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## Empowering rural people to use information technology services

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### ABSTRACT

Education has played a vital role in developing the nation and it is well known that majority of the people in India come from a rural background. Knowledge and information should be provided for people effectively as they can use it in their life. Empowering rural people to use formation and knowledge is necessary and important than its transfer. This work creates awareness to the suppressed rural people about the development in the country and motivates them to come out of their ignorance and give confidence to the people about their life and makes the first move to the rural people to learn about the Information and technology and the facilities that can be bought at home through e-learning.

**Key words :** Empowerment, Information and communication technology

### INTRODUCTION

Even after six decades of independence and developmental planning, the rural population in India do not find themselves in the mainstream of development across the country. The gender mainstreaming strategy has to go a long way and still has a lot to achieve. The livelihood indicators of our rural areas are lower than even some of our neighboring countries. The basic issues of healthcare, sanitation, comparable quality of education, employment and overall quality of life remain a serious consideration in policies and programmes of national and provincial governments. Much of the significant performance gaps in the policy planning and implementation are owing to the poor participation of the people at the grass root level, in the rural areas, in planning, projects management and implementation.

Widely-used and accepted international definition of sustainable development is: 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' - Globally we are not even meeting the needs of the present let alone considering the needs of future generations.

Something that causes a great and wise nation is based, is training to all its people and spread to influence people and quoted Gandhi "independence of the low and lower to begin, if each village self-sufficient and be able to manage its independence is obtained Affairs. Knowledge,

awareness and information for people to opportunities and challenges in response to social changes, economic and technology are required. But that is useful and beneficial if such knowledge is effectively brought to the people; so they can use this information and knowledge of their life. More than 850 million people in developing countries have been away a wide range of information, knowledge and awareness (Bastian and Bastian 1996). Information Communication Technology (ICT) allows countries to modernize the system, increase production and enable this country to move faster to economic development (Uppal, 2005).

Any success in rural development depends on update information, reliable and sufficient information that the role of ICTs in achieving it is very important. ICTs can power to rural communities and awarded to and conditions for being involved in the development process can provide. With new ICTs, rural communities can improve the ability and progress of his life Obtained conditions through education and discussion, with others to a surface, the motivation for their participation in the fate of reach (Chapman and Slaymaker, 2002).

Empowerment can be considered as a process in which people overcome the barriers to progress, are doing activities that cause their master is their determination. Enabling or empowerment means to overcome inequalities of the foundation. Self-sufficiency is different. Besides, this term means to exercise power rather than the others.

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The description is in power, can do something that shows a person (enabling) and requires strategies to encourage use of other forms of influence.

Empower villagers to profit from the services provided by rural ICT, including ICT development policies proposed. The requirement of the communication means is the cognitive and motivational. Since the nature and activities of rural areas have special concerns we deal it very carefully.

Today, between stimulus and context factors, the planners plan for sustainable development of rural people. The perception, understanding and awareness of rural residents and environment of their skills and learning words, rules of individual behavior in the life of intellectual, social and professional attention are different from others. The majority consensus experts and those involved in rural planning and development has been therefore, study the existing literature and texts that could often receive new paradigms. Importance of sustainable development of rural education is based on empowerment of villagers and rural people and their access to the information resources, the different dimensions of content, educational programs, channels communications, the costs and services.

**Work done in this Area (Tuticorin) in India :**

Tiruchendur, a temple city, second bodes of Lord Muruga is located in the district of Tuticorin. There are several villages surrounding this area. Many rural development activities are undergone in some part of the village to improve their living but women were not given priority. Even trained people lack the recent evolving technology. In this computer era, the rural women are unaware of the facilities that are available to them.

The objective of this work is to identify the role and implication of Information and technology, in the form of computers and telecommunication, for rural areas. It holds the potential to revolutionize the world in which we live. It will influence the rural area and cause a higher proposition of nation’s people and jobs to the rural people and improve the quality of life of the rural people. Besides focusing on the basic primary and secondary education needs, the project focus on IT educational initiative - “From illiteracy to e-literacy”.

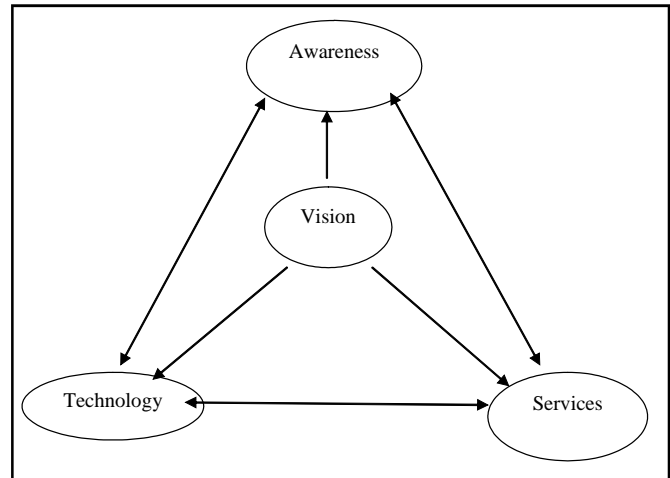
**Essential elements of rural empowerment approach:**

This work identified the empowerment solutions for rural people in order to use services offered by Government. Currently only 40% of the rural populations have the access to the government services. Therefore, empowering people can promote efficiency and effectiveness of information and communication

technology services and accelerate the rural development.

For rural ICT success, various elements of social awareness, capacity building, public access and content to provide local needs are considered essential (Girard, 2003). The efficiency of ICT is depending on the environmental, technical, human, social-economic and geographical conditions (Chand *et al.*, 2005). Empowerment strategies have to create awareness about the facilities and opportunities that ICT can have in developing countries and to create, facilitate the use of ICT through the communication centers. The necessary changes in the program languages and cultures in different countries are to be followed for development. (Bastian and Bastian, 1996). To design ICT program services in the rural areas, an attention in the following branches of information services, capacity building, sustainability, technology and policy planning are to be given (Opena, 2004).

According to the literature, awareness, vision and technology approaches should be adopted, in order to empower villagers to use ICTs. Various aspects of empowerment have been shown in Fig. 1



**Fig. 1 : Essential elements of rural empowerment approach in using ICT services in rural**

With this purpose in mind, the following objectives were compiled:

- Investigation of rural people awareness in use ICT service
- Suitable content for rural people empowerment
- Identification of solutions to empowerment to use ICT service

Knowledge and information should be provided for people effectively as they can use it in their life. Empowering rural people to use information and

technology is necessary and important. In order to develop information and communication services in rural area, services offices have been established, but the villagers do not know how to use the services offered. This research identified the empowerment solutions for rural people in order to use services offered by ICT service offices. Currently we have access to 75% rural populations; therefore, empowering people can promote efficiency and effectiveness of ICT Services and accelerate rural development.

The proposed model for empowerment of rural people is based on Paulo Freire's theory of empowerment education that consists of "listening-dialogue-action cycles" to help the participating members reveal their values, gain local insights, and develop their leadership abilities. The model also uses participatory action research (PAR) methodology that follows the cycle of "analysis-action-reflection". High fertility always has a direct impact on the health and well-being of women. It is also true that in terms of gender, women are the disadvantaged group in most societies.

The first hypothesis is that the empowerment of rural people will facilitate the illiteracy people.

The second hypothesis is that rural people will help in controlling the provision of basic family planning services and improve their living.

The rural people are the main focus of this model because of two hypotheses. The model assumes that by bringing rural people together to discuss the problem and to seek a solution, a sense of individual and group empowerment will develop. It is also believed that rural people know a great deal about their own community and that the group process will enable them to use their existing knowledge and experiences to critically analyze the problem of high fertility in their community. This analysis will enable them to develop critical consciousness regarding the problem and its causes. Empowerment is an outcome when there is a sustainable change in the performance of rural people.

## MATERIALS AND METHODS

The methodology of implementation of the project is essentially people-oriented. Extra learning opportunities are necessary for the operation of a successful program. The program must have adequate facilities in which it is to operate. Sufficient supplies and materials must be available to implement the instructional program and technology for learning activities is also an important enabling factor. There must also be adequate transportation to ensure student safety in movement

between centre, program, and home. Finally, the program must have a strong accountability process that can measure the progress of the people, be used for program improvement, and demonstrate the effective stewardship of program funds.

- Create an appropriate learning environment.
- Develop the Community Involvement
- Frame the curriculum.

The structure for the curriculum is built on the three areas:

- Community needs
- The current curriculum
- Strategies for development
- Training based on the curriculum
- Assessment of Program

### Create learning environment:

The location of study is Tuticorin - the district with educationally backward people in rural areas. 5 villages from the district were chosen. Due consideration was given to the representation of SC, ST and other population within with Backward class were also chosen. A member of the region was asked to make available covered space that belongs to him / her and was lying unused. When such a space was not available, bamboo and thatch were contributed for construction of a covered area that can accommodate upto 25 students. The community decided the timing of the education centre. The centre usually runs for a period of three hours on a working day. The timing in different centres could vary from early morning hours *i.e.* 8.00 to 10.00 a.m. to late afternoon hours *i.e.* 2 p.m. to 4.00 p.m. On weekends from early morning hours *i.e.* 8.00 to 11.30 a.m. to late afternoon hours *i.e.* 2 p.m. to 5.00 p.m.

### Community involvement:

Sending the youngsters and children to training is the major role of the community. Several parents have initial inhibition in sending their girls. However fears were resolved through discussion in a group. Adult female group members were encouraged to attend. A female teacher is preferred. Getting a trained teacher at village level is out of question, it has been difficult to find educated persons too. Considerable time and effort was, therefore, spent in training of persons who were placed in the role of teachers by persuasion. The teachers were given training to create awareness about education on ICT, job facilities that are available and their security and also to motivate them.

### Frame the curriculum:

The curriculum is based on the community needs,

the current curriculum and strategies for development. The Community needs includes the behavior, hygiene and environment. These are extracurricular aspects that the training is made responsible. As participants of the program often have no background of schooling, even small things like whether the child has washed the face, wore the dress properly, combed the hair, cut the nails, etc. are considered important. The current curriculum includes learning and mastering all the basics of computers and basic PC knowledge skills (MS Office, Hardware and Trouble shooting, Photoshop. Flash, Internet, Printout and Xerox) they need to progress in life. Learning makes use of computer training video tutorials. The use of video lessons for learning any new skill is proven to be the best method to master a skill faster rather than using the old fashioned training books. Attention to speech and pronunciation aspects is also emphasized. The strategies for development include the job facilities in public and private sectors and to earn their living.

#### Training based on curriculum:

The training programme is usually very intensive, as persons of low educational background are given responsible roles. Lab sessions are arranged to put their hands on computer and internet and work on it and to

provide practical skills and knowledge. The attempt is made to develop and retain the interest of the participants in pursuing studies. Participants are taken to educational tour to demonstrate the happenings of everyday life.

#### Assessment of program:

The practical test is conducted to assess their knowledge in computer and accessing the internet.

## RESULTS AND ANALYSIS

NSS and RRC camps are conducted in the villages of Tuticorin district for past ten years. Each time when we met the rural people in the Tuticorin district, we found that there was no improvement in their life style or education. Hence we have conducted a questionnaire to the rural people to know their knowledge in Computer and their awareness about the advances in the field of Information and Technology.

#### Personal characteristics:

The results of this study showed that average age of the respondents was about 37 (36.83) and the average year of their membership in rural organizations was about 7 (6.83). About 39% (38.6) of the respondents had a high school diploma and about 24% (24.3) of them had a B.Sc.

**Table 1 : Empowerment solutions to enable villagers to use ICT services**

Empowerment Strategies	Mean	Standard deviation	Priority
Employing local contact persons	1.81	0.99	-
When did the schools in your area start ICT education?	1.68	0.97	-
Infrastructure at school in your area?	1.65	1.00	-
No. of computer labs			
No. of computers connected to WWW			
No. of Personal Digital Assistants			
What are the computers used for?	1.65	1.05	-
Is ICT education at school in your area implemented at the discretion of the teachers?	1.62	1.04	-
What is the approximate ratio of boys and girls who took ICT education courses either by going to computer training centers or by any teacher?	1.58	1.02	-
Has the school in your area introduced a remote education system via WWW?	1.50	1.03	-
Does awareness program on ICT is carried out in your area?	1.69	1.01	-
What expectations do you have toward ICT education?	1.71	1.04	-
Do you have any concerns about ICT education?	1.62	1.15	-
Simultaneous investment in short-, middle-and long-term training courses	1.71	1.06	1
Improving access to rural ICT	1.68	1.03	2
Start with basic services and gradual moving toward complementary services	1.55	1.05	3
Describing the way villagers can use ICT services	1.62	1.04	4
Developing villagers' skills to use ICTs	1.43	1.08	5
complementary services (e.g., e-learning, e-commerce and e-government)	1.65	0.98	6
Familiar building to obtain benefits and advantages of ICT services	1.43	1.08	7

degree. Most of the respondents (76.7%) were male.

According to the results shown in Table 1, respondents gave top priorities to familiar building to obtain benefits and advantages of ICT services, complementary services (e.g., e-learning, e-commerce and e-government) and developing villagers skills to use ICTs. On the other hand, simultaneous investment in short-, middle-and long-term training courses was the lowest priority solution.

Based on the information collected we came to know that the people are unaware of ICT and they are also willing to know about ICT and services. Fortunately the people in some remote villages heard and use the mobile phones. The knowledge on this will help the study to enlarge the usage of mobile phones and take the ICT very easily to the hands of villagers.

### Conclusion:

Research findings regarding the strategies used to empower villagers in the short term action should be an investment on fundamental plan, facilitation and increased access to education services and will encourage decentralization. Among the long-term focus it also serves as facilitator and an increased access to education. For empowerment it should be as much as possible like the methods for a valuable training of rural people in ICT, emphasizing the benefits of services, awareness on the methods of obtaining services, obtain full service and to encourage using multimedia.

Research findings regarding the content to be presented, should focus on the personal benefits and advantages described in the use of ICTs services, the benefits of service to the local community and the disadvantage due to the lack of use of ICT. Empower villagers to the awareness-communication factor and facilitator-motivator.

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