Research Program: Engendering ICT Policy – Grant Proposal

The Akshaya Project: An Evaluation of E-literacy Programme in Kerala

Statement of the Problem

The United Nations Millennium Summit in 2000 adopted eight Millennium Development Goals (MDGs) indicating members' commitment to development progress at a quick pace. It has been recognized that achieving these goals depend critically on effective and efficient use of available human and financial resources. Policy makers and multilateral institutions are emphasizing the use of Information and Communication Technologies (ICT) as one of the tools to provide the know how and efficiency in attaining the MDGs (World Bank 2003).

Information technology (IT) has a huge unrealized potential in terms of playing a very important role in the integration of social, economic and political life. Unfortunately, a digital divide resulting from the access and non-access of this technology has emerged. This divide between the information haves and have not is more distinct among the most vulnerable category of the population in developing countries: women (Hafkin and Taggart 2001; World Bank 2004).

Women in developing economies encounter gender inequality in terms of lower access and control of resources and availability of opportunities. These factors in turn affect their level of achievement and success in integrating with the society (World Bank 2004). ICT has the capacity to empower women and hence tackle the gender inequality issue by raising social and political awareness and improving their educational opportunities and making them more employable in the labor market (World Bank 2004; World Bank 2003).

The digital divide in India is evident. About 0.2 percent of the total population has access to internet and 23 percent of the users are women (Hafkin and Taggart 2001). The growing prominence of the IT industry in India led to the setting up of the National Task Force on Informational Technology in 1998 which recommended regulatory and promotional measures resulting in the growth of the industry in the country. The passing of the Information Technology Bill in 2000 was a step taken by the Indian government to spread IT to the masses. The Working Group on Information Technology for the Masses was also set up in 2000 as the policy initiative to promote fast and equitable application of IT in all possible areas including infrastructure and services, electronic governance,

education and mass campaign[1]. The Group acknowledged the fact that IT development was important for the socio-economic development in India. Finally, the National IT Mission was set up to implement the recommendations of the Working Group which included keeping the role of the government to the minimal and to train self-employed in the small and unorganized sectors to spread IT and IT related services covering length and breath of the country.

Objectives of the Research

In India, the largest gains in terms of bridging the digital divide will initially be made in the southern state of Kerala. In Kerala, the Akshaya Project was introduced in November 2002 with a view to bridge this divide. The idea was to take technology to the masses.

Kerala is most well-developed Indian state with demographic and economic indicators comparable with those of developed countries. The project is one of the most ambitious projects implemented in any developing country where the IT Ministry of Kerala collaborates with the private sector under the Public Private Partnership (PPP) framework and the project is implemented through the Local Self Government (Panchayati Raj System[2]).

The project was first implemented in the Malappuram district in Kerala. It is one of Kerala's most backward districts. Centres were built to provide relevant skills and information about computers, communication and technology to the common man in Malayalam[3]. As of April 2004, Malappuram was declared as the first computer-literate district of the country with 0.65 million families linked with 615 Akshaya e-centres and high speed broad band internet connection. The scheme has covered 0.55 million people out of which 60 percent are women (http://www.tippusultan.net/news_index51.html). This project is going to be scaled up to the rest of Kerala. Within a span of three years the project proposed to set up 6000 information centres, generate 50,000 employment opportunities and increase investment opportunities to upto Rs.500 crores in the state. Some of the other direct benefits of the project were to assure one computer literate person per household, access to information service and have local community empowerment. There were also some indirect benefits foreseen including cheaper communication, increased use e-commerce and improved public service delivery.

[1] Government was consciously aware of the divide emerging between the information haves and have nots (Government of India 2002).
[2] District level Panchayats were the main coordinators and grass-root level committees ensured 100% participation of the households.
[3] Language spoken in Kerala.

Access and use of IT resources is not the end but the beginning of transformation of social, economic and political life. This is especially true for the women. The question becomes what are the lessons we can learn from the Malappuram success and is this achievement adequate or more needs to be done. Has the position of women in the household improved or have their labor market opportunities increased by acquiring these new skills? Answers to these questions become important not only for implementation of the Akshaya project in other districts of Kerala but also for setting up similar projects in other Indian States. Given this perspective, it is proposed to study the impact of computer literacy on economic empowerment of the women and bridging the digital divide in Malappuram, Kerala.

Methodology

Qualitative and quantitative data will be collected as part of questionnaire filled out by respondents and analyzed using the software *Nudist* and *Stata*. A total of 100 respondents (users) across 10 service providers will be surveyed. Data would be collected under the following heads: household and individual information, purpose for which computers are used and the consequent perceived, actual benefits accruing. A copy of the questionnaire is available on request.

The proposed research would involve conducting focus group interviews with the users, especially women. Focus groups are excellent research tools for conducting an in-depth examination of issues and concepts and reveal variation in perspective and attitudes (Knodel 1993). Each focus group will consist of 7 to10 people. Selection of users would be women within the household who are computer literate and adequate care will be taken to ensure homogeneity level within the groups (age, position within the household and similar income level). In addition, interviews would be conducted with at least 10 service providers. Interviews will also be conducted with key people who were involved with the implementation of the project. The proposed research will also rely on the secondary data sources in particular the statistics collected by the Kerala Government.

Method of Data Analysis

The first step after the collection of data would be to transcribe the focus group discussions and interview which will facilitate analysis of the data. The second step involves looking for patterns and trends within interviews and across focus groups (Kreuger 1988).

Time Line

Dates	Task
October-November 2004	Development and refinement of survey instrument
December-January 2005	Identifying the 10 centres where the questionnaires will be administered to the users
February-March 2005	Administer the questionnaire and conduct the focus group interviews
April-May 2005	Input the data
June-July 2005	Analyze data, compile results and write up findings
August 2005	First draft of the paper will be ready
September 2005	Final draft of the paper will be ready

Investigators

The principal investigators for this project are A. Jayaraman and S.Chandrasekhar.
A. Jayaraman is a doctoral candidate in the Department of Agricultural Economics and Rural Sociology and Demography at the Pennsylvania State University, USA. She is currently working on issues relating to poverty dynamics and intrahousehold bargaining among rural households in Bangladesh. She has also worked on projects relating to usage of internet as a tool for promoting exports by agricultural businesses in Pennsylvania, USA. She will be responsible for analysis of data from focus group discussions using the *Nudist* software. Also, subject to availability of funding through this grant and alternative funding sources, she will be involved with the field work for this case study.

Chandrasekhar has a PhD in Economics from The Pennsylvania State University. He is a Visiting Fellow at the Indira Gandhi Institute of Development Research, Mumbai, India. His primary area of research is decentralization. He has also worked on issues relating to gender inequities in access to water, sanitation and education. For this project, he will primarily be responsible for conducting the focus group discussions and administering of questionnaire. He will also liaison with the Government of Kerala for access to key people who were involved with the implementation of Akshaya Project.

Budget

Expenses	**Description**	**Amount (in Rupees)**
Travel	Two trips to Malappuram, Kerala from Mumbai, India	5000*2 = 10,000
Administering questionnaires	10 service providers	10,000
Focus group interviews	100 computer literate women	250*100 = 25,000
Research Assistant	Required for data inputting	5,000
Publication and Documentation Cost	Questionnaire and focus group packets	2,500
Total		**52,500***

Note: *At the exchange rate of Rs 46/1 $ costs work out to $ 1,141. Subject to availability of funding via this grant or alternative sources A. Jayaraman will also involved with the field work for this case study.

Preliminary Bibliography

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