Role of Information and Communication Technology in the Rural Development: Study of Thangachimadam Village Resource Center and its Village Knowledge Centers

Submitted
By

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2007
Introduction

The widespread availability and convergence of information and communication technologies - computers, telecommunication, television, etc. - have led to unprecedented capacity for dissemination of knowledge and information. The impact of this fourth information revolution is felt in education, research, medicine, government, business and entertainment in many parts of the world.

But the final benefits have reached only to a few people around the world that has led to digital divide between the developing and developed countries. The divide is also visible within the developing countries between the urban and rural areas. The divide is widened so much so that the downtrodden capitalizing on the benefits of ICT has raised a disquieting question?

Is there a way the downtrodden can benefit from ICT?

Jeffery Sachs, special advisor to the UN says that “ICT has a tremendous potential to scale up investments for the rural masses, it could improve the services at the local level and improve the productivity of the local sector”

Information Communication Technologies can be powerful tools in promoting social inclusion that leads to empowerment. Access to relevant information and knowledge is crucial for empowerment and development. To be effective it has to be linked to the particular situation, needs and demands of the people. Thus local knowledge is vital. The relevance of locale specific knowledge is changing and it varies with different contexts. Therefore, more pragmatic approaches are gaining importance. It can be more effective to link people with relevant knowledge directly.

Apart from creating the infrastructure and locale specific knowledge a participatory approach should be carried out in collaboration with ICT to involve the people at all levels.

1.1 ICT projects in India

Six decades of Independence have witnessed overall economic growth, but acute distress and deprivation continue to haunt the rural areas. Various strategies for rural development have failed to make the desired impact. There are several reasons for this. An analysis of the maladies afflicting rural areas has brought out the need to develop an information and knowledge-led rural economy as an important means to promote rural development. It has been found that knowledge transfers between, and across, rural communities, scientists, educators, administrators, health care providers and technology enablers on the ecological and socio-cultural conditions of each village and on matters such as farming methods and on health issues could play a crucial role in such a process.

Knowledge sharing can be improved through increasing access to public information at both local and national levels. It is here that ICT has a crucial role to play. The challenge lies in adopting a holistic
information access-enabled development strategy and using ICT as an important instrument in various aspects of the strategy. India has had its tryst with the ICT projects and it has been extremely successful in the urban India but when it comes to the rural India it drew a blank as proven by the ICT projects.

Gyandoot an information kiosk was started in Jan 2000 by the then Madhya Pradesh Government to offer Internet based services to strengthen the e-governance model. Similar was the case with Andhra Pradesh’s e-seva that offered services of the public sector through the noose of computers. Other projects like TARahaat, Bhoomi and Drishtee offered Internet services and digitized land records to the rural masses. Then there are the kiosks started by business houses like ITC e-choupal that deals in e-procurement that reaches out to 3.5 million farmers in over 31000 villages across 6 states (ref: Atanu Garai and B. Shadrach, 2006, Taking ICT to every Indian village: Opportunities and Challenges: 67). All these projects have been implemented as pilot projects but have not moved on to become a macro level project that could be emulated in other parts of the country.

1.2 An alternative view
Every village in this country has an identity of its own which has its own tradition and culture and unique in its own capacity. People have moved on but the structure and the composition of the community has remained intact for all these years. When a new concept is introduced in the village it is bound to affect the balance of the village in a positive or negative manner. Tampering the structure of the village might have its own repercussions that would have to be borne by the local community.

Introduction of technology is no different, as it has various strings attached when it is introduced in the villages. With Urban India relying heavily and gaining tremendously from Information and Communication Technologies, it sends a vacillating message to the rest of the country of that of optimism and hope.

An organization, before setting up a development project has to figure out whether the village is in need of such an expensive and modern project. Are the people really yearning for an NGO to bail them out of poverty? If the people are expecting an organization to help them out then the organization has to ask itself, whether technology is the way to tackle this conundrum.

This becomes critical, as there is hardly any evidence of an ICT related project in India that is said to have created a radical change at the grassroots level in the field of participatory communication so as to be that it could be replicated in other areas as well. Hence the organization introducing the development project has to induce a system by itself, and have a constant check on to find whether they are maneuvering in the right direction.

The other quandary is that of time period. What time period have they set to check whether the organization is traversing in the right direction? The situation demands since there is sufficient evidence to prove that projects come to a stand still and have always stagnated as pilot projects due to various reasons.
For the organization to achieve its objectives the approach of the organization is most important and it has to be directed at the beneficiaries as they are introducing to the people something that they have never seen, never heard but make them believe that technology would solve their anomalies. It’s the trust and belief that the organization needs to develop to make sure that the people rely and participate in the activities of the organization.

One such organization that is determined to take ICT to every Indian village is the M.S.Swaminathan Research Foundation. Established in 1988 by M.S. Swaminathan, a key architect of the “Green Revolution” that drastically increased India’s food supply, he was instrumental in introducing the concept of ‘reaching the unreached’.

The concept of Village Knowledge Centers has its roots dated back to 1992 to be precise by a consortium of organizations that were formed for the establishment of a project that would take the benefits of modern agri business to the resource poor farming families. The consortium recommended that the “information shops” would be a component of the larger project.

This projected was implemented in 1998 in the Union Territory of Pondichery where in the Village Knowledge Centers, funded by International organizations catered to the information needs of the rural poor. This project is slowly finding shape and it is emerging as a pillar of strength in different parts of villages across India.

Supported by a consortium called the National Virtual academy that includes the Government, hi-tech industries and other international players, the academy has a mission to set up 600000 Village Knowledge Centers covering the length and breadth of India.

The idea of pursuing research in this project stemmed from an article from THE HINDU (Every Village a Knowledge Center: MISSION 2007, November 25, 2005), a national newspaper, written by M.S.Swaminathan. The article spoke about the importance of ICT and its ability to empower the rural people and the progress being made to accomplish the mission of setting up Village Knowledge Centers.

This research deals in knowing one such Village Resource Centre (a number of VKCs are connected to the VRC), located in Thangachimadam. It gives a depth detail about what the project is all about and what are activities the Foundation is taking in to empower the people through information. It also critically reviews the programs formulated by the Foundation for the benefit of the villagers.
Review of Literature

Literature in the field of Development communication or Participatory communication has been recent though it remains to a few case studies. Though there are a number of researches carried out by eminent NGO’s, International donors and implementers and the Government, they crave for communication when the objective is to gain visibility. The discussions in participatory communication have recently gained popularity in the past two decades. A lot of projects or case studies have not been reported due to language barriers and scarce international visibility of most of the grassroots experiences.

Too many projects have failed because of vertical planning and implementation and funds where channeled to developing nations that never reached the intended “beneficiaries”. The grassroots level felt the need to communicate but there has been little consciousness of change at the planning and implementation level as development projects are mostly in the hands of economists and technicians impeding the understanding of social and cultural issues that are key to communication strategy.

Alfonso Gummucio Dagron in his book Making Waves- Stories of Participatory Communication for Social Change admits that there is a change in the concept of establishing a dialogue with beneficiaries all along as the process of conceiving, planning, implementing and evaluating a project has been gradually consolidating with the implementers understanding that there should be a sense of “ownership” that has to established within the community. The planners have also realized that the sense of ownership cannot be promoted if they do not involve the beneficiaries at the beginning of the project.

He goes on to add that the increasing awareness of the concept of participatory development has lead to a greater level of understanding of the role of communication for development.

2.1 Participatory communication and Development Communication

The term communication for development emerged in the 1970’s as the Diffusion of Innovation paradigm (Rogers Everett 1962, Diffusion of Innovations), came to focus on the poor majority, their communication behavior and the impact of information on their situation. The emphasis on communication process was less as the communicalogists tended to look first on the structural factors and then on the individual factors. There was little evidence to support that they had thought about holistic, systemic, dialectical, critical, or cultural approaches.

Everett Rogers who has been propagating the Diffusion of Innovation paradigm throughout the world addresses the issues of equality, self-development and the impact of new communication technologies, noting that the ‘dominant paradigm’ is responsive to these issues, is expanding, and is becoming more flexible.

He points that the concept of development is becoming more ‘humanitarian’ in its implications, and benefits can come from adapting technology. He adds that the “goal is to ‘learn’ on one’s own, rather than be owned by those who have well-set patterns of using technology”.

Rogers suggests that the dominant paradigm can incorporate these new perspectives. This implies that a new paradigm must incorporate variables that address the issues of self-reliance and the hope of transforming social structure.

K. Sadanadan Nair and Shirley White in the book Perspectives on Development Communication (1993) had come out with a model that reconceptualized development communication and incorporates the notion of an interface between participation, communication and organizational change processes as well as social and cultural change leading to social justice and egalitarian rights in development. The focus of their model was to marshal human resources in the development process via acquisition of communication skill, and utilization of effective communication strategies.

The model does not eliminate the traditional elements of – Sender, Message, Channel, Receiver, Effect. It places the source and the receiver in an equalitarian relationship inherently promoting dialogic communication process.

The most important aspect of this model is the recognition of indigenous knowledge as a necessary component in a dialogue and the interface of the communication and participation processes.

Rajni Kothari had laid out the charge for rethinking and changing communication perspectives in the 1990s. She says, “It [development communication] has to be thought of not as a specialized concern, but as part and parcel of the struggle for human liberation, freedom and justice, strengthening the struggles of communities and cultures of national entities that are thought to be marginalized, and of already marginalized peoples within these and other societies.” (Kothari Rajni, 1988, Rethinking Development).

He emphasizes that communication could expose the hypocrisy of the rhetoric in international forums come up which is in direct contrast to the same elite’s behavior in their own societies. Communication should be a process that contains the forces of backlash and promotes the forces of transformation and survival.

Sapir observed, “Every cultural pattern and every single act of social behavior involves communication in either an explicit or implicit sense.” (Sapir 1931 reprinted in Berelson and Janowitz 1966: 169; referred Binod C. Agrawal).

Schramm, a communication expert thinks, “society is a sum of relationships in which information of some kind is shared. Let us understand one thing about it: Human communication is something people do. It has no life of its own.” (Schramm 1976, Communication and change, Ref: Perspectives of development communication)

2.2 Information and Knowledge

The term ‘knowledge’ evokes different connotations as semantics of knowledge varies across academic disciplines. The term knowledge exists in multiple forms and communicated in variegated ways but at the
outset we need to understand that it leads of sustainable development carries different meaning in information science, management, philosophy, psychology, etc. However, the local communities persist with a form of knowledge known as ‘local knowledge’ or indigenous knowledge in academics.

The term indigenous knowledge has been defined in different ways as different organizations or development agencies have perceived in different contexts.

Indigenous knowledge has been defined as “the local knowledge that is unique to a given culture or society-contrasts with the international knowledge system which is generated through the global network of universities and research institutes” (Taking ICT to every Indian village, warren, D. Slikerveer, L. & Brokensha, D. (1995:15))

The unique, traditional, local knowledge existing within and developed around specific conditions of women and men indigenous to a particular geographic area. (Taking ICT to every Indian village Grenier, Louise (1998:1))

But the term indigenous knowledge termed by IIRR seems appropriate as they say that Indigenous knowledge is the knowledge that people in a given community people has developed over time, and continues to develop. It is: based on experience, often tested over centuries of use, adapted to local culture and environment, and dynamic and changing. (IIRR: 1966)

The UNESCO recognizes the fact that Information and knowledge holds the promise of alleviating many of the problems confronting human society if only they could be equitably shared. They add that mere creation of an Information society is not sufficient to address the human development issues on a global scale.

The importance of ICT is felt when they claim that the transmission of knowledge and information (which traditionally has been passed on through interpersonal contacts) has undergone dramatic change after the advent of ICT policy. Information is shared and disseminated at a much faster rate than ever before and it permeates to all levels of the society. ICT can be used to effect poverty reduction, the creation of health and wealth, to impact on the whole societies and to support social justice and equity.

The notion of knowledge society goes beyond that of an Information Society by ensuring that all persons, without distinction, are empowered to create, receive, share and utilize information and knowledge for their economic, social, cultural and political development. Finally it is critical that ICT should be regarded as tools to progress and not as ends in themselves.

The emergence of global Information and Knowledge Societies can be viewed as an opportunity and a challenge. It is an opportunity for Societies that accepts ICT and a challenge for those who have yet to employ ICT effectively. This might also lead to a disparity between developed and developing countries and privileged and under privileged sections within societies themselves.
The power of knowledge for development has been highlighted in the World Development Report (1999) that states that ‘Recognition of the importance of knowledge has gained momentum and there is a renewed impetus to integrate knowledge into countries’ development strategies’. The report emphasizes that the power of knowledge for development can be greatly enhanced by ICTs if they are harnessed to improve access and break down barriers to knowledge ‘While education develops cognitive skills, information gives content to knowledge’ (UNDP report 2001).

The World Development Report (WDR) focuses on knowledge about technology and knowledge gaps that relate to the unequal distribution of technical knowledge. ICTs have the potential to address these barriers to economic development by improving access to knowledge and information exchange. The strategic use of ICTs for poverty reduction will depend on the appropriate infrastructure and appropriate information content for the necessary social and human development to occur. Current approaches, which emphasize integration of technology and local content towards a network age in which everyone is more or less connected, need to take account of the underlined constraints to integration of rural areas.

Defining information and knowledge can help to understand the relation between them. In the concept of economic analysis Machlup (1979, in Baumann, 1999: 6) differentiates between information, data knowledge as follows:

- Data refers to raw materials such as facts and figures that could be collected by an information system
- Information refers to analyzed data often presented in a form that is specifically designed for a given decision making task.
- Knowledge refers to the subsequent absorption assimilation understanding and appreciation of that information.
- Role of ICTs in future development strategies is therefore dependent on users being able to select information that is most relevant to their own social and cultural knowledge systems.

Information society is defined “as a society that makes extensive use of information networks and information technology, produces large quantities of information and communication goods and services, and has diversified content industry” (Jeskanen-Sundstrom, 2001). The report goes on to add that the mere creation of an Information society as defined is not sufficient enough to address human development issues on a global scale.

Amrita Singh in her research paper states the importance of knowledge at the grassroots levels, “Knowledge has been a primary resource, no less important than land, labour or capital for improving the lives of people” and goes on to add that it is a vital tool to empower people to attain sustainable development. The political community that has set aside 1 percent of GNP for scientific research since Independence has utilized a miniscule on research that is of direct relevance to the poor. This scenario is changing due to the sustained efforts of civil society organizations and hopes that the government cogitates about the village as a consumer and a potential repository of high quality knowledge.

2.3 Previous Researches
It has been proved time and again by the number of researches by NGO’s and Development organizations that research is restricted to a few case studies. Very few researches have actually taken the pain to study a project and measure the transformations in a holistic manner. The researchers acknowledge the fact that a society is entwined socially, politically and culturally and intrusion of technology can contexts that are that implemented ICT as their in the field of participatory communication

A research carried out by the NIC and Asia Pacific Research Center, Stanford University on the nine different ICT related projects in India have remarked that India is the most favored destination as a test bed for the ICT related projects due to its IT skills, poverty and political support. They claim that despite high user interest, the availability and affordability of relevant content, poor infrastructure and rapid obsolescence remain a major drawback. As most of these projects are not financially viable and does not overcome the differences of faith, caste and gender, they fear that a digital rift would be manifested in the rural areas.

The Center for Electronic Governance, IIM Ahmedabad that had conducted a detailed study on the Gyandoot project had similarly remarked that power supply, connectivity and backend support had to be improved for better implementation of the project. While appreciating the nascent steps taken by the program implementers, they had remarked that ICT alone couldn't improve the service delivery of the poor, as services that directly contribute to poverty alleviation should be implemented for the optimum utilization and sustainability of the program.

**Aim**

To study the role of Information, Communication and Technology in the rural development of Thangachimadam. - A study of the initiatives pursued by the National Virtual Academy and M.S. Swaminathan Research Foundation in ICT led development.

**Objectives**

- To understand the various modes of communication adopted to disseminate the information. (This objective would give me an insight into the different modes that the foundation utilizes to communicate relevant information to the villagers. It would also give me an idea about the usage of these modes by the people.)
- To study and analyze the processes involved in the content creation and capacity building measures and linkages carried out by the foundation.
  (This objective would give me an insight into the following details:
   - Factors involved in the creation, management and sustainability of the VKC
   - Highlight the linkages between the VKC and other organizations
   - Parameters on what constitutes content and the process involved in the creation, management and dissemination of the content.
   - Discuss a few programs conducted at the VRC that have followed the above process.)
- To study the use of content and capacity building programs by the people.
(This objective would give an insight into the perceptions of the people towards these programs and give a better understanding on whether these programs have brought any change in their lives.)

Methodology

Qualitative researches are grounded, exploratory and inductive representing a legitimate research style. Qualitative researches portray the fact that the reality is holistic and cannot be subdivided while attempting to produce unique explanations about a given situation, individual, or an organization. They are valuable for exploring an issue and probes below the surface of the empirical data for effective drives and subconscious motivations.

The data collection for the research was carried out in two phases over a period of two months between the last week of January and the third week of March. The first phase of the research was of exploratory in nature as the researcher was visiting the area under observation for the first time.

- Exploratory study
- Detailed Study

Exploratory study

The researcher visited the VRC at Thangachimadam, on (Jan 29 and 30) for an exploratory study. The researcher met the knowledge workers, animators; technical co-coordinator and Project Associate at the VRC to have a first hand account of the activities at VRC.

Observations

The exploratory study conducted for two days at the VRC had helped the researcher build a rapport with the staff and understand the dynamics of the village. The discussions with the project staff helped in revealing details about the programs being conducted by the VRC and VKCs. The study had helped in defining a basic background for the research and provided important inputs for the detailed study.

The Project Associate had explained their day-to-day activities and the programs that were to be followed in the next few weeks. It had also helped the researcher refine the objectives and the tools that were to be used for data collection.

The second phase of field observations involved visiting the VRC at Thangachimadam and the surrounding VKCs for the detailed study. The study was carried out between March 12 and March 25. The research tools involved in this phase included

- Field observations
- In-depth interviews
- Focus Group Discussions

4.1 Field Observation
Field observations give a background of the project to be studied and the data gathered through this process is first hand. Dominick & Wimmer say that the study takes place in a natural setting of the activity being observed and thus can provide data rich in detail and subtlety.

The researcher maintained a diary to note the observations at the VRC and VKCs and during the meetings attended. The research had demanded the researcher to attend all the meetings conducted by the VRC during the stay of twelve days at the village.

Meetings attended during the stay at the village
- Training for Knowledge Workers and Animators for the ICT related educational programs conducted at the VRC, Thangachimadam for duration of three days.
- Focus Group Meeting at Seeniapppa Dargah, Sundaramudaiyan
- Meeting held for fishermen to gather inputs from them on their needs on a mobile phone for upgrading the technology of mobile phones.
- Malaria awareness meeting that was conducted by the VRC with the assistance of the District Medical Officer of Ramanathapuram for the locals at the VRC, Thangachimadam.
- Meeting held to garner support for the HIV infected children by an NGO at the premises of the VRC.
- Attended a meeting held for parents of the children enrolled for the Intel learning program.

4.2 In-depth interviews

The second objective of the research involves knowing in detail about the processes involved in formulating, managing and dissemination of the content, capacity building programs and the linkages that the organization has been conducting to the villagers in Thangachimadam.

Sampling
The researcher had conducted the interviews according to the hierarchy in the organization that was involved in the project at Thangachimadam. The important aspect of conducting the in depth interviews were to tap the wealth of details from the staff members and people who were pursuing the ICT related programs.

The purpose of interviewing the staff was to know the processes involved in setting up a VKC, selecting a program for the VRC and VKC and the ways to sustain the VKC.

4.3 Focus Group Discussions

Focus Group Discussion was best suited for analyzing the third objective as it involved interacting with a group of people who were just learning to read and write.

The FGD’s were selected over other research tools as complete and a variety of answers could be derived from a group of 12 people. The FGDs had been conducted in a short span of time and the cost involved was minimal.

Sampling
The sample for the FGD was purposive as the researcher had only considered people who were pursuing the ICT related program. It was easy for the researcher to find the sample to be interviewed as the
researcher visited the place where the ALP program was being conducted. The program was conducted for a group of women of a Self Help Group (SHG) who meet twice a week to discuss their SHG accounts and after their classes the animator visits their place to conduct classes for the ALP program after their meeting.

The other sample that the researcher considered were a group of school children between the age group 12 and 15 years who were pursuing the Intel Learning program.

The third objective had been formulated to identify the perceptions of the people who have utilized or have been utilizing the capacity building programs offered by the VRC at Thangachimdam and the VKC at MGR Nagar.

**Sampling of the programs held at VRC, Thangachimdam**
Amongst the list of programs offered by the VRC, the researcher chose the four ICT related programs extended to the people of the village. It was observed in the pilot study that people use computers, directly or indirectly; only through these ICT related programs. The researcher felt that it would be significant to know the perspectives of the beneficiaries of these programs.

The four ICT related educational programs include:

- Microsoft Unlimited Potential Program (MUPP)
- Adult Literacy Program (ALP)
- Intel Learning Program (ILP)
- Computer Aided Learning Program (CALP)

**Village Knowledge Center, MGR Nagar**
The researcher had selected the prawn pickle-making program commenced by the VKC along with the Nesakarangal trust, an NGO for the physically challenged. This capacity building program was specifically organized for the physically handicapped people.

**4.4 Choosing the Research site**
As per the initial plans the research site picked for field observations were the VKCs at Pondicherry as the concept of knowledge centers was initially introduced by MSSRF in Pondicherry. But after the discussions with the Projector Director during the presentation, the researcher was advised to visit the VRC at Thangachimdam and the surrounding VKCs as they were recently established and there were few researches carried out at these centers.

As the researcher had the prior approval from the Project Director, gaining access to the VRC and VKCs was smooth. The staff members had willingly shown their reports when the need rose.

**Sampling of the Knowledge centers**
Due to constraint of time and the magnitude of the research, the researcher decided to consider the activities of Village Resource Center (Thangachimdam) and one Village Knowledge Center (MGR Nagar) from the five VKCs connected to the VRC. The Village Knowledge Center at MGR Nagar was considered over other Village Knowledge Centers as it was the earliest (May, 2005) to be established in Ramanathapuram district.
During the process of carrying out the research, the researcher had to travel thrice to Chennai and twice to Thangachimadam as the researcher had to visit the Village Resource Center at Thangachimadam, Village Knowledge Centers at MGR Nagar and Sundaramudaiyan that comes under the Mandapam block and M.S.Swaminathan Research Foundation in Chennai.

The project was approved after the researcher presented a PowerPoint presentation of the research design at M. S. Swaminathan Research Foundation, Chennai.

All the interviews were semi structured and ranged between 30 minutes and 1 hour and were conducted during the stay at the VRC in Thangachimadam and later at the MSSRF, Chennai.

The list of people interviewed at the Village Resource Center, Thangachimadam and M.S. Swaminathan Research Foundation include:

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<thead>
<tr>
<th>Name of the Interviewee</th>
<th>Designation</th>
<th>Contact</th>
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**Overview of the Project**

The Village Resource Center at Thangachimadam is part of the overall project of the National Virtual Academy that is instrumental in bringing ICT to the villages of India supported by the Tata group and other International playes like Microsoft, Intel and Friends of Tokyo and Australia. The project was implemented and formally inaugurated by the Prime Minister H.E. Dr. Manmohan Singh on October 18, 2004. Thangachimadam, located in Ramanathapuram district of Tamil Nadu, was selected for the project since the Foundation was working on a bio diversity project in the Gulf of Mannar and they wanted to set up a Village Resource Center in the coastal region catering to the large fisherman community prevalent in that area.

Initially the project had three Village Knowledge Centers (VKC) connected to it but later two more Village Knowledge Centers were added. The distances between the VKCs and the VRC vary between 5kms and 18kms with the exception of MGR Nagar VKC that is located at a distance of 1.5 kms from the VRC.
**Difference between a VRC and VKC**
The Village Knowledge Center is located at small villages that fall under the same block or Taluka. VKC is a small community center that has three computers, a telephone, and printer. These VKCs are connected to a VRC, located in a community center that is fully equipped with modern technology. The VRC has about 7 computers, a 3CCD Sony camera, a kyon community computer, video conferencing facilities provided by ISRO and instruments to check blood pressures.

There is a list of procedures in setting up a VKC or a VRC and a thorough process is followed to set up a VKC. The time period required for setting up a VKC lies between six to eight months from the time the Foundation intimates about the project to the local Panchayat or interested NGOs and they in turn reverting back to the Foundation.

The following processes are adopted for setting up the Village Knowledge Center:

- Collection of secondary data
- Conducting Village level meetings
- Identifying the interested groups / partners / areas
- Consulting with policy makers at district and block level
- Conducting village survey
- Situation analysis
- Periodically conducting Village level meetings
- Social mobilization / Village survey / Need assessment
- MOU with partner organization
- Selection of Knowledge workers
- Formation of the Village Management Committee
- Training to the Knowledge workers

The staffs at Thangachimadam follow a process to identify the training or content needs depending on the requirements of the village and the people. The content is also developed through the training programs conducted by the VRC.

The following processes are adopted for identifying the training / content needs.

- Need Assessment Survey
- Conducting focus group meetings
- Village Management Committee Meeting.
- One to one interaction
- Field observation
- Analyzing User register – VRC and VKC’s
- Categorizing/prioritizing
- Feasibility study.
- Identification of resource institution / resource person (including technical expertise of the institution / individual, training cost, willingness, hands on training, demonstration, presentations, etc.,)
- Orientation meetings

Content is broken down into three forms

- Generic
- Dynamic
- Timely Information
Generic content
Information about Government schemes, health issues, local news, employment news, transportation services and other general services constitutes the generic content.

Dynamic content
Services like market rates and weather details forms dynamic content. Access to markets and market information helps to improve choices for the sale of goods on local markets these content enhances the occupation that the villager is dealing in.

Timely Info
Services like Potential Fishing Zones, wave heights, cyclone warnings, that needs to be informed to the people in minimum time.

The major services offered by the VRC and VKC with cooperation from other organizations like Marine Products Development Export Authority (MPEDA), Central Marine Fisheries Institute, etc and other Government Institutions to disseminate it to the villages include

Agriculture services include
- Pest management and disease control measures
- Prices and availability of crops
- Awareness on gene bank concept and conservation of traditional seeds

Fisheries services include
- Fish preservation methods
- Fish and prawn pickle making
- Usage of Global Positioning System (GPS)
- Awareness to preserve ecology at the Gulf of Mannar and Marine based organisms and its uses and market based information
- Registration of boats and details about Government and co-operative schemes for fishermen
- Training on Hygienic handling of fishes
- Details about wave height and other micro Meteorological information related to the local area.

Information about transportation services.
- Maintenance and update of data on entitlements of rural families like public sector welfare and infrastructure funds.
- Consultation on the role of Panchayati Raj Institutions for setting up VKCs
- Details about passport applications.
- Examination results and information about distance learning programmes.

The VRC and VKC also arrange for Capacity building programs that include livelihood opportunities and health services for the benefit of the people at large. Capacity building programs include

Software accounting programs for Self Help Groups (SHG),
- Tailoring training,
- Seashell ornamental training
- Training program on diesel engine mechanism
- Book Binding training

Health services include
- Malaria awareness program
- HIV/AIDS awareness program
- Eye camp
- Awareness on reproductive health problems, care and preventive measures for women
Leprosy awareness camp

Linkages with Government and other departments
It is important that the Foundation while establishing the VKC should consider like-minded NGOs who might be working on similar programs for the people. The Foundation also has strategic alliances with Central and State Organizations like MPEDA (Marine Products Export Development Authority), Tuticorin, Central Marine Fisheries Research Institute, Gulf of Mannar Biosphere Trust, etc. to conduct programs and collect relevant content for the benefit of the people. Health camps are also conducted by private hospitals at the VRC and VKC.

The Government and Local administration plays an important role in forming the linkage by extending the services to the people. The VRC and VKC possess application forms for 35 schemes that the Government provides for the people apart from other basic information like the procedures for applying ration card, voter identity card and caste certificate on other Government schemes

Connectivity
Connectivity forms an integral part of setting and maintaining the VRC and VKC so much so that only after an initial review and feasibility of the place is it selected for project.

VRC to Chennai office
- ISRO Video conference connectivity & Satellite phone
  To clarify the technical doubts with Chennai office through Videoconference as well as staff interaction with Chennai Office.
  VRC staff can contact through satellite phone to Chennai office.
- Net meeting – Reports and importance contents can be transferred (Bulk content).
- Telephone Landline.
- Internet connectivity
  Internet connectivity is very useful for VRC and VKC regular users to get the information on passport status, results, employment opportunities; application downloads and content collection etc.
- Potential fishing zone
  INCOIS PFZ information board
  Giving information to fisherman on potential fishing zone through landline phone connection

(Source: VRC Thangachimadam and Chennai)
Qualitative analysis

6.1 Communicating with the grassroots

Communication was mistakenly conceived as information dissemination and seldom as a dialogue overlooking the voices of the poor. It has predominantly remained as a one-way model that is incompatible with a focus on participation of the people. There have been experiments with modern technologies but researches have revealed that there must be an interface between the traditional and modern technologies. The traditional technologies here include the print, electronic media, interaction with villagers by the staff members and telephone whereas the interaction through modern technology constitutes Video Conferencing and Internet.

ICTs are regarded as being able to improve and enhance two-way information flows and there is evidence that without the two-way information flows, development efforts fail. This perception is centered on the concept that development should be participatorier in nature allowing the voices of the poor to be heard.

Community Newspaper (CNP)
The CNP had been introduced in Pondichery as a mean to disseminate the knowledge services to the beneficiaries. The contents collected from various research institutions, government departments, magazines, newspapers, NGOs, federations, Internet, valam website and villages are printed and published every fortnightly and distributed to government agencies, hospitals, NGOs, News agencies that fall under the five VKCs and the surrounding villages. The CNP is dispatched to the beneficiaries on the 1st and 15th of every month.

Mr. J. Arokiya Kevi Kumar, who is primarily involved in collating the data for the CNP, says, “Tapping traditional knowledge from the villagers involves conversing with the communities and getting the right resource person. We are mere communication tools to propagate knowledge collected from them”. He went on to add that there were reading sessions conducted at various villages for the benefit of the illiterate people. Data collected is verified by the officials at the VRC and then handed over to the technical coordinators at the VRC who complete the process of formatting and organizing the paper. The VRC keeps a track of all major organizations for relevant content that could be added in the newspaper.

Observations
The observations revealed that the paper had an audience as it covers issues related to employment opportunities in the area and fishing related information. The third page (refer to appendix) is dedicated to Open Knowledge Network, a website that deals about indigenous knowledge prevalent in that community. The website covers indigenous knowledge from different countries which are collected in similar fashion and are uploaded in the website.
During the field observations, the researcher observed that the concerned person studied and prepared meticulous notes on a daily basis and there were instances when the people themselves had approached them with inputs to be published in the paper. When asked about how he goes about finding the resource person, he says, “If you belong to the village, you start recognizing and familiarize with them, this helps in finding the resource person”.

There were a few remarks at a Focus Group Meeting at Seenippadargah that the CNP does not reach on time on a few occasions but the Project Associate who conducted the meeting had assured them that it would reach on time. She advised the KW of that VKC to distribute a few copies to the Self Help Groups and make sure that the head of the group reads out the news items. Most of the people did answer in the affirmative about the reach of the newspaper.

An interesting observation was that the CNP was distributed in the classes to the students and they were advised to hand it over to their parents. The members in the FGM had agreed that they were familiar with the newspaper due to their children and said that they also read it out to them.

The students in the FGD expressed a similar view when the researcher had posed a question regarding the CNP. They said that they do read out the newspaper at home to their elders.

**User Register**

The researcher found through the User register present at the VRC that number of people visiting the VRC and VKC were not overwhelming. The number of manual entries between January and March 1st week, 2007 did not exceed more than 110 entries (Source: VRC, Thangachimadam) of which 50% of them enquired about the MUPP program, whereas 25% of them had wanted to use the internet based services like downloading application form and the rest 25% wanted to take print outs, know their status of their passport application forms and transportation details. There was a high rate of people asking for the MUPP course since there was a batch that was about to commence which was advertised in the local cable television. (Source: VRC, Thangachimadam)

**Village Meetings**

The staff visits different villages and promulgates about the activities taken up by the VRC and VKCs. They also talk about the programs and its benefits to the people and how important and beneficial it is to them. The researcher was witness to a village meeting at Seenippadargah in the Mandapam Block, which was close to 4kms from to the Saathankovil VKC and 18kms from the VRC at Thangachimadam. The meeting was supposed to be held in the village at around 2p.m. but people hadn’t turned up till 3pm but then about 35 women from close by areas had gathered for the meeting by 4pm. The staff member explained the activities of the VRC and VKC and how it could be of use to the villagers.

Ironically these women visit the Fair Price Shop regularly but have no clue about the VKC and its activities located in the same compound. But they said they had read the CNP published by the VRC on several occasions. There was only one meeting held in the ten days of the researcher’s stay. Asked about the less
number of days spent on the field and more days spent on the computer sending reports to the Chennai office, the Project Associate clarified that on most occasions they were out on the field but they were busy due to the review that had come up during March 1st week and the Capacity building program held for the Knowledge Workers at the VRC and coordinating these programs had eaten up their time. This was an important point that had to be noted because, participatory projects involves maximum interaction with the people.

**Notice Boards and the INCOIS electronic board.**
There is a notice board located at the entrance of all the VKCs and VRC and it carries the same information on that day. Important notices like notifications, last date announcements and schemes are written on the notice board. By passers do at times read the notice boards but on most occasions people fail to notice. This was evident when the staff at the Village meeting at Seenippadargah had queried the women on whether they had read the notification carried out by the Government about the increase in the supply of kerosene by a liter to the people but none of them were aware of it.

The location of the notice board also plays a crucial role. Though there were people who read the notice boards in most of the VKCs as they are located in crowded areas, the notice board at the VRC seemed redundant as the VRC was on the highway and hardly find by passers standing back to have a glance at the notice board.

The INCOIS board, an electronic board that displays information about wave heights and prominent fishing zones had not been in use due to a technical failure.

**Video Conferencing**
Depending upon the magnitude of the program the staff at VRC conducts a query clearing session through the video conferencing mode. The queries are collated after a survey and sent across to the resource person who in turns responds through one of the VRC through the video conferencing system on a specified date and time wherein the villagers visit the VRC to clear their doubts through video conferencing with the resource person. ISRO supports the technical aspects of handling a video conferencing program.

The Video conferencing was used for not more than 7 times between Jan 2006 and December 2006 for programs like Rabbit farming, hygienic handling of fish pickle making, educational opportunities for class 10 and class 12 students, livestock management. The interaction between the beneficiaries and the resource person was done through the video conferencing mode.

The Video conferencing mode is also used in an emergency situation as Mr. A. Shivakumar cites an example where in a disease that could not be found affected the turkeys in that area. The person rearing these turkeys contacted the resource person through the VRC who advised the remedy that saved the turkeys.

"From my long experience in agriculture, I find that whenever poor people derive some benefit from a technology, rich people benefit. The opposite does not happen." - M. S. Swaminathan, key architect of India's green revolution
Need assessment survey
Apart from the village meetings, the staffs at VRC and Knowledge Worker from that are visit households in different areas conducting the survey. The survey forms are duly administered by the staff members as people either refuse to fill or are illiterate. The form is a detailed one with 39 questions (ref: appendix). It has details about all aspects of a household and detailed questions such as the kind of boat that they possess and the type of electronic appliances that they use apart from the demographic details are asked.

The Project Associate shared her experiences about the survey with the researcher. She said that few people do not appreciate filling in forms, as they believe that these people are from the Government. This irks them and they bang their doors or shoo them away, but after a few minutes of explanation people understand and cooperate in filling the form. But there is another set of people who think that the staffs are from the Government and the Government has sent them to pay money with respect to Tsunami relief funds. These people willingly volunteer for the survey but expect money at the end of it. Says Arockiya Kumar, “This mindset is probably because of the overwhelming response of the Government in distributing funds for people affected by the Tsunami. Hence they expect a government official to knock at the door to distribute the relief funds in spite of the fact that Thangachimadam was not being severely affected in comparison to the villages of other districts like Nagapattinam and Kanyakumari”. Its this mindset that has to be worked upon, the mindset of depending on someone has to be eradicated which would pave the way for better prospects of the VRC.

Village Management Committee (VMC) Meeting
The Village Management Committee Meeting consists of people from all walks of life who are involved in the development of the village directly or indirectly. Teachers, nurses, doctors, panchayat members, fisherman association members, religious members are a part of the village management committee. They meet once in a month to assess the progress of the village. The researcher had spoken to one such VMC member who was part of the Focus Group Discussion that was conducted for the women taking the Adult Literacy Program. During the discussions the researcher had asked her whether her SHG members knew about the activities of the VRC and VKC but she answered in the negative and said that “I keep telling them every time about the activities but they ignore”. In spite of a VMC member amongst them they weren’t able to tell about the activities of the VRC.

6.2 Lets start from ground zero
The analysis of the second objective involves verification of the interviews of the staff members and their perceptions about the content and capacity building programs. The researcher probed the staff on the conceptions of the programs and the content that is disseminated to the people.

Setting up of a VKC
The process of setting up a Village Knowledge Center involves the policy makers from the initial stage. The foundation identifies the village and presents the VKC’s activities to the members of the traditional or constitutional panchayat. They in turn are given an appropriate time to discuss amongst their community
The project requires time and is a slow process but the policy makers are involved and made to participate in the allocation of the VKC right from the initial stages. The policy makers are also told to select a building to set up the VKC and the electricity and phone bills are borne by the local body.

The Foundation need not consult the panchayat always before setting up the VKC though their primary objective would be to involve them, but if the panchayat delays or turns down the offer, then the Foundation looks out for the NGOs in that area or other organizations that are interested in joining the project. On most occasions claims A. Shivakumar that the popularity of the existing VKCs spreads to far by villages and hence they are requested by the Village Panchayat or other NGOs to set up their project over there. He adds that since the foundation involves the local body from the conceptual stage, there is a sense of responsibility amongst the members.

A member from the village is selected by the Panchayat as a Knowledge worker of the VKC and is trained by the foundation. The foundation conducts a pilot study of the allocated area and checks the feasibility for connectivity.

The Project Co-coordinator M&E made an interesting remark about the requirements for setting up of a VKC. She said that to set up a VKC, the village should possess a minimum population of 1000 people and hence the foundation cannot set up a VKC in any tribal community where there are people less than 1000 but the criteria is to find and set up a VKC in the most backward areas. She adds that there are VKCs set in tribal dominated villages in Dinidugal and Kanyakumari districts.

Managing the VKC and VRC
The nominated Knowledge worker from the community is given training on how to run the VKC, manage the users and visitors, build a rapport with the local community members and are taught to handle basic hardware and software components like the SHG software accounting program, MUPP program, Adult Literacy Program and Computer Aided Learning Program.

A National Virtual Academy Fellow, an altruist amongst the community members who has been associated with the foundation’s activities for a few months and has been helping the organization in their activities guides the Knowledge Worker in their activities. The Project Associate visits the VKC once or twice a week to monitor the activities of the VKC. “We train the Knowledge Worker so much so that they inspire and convince the people to attend the programs or clarify their queries from the organization”, says Sree Kirupa, the Project Associate.

There is no specific turnaround time that the Foundation has set for the reply of a query from the people but the KW makes sure that they revert back as soon as possible. The Project Associate adds “If the Knowledge Worker isn’t able to answer the queries from their end, then they call the VRC and if the VRC is not able to figure then we contact the Chennai office for further clarifications”, she points out that it has rarely happened that the VRC have had to contact the Chennai office for clarifications, it is mostly solved at their end.
Role of a Knowledge Worker (KW)
The Village Knowledge worker conduct classes on the ICT related educational programs visit the villagers on a regular basis through meetings and need assessment surveys interact and familiarize with them. The level of interaction of the knowledge worker with the community is at the maximum. Being a member of the community the KW understands their socio cultural set up of the community. This helps in finding the problems of the villagers first hand so that the members of the VRC and VKC help them in some manner.

The researcher interacted with the MGR Nagar Knowledge worker who faced a lot of problems in her personal life before she was helped by the community members to be appointed as the KW. Apart from the core activities involved in the VKC, she converses with the village members emphasizing the importance of forming SHGs. She takes care of the accounts of three SHGs and is supposed to deposit the money in the bank. She conducts the ALP programs when the SHG meets for their account reviewing and informs them about other livelihood opportunities like preparation of OMAM water, preparation of phenyl and purchasing vegetables, rice and pulses at wholesale prices and selling them to the villagers.

She pointed out that the fishermen suffer the most during the breeding period (April and May), where in the Government imposes a blanket ban on ships from sailing into the sea. “This is the period that the fishermen actually suffer and depend on their women members who have saved the money through the Self Help Groups or by doing other menial jobs.” The money saved by the SHG comes in handy during this period that could be used to repair the boats and purchase new fishing nets to be prepared before they enter into the sea.

The KW highlights that the people are least bothered about Computer related programs. As they are more interested in the details about fishes and their markets but hardly need thought they would prefer their children to learn Computers. Inspite of the VRC conducting programs on fishing and other activities VKC it has a low turnout according to the figures.

Altrin supports, NVA Fellow at the MGR Nagar VKC that it hardly matters if the organization introduces satellites programs or Internet as the common fishermen is more interested in fishing related programs. That is the reason he says that there was a better turnout for the GPS training program and there has been still a demand from the fisherman community as well for a training program on the GPS. Similar is the case with the diesel mechanism program, but conducting one program will not suffice the 5000 odd fishermen in and around the area.

“I am proud that I am the first woman in my family to work and now I can stand on my own feet, thanks to VRC”- Guna Dicta, Animator, VRC Thangachimadam
**Sustainability of the VKC and VRC**

Though the Foundation invests huge amount of funds in setting up the infrastructure for a VKC and VRC, if it cannot sustain by itself it might prove to be another dud. The Foundation claims to start a project and make sure it is run and owned by the people with the maximum involvement of people at the financial, administration, training, technical, etc. The Community should be involved at the roots and be in charge of the communication initiative. The initiative should be rooted in the daily lives of the people even if it not originated by them.

The Project Associate says that measures are being taken to make the VKC sustainable. People pay money for the print outs and they collect Rs 100 for the MUPP program at the VKC but apart from that there weren’t many ways through which the VKC can be sustained.

But the Technical Co-coordinator comments that the VKC does not need to be financially sustainable as there are minimal charges involved in running a VKC. Even the maintenance of the computers will not be a problem, as we would be training the KWs to maintain the hardware components as well. The researcher observed there weren’t many ways to make the program sustainable as the foundation was concentrating more on training and awareness programs. There is a lack of focus that is visible through the programs. This might prove detrimental to the VKC if the means of sustainability are not founds out as early as possible.

**Limitations of the foundation**

The Foundation that is in its nascent stage has to fight odds to establish itself as an organization that could be taken seriously to solve the problems of the people. But there are certain limitations of the Foundation that they practically cannot implement. The KW sharing her experiences about the survey, she says that the people often expect monetary benefits when they approach them for a survey or to explain about the VKC. They assume it to be a government organization and pour their problems out asking for a quick remedy for their problem.

People tend to overlook the point that the VKC serves as a platform for the people to highlight their problems at the right place. People ask solutions for problems that are usually not in the hands of the Foundation like electricity or water connections. The Foundation can only direct these people to the right department but cannot undertake the task.

The Project Associate accepts the foundation’s limitations as these major tasks are to be carried out by the Government but he adds that they could create a link between the departments and build a rapport with them so as to complete the essential projects as early as possible.

A similar trend has been observed in many ICT researches conducted in India. The program does not deal with the problem upfront forcing the beneficiaries to rely upon the ancient way of getting things done through the government, which append to corruption and non-transparency.

As discussed in the earlier chapters, content could be constituted in two ways
Demand Driven
Supply Driven

If the beneficiaries ask the content through methods like meetings, user register and surveys and a demand is created form the community for a particular program or information then it is termed as demand driven content

Supply demand constitutes information that the organization thinks it has to be supplied to the audience according to the ground situation of the village. For instance the malaria awareness camp for the people. Since the staffs know that there has been a requirement of the camp due to the widespread malarial disease at these villages, they decide to conduct an awareness program.

**Parameters on what constitutes content**
The content collated from different surveys, observations and other methods (refer to the overview) are sent back to a strategic partner or the MSSRF, Chennai center for verification and later disseminate through the different modes. (Ref: chapter 5)

The content also constitutes information from programs that are organized by the VRC or VKC, wherein the Knowledge Workers or Animators note down the important points in the program and make a report sending it across to Chennai for verification. On many occasions the content is verified at the VRC itself with the help of staff members who are well versed with the subject.

**Relevance of content and capacity building programs**
The staff analyses the feedback from the user registers and surveys and decides upon the program or content, and on priority basis disseminates it to the people. For example the villages surrounding Thangachimadam mad Rameswaram are under constant threat of vector borne diseases like malaria and dengue. The VRC and VKC with the help in collaboration with the District Medical Officer and Doctors from the Government Hospital organizes programs for creating awareness about malaria and its adverse effects.

The VRC and VKC through their partners conduct programs on the importance of improving the sanitation facilities in the area that might drastically reduce the vector borne diseases. Awareness camps for women are held emphasizing on pregnancy care, vaccination, family planning and menstrual cycle. Importance of the usage of sanitary napkins was also emphasized in these camps.

Capacity programs to enhance the existing occupations like hygienic handling of fishes were conducted by MPEDA for the fisherman which involved details about the maintenance of the quality of seafood, export details and the nutritional properties of the fishes. They had also given details about the about the maintenance of Iceboxes that would help in the longevity of the fishes.

They were also asked to preserve the ecology of the sea and sustain it for the future due the depleting levels of the sea varieties. Importance of the preservation of the turtles was also explained to them as their steady
decrease in the number of sea turtles. They also explained about the legal implications of catching turtles as it is considered illegal.

The immediate repercussion was that of people dropping the sea turtles into the sea even after getting hold of them in the net. Altrin, a fisherman and a NVA Fellow and his fellow boatmen said that they had let go 29 turtles back into the sea after attending the program.

The fishermen were also trained to handle the GPS, which is an important and useful tool for the fishermen. The functions of the GPS include details like directions of the boat, potential fishing zones and the velocity of the boat so as to enhance their occupation. The Project Associate pointed that “we had given the training at the VRC but majority of them could not understand so we decided to train them in the sea as we thought to be more productive and it did work as the people were able to understand better by raising the popularity of the program.”

The Projects Associate adds that this training program is popular amongst the fisherman because it directly relates to their occupation and there has been a demand from different communities to teach them the nuances of handling the GPS as early as possible.

Similarly diesel engine mechanism program was introduced for the fisherman to deal with the dynamics of handling the engines of the boats. The fisherman had been coached to handle the engine if it fails while in the mid sea. The NVA Fellow, Altrin, remarks that this program particularly helps during the ‘strike’ period in the month of April and May when the ships are barred from entering the sea by the Government to facilitate the fishes to breed during this period.

“We don’t need computer programs. They will not give us food. What we need is a program that would enhance our only employment, FISHING. I shall think about computers for my son-a fisherman from Thangachimadam.”

“During this time the fishermen suffer to the hilt as they have no other occupation to take care of the family. So they are forced to take loans or debts for the repairs of their boats that would cost close to Rs 3000. This program helps them in dealing it by themselves, as they do not have to pay the extra money to the mechanic”, he claims. This program actually makes them self-dependent and there are minimal chances of being exploited.

The VRC and VKC also organizes programs for the Panchayat president and members of different villagers in highlighting their roles and responsibilities as a panchayat member, bio shield and its importance, NVA and its objectives and the VRC and VKC’s activities. They also explain about the various structures involving the Central governments and state governments in the panchayat.

The VRC and VKC also conduct the software accounting program targeting the SHG for men and women to maintain their SHG accounts. This program helps them maintain their accounts easily. As most of them, maintain their program in the small notebooks and loose papers and they would have to spend another Rs
1000 for an auditor to reorganize the accounts before they could apply to the bank for a loan. This problem is eliminated if they fill it in the computer so as to save Rs 1000 and maintain the accounts.

The VRC and VKC conduct a number of programs for livelihood opportunities for the women. Tailoring training program, prawn pickle making for the handicapped and seashell ornamental training. The Prawn pickle-making program was started by one of the staff members for the handicapped members at the MGR Nagar VKC with the support of the Nesakkarangal Trust, an NGO that supports physically challenged people and is local partner with the VRC.

**Prawn pickle-making program**

This program started by one of the staff members has come a long way in helping the physically challenged members of the trust who had started it with enthusiasm and minimal support. But now the program is helping the five members who are involved in the program earning them close to Rs 800 a month from Rs 100 when they had started. This has made them independent says the Project associate and the number of offers are growing as the quality of the prawns and the product is maintained.

Says Altrin, NVA Fellow, who was instrumental in getting the program, started chips in with the logistics like purchasing the prawns and the groceries involved for the product. He informs that earlier there were orders not exceeding 50 bottles a month but now they produce close to 500 bottles a month. "We are completely indebted to MSSRF for starting this program and giving them a new a lease of life who cannot stand by their own feet".

**Capacity building program for the staff members**

The VRC and VKC also conduct capacity building programs to enhance the Knowledge worker’s efficiency in managing the VKC and VRC. Doubt clearing sessions for the Knowledge Workers in all the ICT related program and different methods ways to enhance their skills in handling the visitors.

**Observations**

The researcher found out that there weren’t many takers for the Software accounting program as there was some anomaly in the program. Due to this snag, the program has weaned away people from technology into the old way of writing in bits and pieces of paper.

When the observer asked the Project associate on why the program did not have a decent response she said that the program was designed for the people of Pondichery and it was applied to the people at Thangachimadam. But the people over here do not maintain the SHG accounts in the same manner. She added that they have sent the software to the Chennai office for rectification and should be introduced to the people of Thangachimadam.

The researcher was witness to a three-day workshop held at Thangachimadam VRC for clearing the doubts in the ICT related programs. Knowledge workers from few other districts were also involved in the training program. The instructor who had come from Chennai had conducted the workshop. The interesting
observation was the manner in which the program was conducted; the instructor had cleared each every doubt in a detailed and precise manner. And then there was an interacting session with the students was held which helped Knowledge worker students understand better.

6.3 Learn through computers

Analysis for the third objective involves analyzing the perceptions of the people of the programs conducted for them. The researcher had selected four ICT related programs that is being conducted for the people.

**Microsoft Unlimited Potential Program (MUPP)**

![Chart 1: Details of the MUPP program for the 1st and 2nd batch](image1)

![Chart 2: Details of the MUPP program for the 3rd batch](image2)

*Source: VRC, Thangachimadam*

The graph 1 and graph 2 show the number of students joined for the MUPP course in the all the three batches. The graph shows that there was a high drop out rate in the first and second batch as compared to the third batch.

There have been different reasons portrayed for the dropout in spite of high enthusiasm amongst the people to join the course.

Kanna who was a member of the first batch points out “there has always been a high rate of enthusiasm when the program is introduced but gradually people feel the heat of the course and quit midway”. He adds
that the delay in certificate distribution for the 1\textsuperscript{st} and 2\textsuperscript{nd} batch had raised doubts about the credibility of the program but all were nullified when the VRC arranged for a glittering function to give away the certificates.

The third batch had the same level of enthusiasm and there have been fewer dropouts than ever before. “Credibility might be the reason”, points Kanna.

The graph infers an interesting observation about the number of girls enrolled for the program. 82 of the 130 students who had applied for the course were girls. All the three interviewees had clearly said that there is enthusiasm amongst the girls but they cannot go beyond and capitalize on the course by working due to familial pressure. The animator Guna Dicta, who was also a member of the course remarks that working is considered a taboo in the coastal society and women are not allowed leaving the houses even. She says that even today the parents consider a waste for a woman to work after studying. Due to lack of jobs in Thangachimadam and the surrounding villages they are forced to travel up to Ramanathapuram district, about 45Kms from Thangachimadam for a job.

Though the program had created a lot of interest, the numbers of people who are employed through the MUPP course are few in number.

This is one of the major reasons that most girls or women after the course land up at home doing nothing. The Project Associate had remarked that they are in talks with companies to offer them jobs like data entry operators in Thangachimadam village. This would help solve the problem of unemployment after the course. The Hi-tech Park proposed to be setup at Madurai that is about 150 kms from Thangachimadam would also help in reducing the unemployment in the area.

**Adult Literacy Program**

This interactive program is targeted at adults who are neo-literate i.e. people who cannot read and write but can only speak the local language. The staff at VRC conducts classes for a group of interested people in a particular locality twice in a week. The target group consists of Self Help Groups (SHG), fisherman and farmers.

This program has resulted in a few success stories wherein people who cannot read and write have started reading newspapers and presenting memorandums to the Collector.

During the FGD for the women, they tell with pride that they could also read subtitles of the serials on Television. The most important task for the animator or KW is that they need to teach people who are completely illiterate to at least make them imprint their signature. It is important because the officers or Managers in the co-operatives societies insist people to sign on the documents.

The most important task is to bring the group to attend the program. Altrin says, “women are fervent to learn this program, but they are shy to attend the classes due to sarcastic comments passed by the male
members”. According to the researcher, the enthusiasm was prevalent as the women were made to undergo tests and taught on the laptop.

The Project Associate visits the learners’ once in a month to oversee the proceedings of the program and sends a report to the MSSRF, Chennai office about the progress of the program.

**Computer Aided Learning Program or CALP**
The M.S. Swaminathan Research Foundation in collaboration with the Azim Premji Foundation initiated the Computer Aided Learning Program or CALP in eight village resource centers and 35 VKCs since 2004. This program aimed at students, provides interactive educational CDs that allows students to learn about energy, sports and educational activities. Students depending on their availability of free hours can visit the VRC and VKCs to work on this program.

The program is meant for children of the age group 7 years and above. The Foundation had monitored and evaluated students who have gone through the program and claims that the students have improved in their academics.

For children who have no knowledge about computers, there is an educational CD, which gives the basics of the Computer that would help the students handle the Computer.

The researcher was witness to a few educational CDs that the children were using. The CD could be used in Tamil, English and Hindi.

The researcher did not find many students voluntarily coming to the VRC to browse the CD. Inspite of a school being located just two blocks away, there were hardly any children coming over to the VRC for the program.

**Intel Learning Program**
This is another computer related program targeting the students from Class 6 to Class 9. An animator from the VRC teaches the basics of computers and programs like Paint, Word processing, Spreadsheets, Multimedia and Internet.

The program that was started in the month of November 2006 was conducted for a group of 10 students from the Holy Cross Girls Hr Secondary School that is located beside the VRC at Thangachimadam.

During the FGD conducted for these children who were between the age group 12 and 15 years, they unanimously agreed that they enjoyed the program but wanted the frequency of the program to be increased.

They claimed that the program seem to benefiting them, but surely does not motivate or excite them. They said that they would like to learn the program but wanted games also to be part of the program so that they would be able to pursue the program more enthusiastically.

**Monitoring and Evaluation**
The Project coordinator for the Monitoring and Evaluation part of the project pointed that every program would require time to evaluate and find its desired effects on the beneficiaries. She said, “All the programs
are monitored at every level to check the validity of the program in that area”. She also added that just introducing the concept of VKC and creating awareness would not be sufficient and beneficial for the people. She concluded that at present the project in Thangachimadadam is in the monitoring stage and should take more time to get into the evaluation stage.

**Inferences**

The inferences from the objectives have been a conglomeration of the researchers observations, the views from the staff members and the beneficiaries of the project. The inferences would serve as a rationale in supporting the project and help the project reach higher levels.

The first objective involves the dissemination of information and with various modes that have been used to disseminate, the Community Newspaper had wider reach and the relevant content. Employments, indigenous knowledge, and the local area information about government schemes, the paper seemed to have the right blend of the relevant content and was accepted by the community depending on the number of copies printed every fortnightly (3000) and the inferences from the FGD.

Other ways to disseminate like conducting meetings and writing on the notice boards does not cater to a larger audience as expressed by an instance where in the people who had come to the Fair Proce shop but failed to recognize the notice board.

But the most simplest and arduous way is to interact with the people to know their problems and find remedies thereby gaining the confidence of the people.

But the staffs were involved in a lot of paper work by preparing and sending reports, which reduced the number of days the staff, went on to the field, which should have been the primary objective. Spending one day a week in the field hinders the process of interacting with the community. And in a participatory project if the people are not involved then it might go on to become yet another community project that scripts an end by itself.

**Role of the Government**

The Government inefficiency in supporting the program overwhelmingly or recognize these programs, e-governance through these foundations is a stark factor in the progress of the project. Though recently in the 2005 budget the Finance Minister had granted a sum of Rs 100cr for the project from the NABARD funds. But mere allocation of funds would not be sufficient as the Government has to work in tandem with the local NGO’s and interested organizations for the upliftment of the rural people.
Approach of the Foundation
The dedication and involvement of the staff is clearly reflected in the minimal success gained by the VRC. In the given short span of two years for a development project the efforts taken up by the staff at the VRC is commendable. There were reports of the Foundation adding three more VKCs in the nearby villages like Rameswaram, connecting it to the VRC at Thangachimadam.

What stood out in the whole exercise was the approach of the staff towards the vision set by the Foundation. The staffs were constantly having the people in mind while formulating the programs and followed a focused approach. The staffs were performing their duty as per the plans laid out.

But what the staff lacked mostly was the objective while disseminating the programs. The numbers of programs conducted were less in number by all means. Even the variety of programs being conducted was disproportionate in different VKCs and did not follow a set pattern. Due to which the staffs were not able to concentrate on any particular area of development.

For instance, if the VRC members knew that there were widespread vector borne diseases like Malaria that had to be controlled then a member should have been made responsible to take care of the health programs and made sure the focus is not shifted until there is evidence that there is a decrease in the levels of people by infected by malaria.

Similarly different livelihood opportunities have to be identified and there should be a constant search for more opportunities that are suitable for that particular area. Very few programs have been introduced in the past two and a half years of inception of the VRC.

Same is the case with capacity building programs for the fisherman community, conducting programs for a few people does not serve the purpose of the community neither does it serve the purpose of the Foundation. The programs would be more efficient if there is a person dedicated for a particular program that constantly monitors and evaluates the efficiency of the program and on the longer run measure its impact.

Time line:
The Foundation has not given itself a time frame to achieve its objectives though on a larger scale the project talks of establishing VKCs in the 6,00,000 and odd villages in India under the program Mission 2007. An individual time frame should be set to check the validity of the capacity building programs.

Generalization
As mentioned earlier, every village is unique in its own way (ref: chapter 1.3) and any development project should not be generalized as the needs may vary depending on the composition of the village. This might have its fall outs as was seen here where in the software accounting program which was used in Pondichery was applied at Thangachimadam.

The failure of the accounting program or any technology related program might lead to the beneficiary going back to the old way of maintenance that he has been doing for all these years.
Dependency Factor:
There was an instance narrated by the technical coordinator that, during the introduction of the MUPP program there was a lukewarm response in the beginning for the program but the staff had requested the local priest at the church to advise the people during the Sunday mass to attend the program. The response was overwhelming notes the co-coordinator. Hence the staffs had also built the rapport with the local religious and community leaders and explain them about the benefits of the project so that the people visit the VRC and VKC overwhelmingly.

Sustainability
Through the interviews there is evidence that the project is designed to be self –sustainable. But the magnitude of sustainability is not encouraging and there seems to be very less work to be done in the projects to make it completely sustainable. The Foundation can design a manner by which the people hold a major stake in the VRC and VKC and make them an important stakeholder in the running of VRC. The villagers need to be handed over the institutional ownership expecting the program to be run by the villagers.

ICT related programs
The four ICT related programs that are conducted for the people are beneficial to them and but there are problems that need to be addressed. For example, after the completion of the MUPP program, jobs need to be offered especially for girls and women, as they would not allowed to travel far distances due to their parents as sighted a few of them. There are a few jobs available like teaching in primary schools but they are very limited. This is indeed major factor that needs to be addressed.

The Adult Literacy programs have started to reap benefits in a steady manner as people have started to read and write their names, read the Community Newspaper and even prepare a memorandum to a collector. But that again has to spread in vast manner so as to include a larger section of the society.

The Intel Program has been recently started (Dec 2006) for the children so expecting results so early would be detrimental. And the same applies for the CALP that has very few audiences.

It’s commendable that the VRC has taken steps to target the youth and the women but it needs to focus on certain areas like the capacity building programs. Targeting the SHG women and men is the best bet, as the VRC staff need not spend their energy collecting people. There are a large numbers of SHG women and men groups in and around the village that could be used to promulgate the activities of the VKC and teach programs like ALP and other awareness programs.

If the VRC keeps working on the needs of the people and interact with the people, people would surely respond in a positive manner thereby increasing the success of the VRC. But at present the VRC needs to concentrate on the quality of the programs thereby attracting the people e to the VRC and play major role in changing the mindset.
The mindset of the people needs to be changed to make them realize them the important of information and participation. Following this we could probably expect the number VKCs growing in large numbers in the years to come than expanding the number of VKCs in all the villages. The VKC needs to empower the people through information in a holistic manner.

Limitations

Inspire of the concerted efforts taken in the past few months in the pursuance of the research there were certain limitations in the project, which the researcher could not overcome.

Methodological limitations

Very few development projects that involve the intervention of modern technology being introduced in the village have been researched with a holistic approach.

The anthropological perspective in communication research is seldom applied in order to evaluate ICT related development projects.

Binod Agrawal says “It is essential that communication whether satellite or human being culture bound, must be studied while focusing human beings in their totality.”

Ideally these projects have to be studied holistically which was the researcher wanted to do but could not completely justify due to major limitations and hence it was felt that the researcher could have followed the anthropological methods for communication research.

The anthropological methods would have required a longer span to stay in the village and understand the effect and impact of technology amongst the people.

The researcher would have preferred to supplement this research with a survey to make sure that numbers supports most of the programs. But as majority of them who the researcher preferred to interview could not read or write which would have forced the researcher to administer the survey. This was not possible, as the researcher would have had to spend more amount of time at the villages, which would multiply the costs of the project, and time.

The research could have yielded more resulted if there were more FGDs or interviews conducted. It would have given a stronger perspective of the beneficiaries of the project.

Due to constraints within the Foundation, the researcher could not decide the sample size of the respondents for FGDs and the number of meetings that could be attended before the detailed study.

Financial constraints

The researcher had initially planned to conduct the research at Pondichery but the project had to be pursued in Thangachimdam, Ramanathapuram district as per the Project Director’s instructions.

The traveling costs and the stay at Thangachimadam had to be borne in mind while pursuing the research.

Time constraints

Time was certainly a concern, as the research demanded the researcher to stay at the village as long as possible for a better perspective of the people’s views about the project. A lot of time was also lost in the
delay by the organization to respond for the approval of the project. Hence the researcher had to delay the start of the project by a month and a half.

**Scope of the research**

There is immense scope in the sphere of participatory and development communication as it is relatively a new subject and not many researches have been conducted.

This particular project also needs to be checked and evaluated by an independent observer at various points, as it is an ongoing process. This is mandatory since the organization conducting the program might lose its way if the project is not traversing in the right direction thereby creating an imbalance in the structure and composition of the village, which prove detrimental to the village community as a whole.

Given the potential of ICT as a tool, it cannot be ignored, as it has to be utilized in an appropriate manner to reap the benefits thereby improving the lives of the rural people. ICT related projects also might play a major role in achieving the United Nations Millennium Development Goals that talks about reduction of poverty, enhancing primary education and eradicating HIV/AIDS.
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