

EMPOWERMENT OF THE PEOPLE THROUGH INFORMATION AND COMMUNICATION TECHNOLOGY

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Information and Communications Technology (ICT) is creating economic, social, and political empowerment opportunities for poor people in the developing world. Here ICT is the electronic means of capturing, processing, storing, and disseminating information. Direct and independent access to information about prices and exchange rates can transform the relationship between poor producers and middlemen. ICT can help to overcome poor people's powerlessness and voicelessness even while structural inequities exist in the distribution of traditional assets such as education, land, and finance. The issues of content and community participation are key to realizing the empowerment potential of ICT.

To become truly relevant for poor people, ICT applications must be visual and graphic-oriented and should make content available in local language. Before launching any ICT initiative, the information needs of a community should be thoroughly assessed, with the active involvement of the community, and software should be developed taking into account local conditions. In spite of some skeptical arguments against the relevance of information technology in Indian conditions, many people are hopeful of exploiting its potential to spur not only growth in the national economy as a whole, but also to bring in new opportunities to those who are mired in despair. It is in this context, that the role of information technology for people's empowerment acquires greater significance. Perhaps the most outstanding feature of the term empowerment is that it contains within it, the word power. So naturally

it follows that empowerment is about power and about changing the balance of power.

The term empowerment has different meanings in different social and political contexts, and does not translate easily into all languages. Here we can say that empowerment is the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives. According to Mayoux (1998) "Empowerment is a continuous process where powerless people become conscious of their situation and organize to improve it and access opportunities; an outcome where men and women take control over their lives; set their own agenda; gain skills; solve problems; develop self reliance". Local terms associated with empowerment include: self-strength, control, self-power, self-reliance, own choice, life of dignity in accordance with one's values, capable of fighting for one's rights, independence, own decision making, being free, awakening, and capability. Empowerment is of intrinsic value. It also has instrumental value. Empowerment is relevant at the individual and collective level.

In its broadest sense, empowerment is the expansion of freedom of choice and action. It means increasing one's authority and control over the resources and decisions that affect one's life. As people exercise real choice, they have increased control over their lives. Poor people's choices are extremely limited, both by their lack of assets and by their powerlessness to negotiate better terms for themselves with a range of institutions, both formal and

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informal. The empowerment process is one where men and women find time and space of their own, and being to reexamine their lives critically and collectively. They enable men and women to look at old problems in new ways, analyse their environment and situation, recognize their strength, alter their self-image, access new kinds of information and knowledge, acquire new skills, and initiate action aimed at gaining greater control over resources of various kinds. In a way, the term empowerment is often used to describe a process whereby the powerless or disempowered people gain a greater share of control of resources and decision-making.

This paper highlights how ICT can empower poor women and men in four broad areas—

1. Access to basic services
2. Improved governance
3. Support for entrepreneurship
4. Access to financial services

Access to Basic Services—ICT reduce low cost and wide reach of radio and television are enabling the delivery of education to isolated rural areas, and telecenters are becoming the means for the delivery of distance learning and virtual education. ICT training for marginalized groups with low levels of education, from poor women in Africa and India to slum dwellers are creating new opportunities in the job market. ICT can also improve health care delivery to the poor and also simplifying medical data collection, record management, and paper filing processes.

Education—IT offers invaluable tools for women's empowerment through education, particularly literacy education, continuous education nonformal education, and life long education, all of which combat literacy and women's other educational underachievement. This, tool, is a task for community information centers, and some thing that IT could take on more cheaply than any other medium.

Health—In India government-owned enterprise, are working together to optimize scarce health care resources in the southern state of Andhra Pradesh through a system based on handheld computing technology. The Information-Based Health Care Delivery project seeks to reduce paperwork, improve data accuracy, and empower village health care workers to provide timely care and information. The impetus for the project came from the Indian government's interest in improving the effectiveness of preventive health programs in that state and alleviating the heavy burden of data collection and paperwork on health care workers and also responsible for data collection and record keeping on the rural population's growth, birth rate, and immunization rate.

Improved Governance—Information and governance are very closely linked. Information and Knowledge are the bases of informed decision making. When information is not accessible to all, those who don't have it can be exploited. One of the hallmarks of women's situation in developing countries, particularly among poor women and most markedly among poor women in rural area, is their information poverty, which reflects the general disparity between men and women in terms of access to all development resources. If information is power, lack of information is disenfranchisement. E-government refers to the use of ICT by government agencies to transform relations with citizens and business. ICT can serve a variety of different ends for improving governance from better delivery of government services to citizens to improved interactions with business and industry, from citizen empowerment through access to information to more efficient government management. The resulting benefits include less corruption and increased transparency. E-government can be implemented at different stages. At a first stage, departments and agencies se the Web to post information about

themselves for the benefit of citizens and business partners. At a second stage, these sites become tools for two-way communication, allowing citizens to request feedback on a particular issue. At a third stage, websites allow a formal, quantifiable exchange to take place, such as renewing a license, paying a fine, or enrolling in an education course. At a final, a portal integrates the complete range of government services and provides a path to them that is based on need and function, not on department or agency (www.gov.sg.)

Improving Local Governance—ICT can play an important role in improving local governance, connecting poor people to local leaders, reducing transaction costs, and better connecting the poor to services. In Madhya Pradesh, India, Gyandoot, (www.gyandoot.net) a government-owned computer network, is making government easily accessible to villagers, reducing the time and money they spend trying to get to and through public officials, and giving them immediate and transparent access to local government data and documentation. Gyandoot provides the prevailing rates for prominent crops at auction centers for a charge of Rs. 5. It also furnishes information on previous rates and on the volume of incoming agricultural produce. Villagers now use Gyandoot to keep track of the cost of fruits and vegetables in the region's wholesale market and cutting out the middlemen traders. Self Employed Women's Association (SEWA) (www.digitaldivide.org/grants.htm) is establishing Technology Information Centres in eleven districts of Gujarat to provide computer awareness training and basic computer skills for their "barefoot managers," build the capacity of women organizers and leaders, and strengthen their members' micro enterprises. Also in India, TARAhaat (www.TARAhaat.com) has been designed as a portal cum economic system to connect villagers with information services,

government agencies, and markets in their local language. Local business will be franchised to set up cyberkioks (TARAdhabas) for public access.

Support for Poor People's Entrepreneurship—ICT can stimulate poor people's entrepreneurship and the development of businesses in underdevelopment rural areas. ICT allows poor people to access important market and business-related information in a more timely and efficient manner. For example, isolated farmers can use ICTs to access essential agricultural information such as data on crops, input prices, weather conditions, and credit facilities. Further, electronic bulletin boards and databases are allowing farmers to share innovations and technical information. Although women play an important role in agriculture, the major industry of most developing countries, they have very little access to information to help them improve their productivity and increase their economic contribution. Information can empower rural females to participate in decision making, exchange ideas with others in developed and developing countries and improve the quality of life of the people.

IT could provide women farmers with guidance on where and when to sow, harvest, and market their produce to avoid having to off-load their goods at throwaway prices. Women agriculturalists need information on improved farming technologies, access to credit agricultural inputs, transportation systems, product potential, new and environmentally sound production techniques and practices, new markets, food preservation and storage, trade laws, trends in food production, demand, and processing. Women farmer could improve their productivity with information on improved seeds, alternate crops, and weather. They also need to exchange indigenous knowledge. IT are not gender specific but worth pointing out because women entrepreneurs are less likely than men to use

IT in their business, and few projects to accelerate women's small business growth include the use of IT. In fact, few small businesses in developing countries, whether owned by men or women, currently use these technologies. The major information needs of small business in developing countries are for information about supply, demand, finance, the environment in which they are doing business, and skills. Information Technology can reduce administrative costs; speed up business transactions and link local businesses with supply chains.

Support to Innovators—In India, the Honey Bee Network, which was set up in 1989 and has benefited from the support of the IIMA, Ahmedabad is making poor people's innovations and traditional knowledge visible through a multimedia and multi-language database of solutions to local development problems. The linkages between farmers, rural extension workers, and researchers in agricultural institutions will be strengthened by the creation of an Info Dev- sponsored knowledge network i.e. useful for extension workers and researchers to transmit information by sound or picture files to facilitate communication with farmers who are illiterate and who speak various language. The database also features a large number of small machineries, herbal pesticides, veterinary, medicines, new plant varieties, and agronomic practices development by small farmers (www.baramatiinitiatives.com)

Support to Small Farmers—Bhatnagar & Schwere (2000), (www.nddb.org) reported that the dairy sector already uses computers in 2500 rural locations for processing milk buying/selling transactions in a transparent manner and exposes 600,000 people daily to the benefits of IT. The Indian institute of Management, Ahmedabad (IIMA) recognized the opportunity to build on this infrastructure. The computerized system benefited with integrated electronic fat-testing machines, and

giving a plastic card as ID. This has increased transparency and led to faster processing, shorter queues, and immediate payment to farmers. In the traditional methods require hours to calculate fat content, as the measurement process is much more cumbersome, and payment to farmers was made every ten days and had to trust the cooperative society staff's manual calculations of the quantity and quality of milk. The IT system provide to milk producer prompt, accurate, and immediate payment and save considerable time with shorter queues at milk collection centers. The system also reduces the number of employees and increases the availability of daily accounts immediately at the milk collection centre. The society's profit is calculated on the basis of data received from the dairy regarding the payment made by the dairy to the society for the previous day's collection. These accounts can be kept over months to maintain an up-to-date balance sheet and account of profit and loss. Farmers delivering milk to the milk collection centre are given a plastic card also known as smart card (i.e. looks like a plastic credit card and a microprocessor or memory chip embedded in it. The chip stores electronic data and programs that are protected by security measures enabling controlled access by appropriate users. Smart cards provide data portability, security, convenience, and transparency of financial records and transactions) as a form of identification. The card is dropped into an electronic reading machine that transmits the I.D. number to a personal computer. The milk is then emptied into steel through and the weight is instantly displayed to the farmer and communicated to a computer. A sample is also fed into a machine that determines its fat content in seconds, displaying it to the farmer and transmitted it to the computer. The computer calculates the amount due to the farmer on the basis of the milk's fat content. The total value of the milk

is then printed on a payment slip and given to the farmer, who collects the payment at an adjoining window. The farmer who use the computerized system feel empowered and benefit from a more transparent, efficient, and effective cooperative delivery system. The system can incorporate a large amount of detailed history on milk production by farmers is provided in the database in the milk collection centre. The application of computer is also access to data on farmers, their milch cattle, and the past record of transactions. Up-to-date data about each farmer's milch cattle and service delivery can be collected interactively during the farmer's daily visit to the society. This can improve the quality of data and also provide complete data for those societies that have been computerized. With availability of complete data and its analysis, both services and productivity can be improved substantially.

Access to Financial Services—Under the financial microfinance is an important tool for poor people to reduce, mitigate and cope with risk. Computerization, Smart Cards, and software systems providing loan tracking, financial projections and branch management information can reduce costs and help microfinance institutions reach clients more efficiently. Smart Cards with an embedded

microchip containing information on clients' credit histories are helping SKS, a microfinance institution operating in the Medak district of Andhra Pradesh to reduce transaction costs. One of the main problems is the high cost of service delivery to the poor. All cash transactions take place at village group meetings and each transaction takes about 90 seconds per person. Much time is spent not only on paperwork but also discussing terms and conditions and counting coins. Office computerization alone would not bring much time savings because staff would have free time during the day, but not in morning and evenings when people in the village are available in meetings. Smart Cards have been identified as a solution to the high cost of delivery, because they can lead to gains in efficiency, eliminating paperwork, reducing errors, fraud and meeting time. Potential savings in operations are estimated to be around 18 percent. Once all of SKS operations are conducted with handheld computers, a read-only device will be left in each village for clients to check the information stored on the Smart Cards. Microfinance projects like SKS enable poor people and their microbusinesses to gain broader access to financial services (www.baramatiinitiatives.com)

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