosk is designed in such a way that information or knowledge retrieval is facilitated through a user-friendly, ICT integrated and self-directed learning mode. In this process integration of ICT introduced a user-friendly learning mechanism in the form of a voice-integrated touch screen kiosk. Since this kiosk shed light to the lives of the farmers the kiosk came to be called, "Light on the Wall".
The kiosk has a stock of scientifically validated information on locally relevant livelihood systems. For instance, cultivation practices and management of vegetable crops like Brinjal, Tomato, etc. give not only general information but also offer solution to the specific problems of the local farmers. Similarly, veterinary information pertaining to goat rearing, poultry farming, etc. add subsidiary knowledge to the farmers. Focusing on the wholistic development of people the kiosk also contain such information as varied health issues, educational opportunities for children, government welfare schemes, etc. The information architecture of the kiosk depicts the following unique features:

a. Knowledge on every aspect is structured on the basis of Open and Distance Learning (ODL) grammar
b. Every granule is voice-integrated and hence user-friendly to the illiterate farmers
c. Use of Macro-media Flash enhances the user-affability
d. Potential web compatibility expands the scope of utility range
e. It acts as an interface between development institutions and rural inhabitants.

ENABLING HUMAN CAPITAL FORMATION

Since the launch of the lifelong learning unit with the touch screen kiosk the centre has become a resource centre for varied sections of people. This centre helped farmers to acquire information, seek clarity, clear doubts and expand their social network. As of now 1035 farmers from the target villages obtained required information for bettering their agricultural operations. Students of collegiate education numbering 1461 have collected relevant information required for their academic pursuits. The centre attracted the attention of 51 government officials and the idea of light on the wall was much appreciated. In addition, 105 general public and foreign nationals got a glimpse of knowledge transformation through modern information technology. Initial association of the stakeholders with the learning centre begins with a casual observation and accessing the available information and this leads to analysis (leading to cognitive state) considering the farmers’ local reality. Hence the users proceed the direction of observe, analyse, act towards livelihood betterment.

FORMING: BETTER ACCESS TO FINANCIAL AND PHYSICAL CAPITAL

The lifelong learning centre, in addition to the light on the wall kiosk, has organized a number of need-based training programmes to the local farmers. Cursorily, the activities at the centre initiated the next phase of forming the farmers into a network so that they become responsible for their own development. This has resulted in the formation of Vaigai Vivasaiagal Nala Sangam (Vaigai Farmers Welfare Society). Initially the society had 121 members who had elected their own office bearers and functioning as an officially registered society. All the members have been issued identity cards for their use. They began to meet regularly and this meeting enabled them to solve one of their major problems of having access to fertilizer and pesticide at an affordable cost. They started their own fertilizer outlet to avail fertilizer and pesticide at an affordable cost. Half of the financing for this cooperative came from the farmers themselves. Now they have formed into farmers clubs and getting registered with National Bank for Agriculture and Rural Development (NABARD) to have better credit linkage.

TRANSFORMING: BETTER ACCESS TO SOCIAL CAPITAL


Ever since the initiation of lifelong learning as a new pedagogy in this region, one could observe significant and perceptible transformation in varied aspects of their life. Farmers who remained as individuals with limited business-related collaboration then have understood the positive impact of coming together as a network. This, in turn, strengthened the social interaction leading to horizontal learning and enhanced production.
b. Expanded Economic Opportunities

The cursory establishment of the Vaigai Farmers’ Welfare Society, as an institution by the farmers and for the farmers, helped the farmers avail themselves of the agricultural inputs like fertilizer at government fixed rates. Farmers pool their limited resources, place order for specific fertilizers, share the operating expenses and get the required quantity of fertilizer at the right time. This has reduced considerably the extra expenses if they buy the same fertilizer in the open market where the traders exploit the farmers. As per the available statistics, within the short period of forming the welfare society, the farmers transacted fertilizer inputs to the value of 1,95,000 INR. Besides, 120 farmers became the direct beneficiaries of this programme and they could save 20,000 INR through direct purchase programme. Reduction in input cost increased the marginal profit of their enterprise.

c. Increased Bargaining Power and Negotiation Skills

Formation of the Welfare Society as a formally registered unit has earned them a kind of identity which motivated the farmers to participate effectively in the farmers’ grievance redressal meetings conducted by the government officials. The demands put forward by the members of the Vaigai Farmers’ Welfare Society have been considered positively by the officials and a number of such issues have been solved instantly. At a specific instance the officials came down to negotiate with the vaigai farmers who reported a scandal to the higher officials. Inevitably this has expanded their bargaining power with the institutions that shape their destiny.

d. Introduction of L3 in the Academic Curriculum

Experiences thus gained in the above process have been consolidated to systematize the lifelong learning by integrating the concept into the existing academic venture. As a prelude to this premise Arul Anandar College has introduced a certificate course on multimedia for lifelong learning. This course aims at producing knowledge capital that can be used by CBOs, educational institutions and banks. The college is negotiating with these institutions to recruit the trained manpower for their extension works among agrarian communities.

CONCLUSION

It is unfortunate that people engaged in farming are poorly educated and also remain at varied literacy levels. Most of the governments do not have strong educational programmes for farmers and hence access to information has been difficult and limited. It is becoming evident that agriculture is knowledge-intensive. From the farmers’ perspective knowledge is often a substitute for land and water, since it helps farmers to produce more from the same plot of land and same quantity of water. Hence it becomes imperative that skills and knowledge building must be promoted as an essential component of future development assistance, combined with improved systems for dissemination and access of farmers to information. In this scenario Life Long Learning for Farmers is a unique attempt that enhances the skill and knowledge base of farmers, provides a platform for their collective thinking and enables them to have expanded livelihood opportunities.
References:


• Clare, LS 2003, *The Influences of Social Capital on Lifelong Learning Among Adults who did not finish High School*. NCSALL Occasional Paper, Cambridge, MA


