# **The Project**

Throughout history, technology has exacerbated the inequities in society. The new information and communication technologies (ICTs) however offer the possibility of creating a level playing field for both the rich and the poor, provided we know how to use them with a commitment to gender and social equity.

In an experiment in electronic knowledge delivery to the poor, we have connected ten villages near Pondicherry in southern India by a hybrid wired and wireless network — consisting of PCs, telephones, VHF duplex radio devices, spread spectrum, email connectivity through dial-up telephone lines, VSAT, public address system and community newspaper — that facilitates both voice and data transfer, and enables the villagers to get information that they need and can use to improve their lives.



#### Pro-poor Pro-women Pro-nature

The entire project draws its sustenance from the holistic philosophy of Professor M S Swaminathan, which emphasizes an integrated pro-poor, pro-women, pro-nature orientation to development and community ownership of

technological tools against personal or family ownership, and encourages collective action for spread of technology.

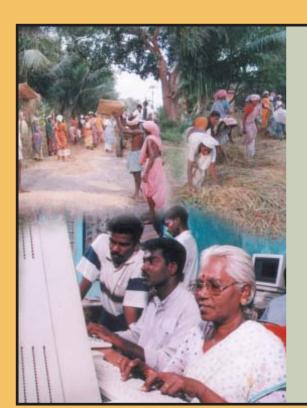
The programme has been designed on the *Anthyodaya* principle of Mahatma Gandhi, i.e. ensure that the poorest person in the village gains from the technology and that technology does not further enlarge the rich-poor divide.

#### **Social Inclusion**

The technologies and the knowledge centres are collectively owned by the community and not by an individual or a family. The knowledge centres are for everybody; no one is excluded: men and women, educated and the illiterate, landed gentry and the landless labourers, adults and children, all have a sense of ownership and pride.

## **Bottom-up Approach**

The bottom-up exercise involves local volunteers to gather information, feed it into an Intranet and provide access through nodes in different villages. Value addition to the raw information, use of the local language (Tamil) and multimedia (to facilitate illiterate users) and participation by local people right from the beginning are the noteworthy features of the project.



### **Global Significance of MSSRF Rural Knowledge Centres**

"This 'information village' and others like it have successfully relied on women from the village itself to provide daily weather and market prices, as well as agricultural and health information, to all the inhabitants. The process starts with volunteer teams that help poll the villagers to find out what knowledge they want. Particularly popular thus far are women's health information, advice on growing local crops and protecting them from diseases, the daily market prices for these crops, local weather forecasts, and clear information about the bewildering array of programs that are provided by the Indian government to aid poor families. Drawing on this concept, I envision a global electronic network that connects scientists to people at all levels — farmers' organizations and village women, for example. The network will allow them to easily access the scientific and technical knowledge that they need to solve local problems and enhance the quality of their lives, as well as to communicate their own insights and needs back to scientists. As scientists, we need to study and learn from these experiments - so as to make a science out of connecting the world to knowledge resources. With the technology moving so fast, it is critical to 'learn by doing' in this way, so that we learn how to make the next wave of the technology even more useful for productive and sustainable economic development."

- Prof. Bruce Alberts
President, National Academy
of Sciences, USA









# **Empowering the Marginalized**

Gender concerns are central to the project. More than half the volunteers are women. This has positively reflected in the increase in the number of women users. Women have formed Self Help Groups (SHGs) and they also help other women in training related to new economic opportunities like incense stick manufacturing, pickle making, phenyl and soap oil production and ornamental artifacts from seashells. Handling of PCs and answering men's questions give women new confidence and status, and influence in the community.

This project has shown that empowering people through access to timely and relevant information can make a difference in the life of the rural poor, and that the new ICTs can play a crucial role in this effort. Information provided in the village knowledge centres is locale specific and relates to prices of agricultural inputs (such as seeds, fertilizers, pesticides) and outputs (rice, vegetables), market (potential for export), entitlement (the multitude of schemes of the central and state governments, banks), health care (availability of doctors and paramedics in nearby hospitals, women's medical needs), cattle diseases, education (public examination results, colleges, courses, hostels), employment opportunities, transport (road conditions, bus timings), weather (appropriate time for sowing, areas of abundant fish catch, wave heights in the sea) and micro enterprises training.

The Knowledge Centres provide information from local, national and international sources. About 50,000 people living in these villages benefit from this programme.

The project has received accolade from scientists, statesmen and development experts. Prof. Peter Singer, Director, University of Toronto Joint Centre for Bioethics has this to say: "I was extraordinarily impressed. Most moving for me was that in the middle of a *Dalit* village, where 130 families live on about \$1 a day and the villagers live in straw huts with dirt floor, stands an information station with several computers and many school children inside working away. That says something to me about the future of those children.



"The success stories - saving lives of fishermen using weather information, improving the price of selling rice using market information, finding employment for villagers as firemen using employment information - were very impressive. The focus on a bottom-up approach, value-added information and economic opportunities were obvious - and obviously effective."

The project has won two international awards — the Motorola Dispatch Solution Gold Award 1999 and the Stockholm Challenge Award 2001. "This project is a wonderful example of the benefits of IT, and of the power of information and opportunity", said the Stockholm Challenge Award jury.

The International Development Research Center (IDRC) and the Canadian International Development Agency (CIDA) support the project. Ford Foundation, Volkart Stiftung, Friends of MSSRF (Japan) and the Government of Pondicherry have provided additional support.

#### **Open Knowledge Network**

In partnership with One World International, MSSRF is building an Open Knowledge Network, which aims at promoting both the creation and exchange of content as widely as possible across the South and to eventually create a network that would connect the rural poor of the world and facilitate knowledge sharing among them.

In the pilot experiment held in March 2003, three information villages, namely Veerampattinam, Embalam and Kizhur, were used to feed local news and a variety of traditional knowledge-based information, government announcements and other suggestions from the public every day. Based on these a daily news-sheet was produced at the fourth village, Kalitheerkalkuppam. All the information from the villages was stored in a specially designed format as metadata, which was uploaded to a WorldSpace satellite. The daily newssheet was downloaded within an hour either through Internet or WorldSpace Radio.

















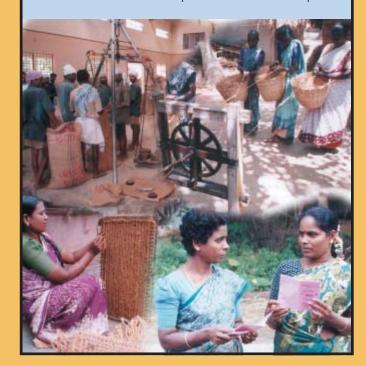


### Doing It Right: Lessons from MSSRF

"The generation of local contents should be essential in any ICT project that aims to benefit rural or marginalized urban communities, and it should be built in since the very inception of the project, not as a complement that may (or, more likely, may not) be implemented as the telecentre develops. A good example of telecentres that really care about providing appropriate information to their constituency is the network known as Village Knowledge Centres, set up by the Swaminathan Research Foundation in Chennai (India). The concept is articulated around community needs, not the opposite."

"There is one thing that we can not separate from any ICT project in Third World countries: the development of local databases and local web pages that are relevant to the people and that take into account their daily needs, their culture and their language. If this is not embedded into a project, I doubt it will have any positive results for the community. This is why the Village Knowledge Centres in Pondicherry (M S Swaminathan Research Foundation) are such an important and coherent experience. While most telecentres that have failed to deliver are like Cadillacs in rural areas, the Swaminathan 'knowledge centres' are like barefoot doctors and the Green Revolution. both of which have delivered and are appropriate to their contexts."

#### - Alfonso Gumucio Dagron **Development Communication expert**





# **Sharing Experience:** South - South Exchange

We hold annual traveling workshops for ICT-enabled development projects in countries in the South. The first workshop held in October 2002 was supported by the Humanist Institute for Co-operation with Developing Countries (HIVOS), International Institute for Communication and Development (IICD), and International Development Research Center (IDRC). The second workshop in 2003 was supported by Global Knowledge Partnership (GKP) and HIVOS. An average of twenty participants come every year from different countries. The participants spend two days at MSSRF, Chennai and the remaining days in the project villages, where MSSRF knowledge centres serve the local communities. The exchange programme includes visits to the rural knowledge centres and discussion with the community on how to strengthen the multiple livelihood opportunities through information and communication technologies. The objective of this annual workshop is to learn from one another.

In collaboration with Bellanet, MSSRF organized an international workshop on knowledge management for development workers.

With the experience gained from the knowledge centres, and with generous support from the Tata trusts, MSSRF has set up a National Virtual Academy for Food Security and Rural Prosperity (NVA) to foster a knowledge revolution in rural

supported by







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# **Rural Knowledge Centres**

**Reaching the Unreached** 

