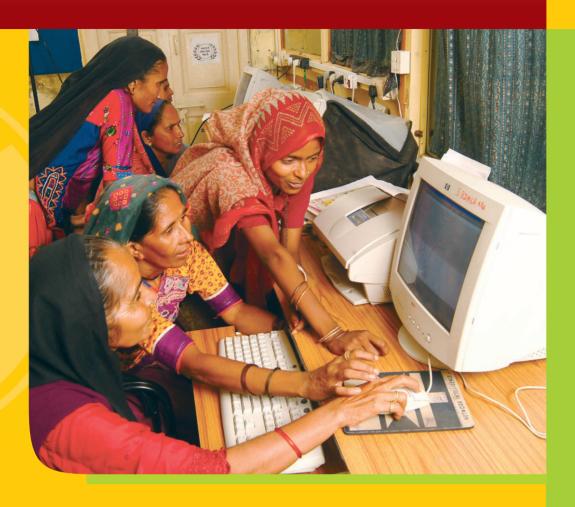
ICT@SEWA



The Story of Women Empowerment & Livelihood







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An Opportunity for South Asia

Information, when in public, has tremendous power. Technology, when gainfully applied, also has similar power. But when both are combined, as are in Information Technology, the power seems limitless, and possibilities seem endless. For example, Information Technology has

changed the role of India, in fact South Asia, in the world economy in less than a decade. From, nowhere, almost overnight, global corporate giants have come up in the region. Some of the key aspects of governance, including taxes and targeting, are now available on-line. The list of changes is much longer and rapidly expanding.

Information technology, by nature, is democratic and decentralized. As a result, if fully used, it can ensure growth with equity. Benefits of Information Technology can reach out to larger number of poor and hard working Indians, citizens of South Asia, and join them in this mainstream of economic growth. For Self Employed Women's Association (SEWA), and many other organizations in South Asia engaged in fighting poverty at the grassroots, this opportunity is too good to be missed. It is with this idea, SEWA took the plunge in finding individual, institutional, and policy environment related information technology activities that enhance livelihoods of the poor. It is now almost ten years since this plunge and some of the process (struggles and achievements) are well recorded in this case-study prepared by a highly perceptive team of Indian Institute of Management, Ahmedabad. We hope that this document is of use and interest to both, the policy makers and the practitioners, alike, in South Asia.

What we are doing with individual poor women and her organization is not easy, but in the face of all difficulties (political, financial, technical and administrative) we are moving ahead. What we need is additional resources, technical and financial, that help us upscale and wide-scale such efforts.

We also need direct and effective partnership with the UNDP, the governments and private sector in the region to create pro-poor and livelihood focused environment, policy and knowledge environment that enables these individual and institutions to expand and succeed. We are sure that this support is there and increasing.

With deep respect for the achievements of the individuals whose work is recorded in this case study I welcome any suggestions to improve and expand our work of making Information Technology empower poor and women in South Asia.

Reema Nanavaty

Director, Economic and Rural Development Self Employed Women's Association, Ahmedabad



Acknowledgement

We are thankful to our sponsors







SEWA members are grateful to UNDP-JWIDF for believing in them and providing them the opportunity to venture into the exciting field of Information and Communication Technology (ICT) with the basic purpose of building capacity of women micro entrepreneurs in the informal sector. UNDP-JWIDF's initial funding and critical support to the ICT initiatives in the form of computer hardware and peripherals, has set up the base enabling the present rapid expansion and growth. SEWA is also grateful to UNDP-JWIDF for continued support in setting up the first Community Learning Centres (CLCs) which have been instrumental in expanding the outreach of ICT. Without this support it would have been difficult to reach and link the remotest villages and most needy members with the ICT initiative. This support also enables SEWA to highlight its ICT activities worldwide, which catch the attention of other organisations & agencies to support SEWA in this noble cause.

Special thanks are also due to Microsoft Unlimited Potential for providing the necessary support by a project that aims to take IT to underprivileged persons in the state of Gujarat with the intent of empowering them with knowledge economy skills and access to information. The unlimited potential program has enabled the rapid training of a large number of SEWA members linking them to livelihoods and the rolling out of non ICT services using the ICT backbone from the CLCs.

It is the generous support of funders and partners that has enabled SEWA and its members to build this success story. ICTs have completely changed their vision for the future and helped to develop the dreams for their children. The dignity and self-respect gained by the women members is by far the greatest compliment to the support of funders and partners.



"Having joined hands with SEWA I have transformed my own life. By being able to earn I have brought respect for myself in the family and the community. Now my own name is my identity and my son is often called 'Gauriben's Son' (There was a time when my son was known by his father's name). Sitting in my remote village, ICT is my gateway to developing a better understanding of markets which helps me and the women associated with the center to deliver good quality output for the market. ICT is not just a platform for growth but it is an expression of self-confidence and self-respect."

Gauriben, Village Bhaktura, District Patan



The story of Gauriben had been one among the many who at about 40 shows the determination of a young heart all confident to reach the top of the world. Ms. Monaben Dave, CEO of SEWA (Self Employed Women's Association) Trade Facilitation Centre was constantly reminded of the determination and the dreams of the likes of Gauriben. She was preparing to meet the Executive Committee of SEWA to review SEWA's project on 'Building' capacity of women micro-entrepreneurs in the informal sector through Information and Communication Technologies (ICT)'. The purpose of the project was to develop a comprehensive program that exposed self-employed women to ICT and equipped them to use this tool to improve their quality of lives and thereby become users, controllers and managers in addition to being producers of their work. The project, initiated in December 2003, was expected to optimally and appropriately utilize emerging trends in technology for primarily achieving economic empowerment of women members of SEWA. The project, innovative and one of the first of its kind, had weathered the challenges in initial days to march ahead towards achieving the goals it had set for itself. For the same, SEWA had utilized newer and efficient forms and applications of emergent technology, which facilitated the work of communities and micro enterprises of poor women belonging to the informal sector. The technologies experimented with and successfully used in routine work of members included internet, electronic mailing, telephony, and video communication at villages, districts and main offices of SEWA. Some of the challenges had been handled with creative solutions. The Executive Committee wanted to assess the long-term impact of initiatives taken. Also, the Executive Committee wondered if SEWA was ready to face the upcoming challenges and take up replication of project across the many more villages where SEWA worked.



SEWA's Genesis

SEWA, registered as trade union in 1972, evolved as an organization of poor, selfemployed women workers who earned living through their own labor or small businesses. These women, unlike the workers in the organized sector, did not obtain regular salaried employment with welfare benefits. As per estimates of the female labor force in India more than 94 percent had been in the unorganized sector (source: www.sewa.org). This unorganized sector consisted of jobs as diverse as hawkers, vendors, head-loading goods in markets, stitching cloths at home, rolling beedis and weaving cloth. SEWA had pioneered an economic revolution amongst these poorest women by providing much needed financial independence and ownership of economic resources.

SEWA was founded in December 1971 as a workers' association consisting of women cart-pullers and head-loaders in Ahmedabad's cloth market. It grew out of the Textile Labour Association (TLA), India's oldest and largest union of textile workers. It was registered as a trade union of self employed women in April 1972. It grew continuously from 1972, increasing in its membership and including more and more different occupations within its fold. Till 1994, SEWA's membership was predominantly urban. This was partly due to SEWA's origin and base being at Ahmedabad. However, in the late eighties, SEWA intensified its rural organizing, with the resultant increase in membership from rural areas. In 2006, of SEWA's 483,012 strong membership in Gujarat, 60.77% was rural and 39.23% urban. Mass mobilization through campaigns had strengthened the SEWA movement and highlighted pressing issues identified by local women leaders. SEWA's main goals had been to organize women workers to achieve their goals of full employment and self-reliance. For SEWA, full employment meant employment whereby workers obtained work security, income security, food security and social security (at least health care, child care and shelter). Similarly, selfreliance meant that women should be autonomous and self-reliant, individually and collectively, both economically and in terms of their decision-making ability. SEWA organized workers to achieve their goals of full employment and self-reliance through the strategy of struggle and development. The struggle had been against the many constraints and limitations imposed on them by society and the economy, while development activities strengthened women's bargaining power and offered them new alternatives. Practically, this had been achieved by organizing rural and urban impoverished women into workers' group and cooperatives.

Initially, women were organized in specific trades and encouraged to demand better wages. Initial organizing in Ahmedabad city developed considerably through the campaign approach, whereby workers of the main trade groups participated in and developed their own economic issue-based campaigns after they had formed their union. Thus, *beedi*-workers, readymade garment workers, vendors, construction workers and those engaged in small industries as contract workers, organized struggles to improve their working conditions and wages or earnings.

Similarly, while undertaking organizing in villages, at first rural women workers were organized by the traditional union strategies. There were many struggles for minimum wages. During these struggles it was realized that the basis of obtaining higher wages had been the capacity and power to bargain. However, the workers in



these areas had neither this capacity nor the power, because they were weak and vulnerable due to their lack of employment opportunities. In a situation where there had been an almost unending supply of labor and, at the same time, limited employment, the workers were unable to bargain for higher wages. SEWA soon realized that agitation and negotiation for better wages was not always the best solution. It was more important to strengthen its members through awareness programs and to provide them with alternative source of livelihood and increasing local employment opportunities. Applying lessons learnt from the activities taken up in the field had been an important feature of SEWA activities that the organization has used to enrich future planning and implementation of programmes.

SEWA organized women workers to achieve goals of full employment and self-reliance.

The strategy followed by SEWA for organizing its rural members had focused on:

- Increasing employment opportunities for women and thus increasing women's bargaining power.
- Developing women's assets.
- Capacity-building and leadership development of rural women.
- Providing food and social security

Presently SEWA has operations spread over many states of India. Its all-India membership has steadily grown from 320 in 1973 to over 900,000 in 2006. More than half of the members are from Gujarat state which happens to be the hot-bed of all activities undertaken by SEWA. The rural development programs are covering most of the drought prone districts of Gujarat where lack of employment, very low wages, poor health, crushing debt and high rates of migration are rampant. Self-employment among rural women gets a boost through the efforts of SEWA.

SEWA's ICT Activities

World over, ICT revolution has driven numerous initiatives by using new technologies for poverty alleviation and socioeconomic development. SEWA realized the potential of new information technologies in facilitating capacity development, supporting cooperative efforts and reducing vulnerability by increasing access to information, particularly about entitlements and programs.

In Gujarat, villages are scattered far and wide and a significant amount of resources, time, money and energy were wasted by women in just commuting between villages or communicating with the government and the outside world. ICT would have enabled

poor people, particularly women, living in remote areas to access vital information related to their trade, livelihoods, government schemes including *Panchayati Raj* (local self-government), seeking and sharing expert opinions on disaster management, management of enterprise, marketing of produce and products. ICT represented a powerful strategy for overcoming various notions of a 'digital divide' and making the information available to the powerless.

This potential and the need were even greater in the context of informal sectors in rural areas. Expansion of SEWA activities across many districts and activities was posing a communication challenge within



the organization in order to better serve the needs of the community. There was a need to achieve greater efficiencies, effectiveness and flexibility in activities for further and faster growth to keep abreast with the changing environment. The modern world had seen emergence of many newer and efficient forms and applications of technology, which could facilitate the work of communities and micro enterprises of poor women belonging to the informal sector. Also, it was felt that the key to survival in the emerging global economy and knowledge society was the ability of education systems to produce learners who were innovative, flexible, collaborative, and emphasized problem-solving in their knowledge and understanding. SEWA's ICT initiative sought to achieve this as well.

SEWA envisaged ICT project as an integrated approach to development which focused on building capacities of SEWA members so that they enter the mainstream economy and thus sustain their livelihoods. The rural poor women had already been exposed to communication technologies such as telephone, radio, and television.

However, access to these technologies had been highly restricted. Though they had been deployed for alleviating the problem of distances in remote areas they had not yet been linked with enterprise related activities to ensure sustainable livelihoods. SEWA, over the past decades, had experimented with and successfully used many forms of technology. Tools like Internet, Electronic mailing, Telephony, SatCom (refer Exhibit 1), Video communication were used by SEWA for communicating across offices or presenting the latest handicrafts to prospective buyers across the globe or for educating the members in far-off locations or for relaying critical information during disasters. The challenge for SEWA was to deploy mainstream or customized technology solutions to fulfill the needs of communities and groups of women at village and village-cluster levels. Training, capacity building, awareness creation and careful planning were seen as the cornerstones on which SEWA could carry out the activities for overcoming the The project covered ten challenges. districts of Gujarat state, India and was coordinated by a central ICT Cell at Ahmedabad, Gujarat

SEWA envisaged ICT project as an integrated approach to development, focusing on building capacities of members for their entry in the mainstream economy. However, linking with enterprise related activities to ensure sustainable livelihoods was a challenge. There was a need to achieve greater efficiency, effectiveness and flexibility in activities for further and faster growth to keep abreast with the changing environment. ICT represented a powerful strategy for overcoming various notions of a 'digital divide' and making the information available to the powerless.

Community Learning Centers

SEWA operationalized the ICT vision by establishing Community Learning Centers-CLC envisaged as the 'hub' or centre of activity for a cluster of ten to fifteen villages (Refer to **Exhibit 2** for SEWA's holistic development model by establishing CLC). CLCs were established keeping in mind that the women in the rural communities

had requirements of diverse information while they had the least access to information and communication technologies. Therefore, there was a constant need for information on people's entitlements, enhancing their capacities, accessing markets, technical solutions for livelihoods as well as technologies to cater



to these requirements. These CLCs offered a gamut of services - ICT training, capacity building, skill upgradation, disaster mitigation related activities and trainings, childcare, hub for village database etc. All these initiatives were directed towards SEWA's aims to develop a sustainable ICT-based model for addressing economic and social problems, resulting from a lack of access to needed information. While establishing CLCs special attention was paid to the role of the infomediary and the processes by which ICT-based interventions could be effective in sustainable livelihoods generation.

SEWA had started with a participative and holistic approach while developing the concept of CLC. The participation of local people involved selection of village resource person for CLC in the *Gram Sabha¹* and recruitment of local village member for CLC. People's participation in CLC activities was ensured through participatory management process and decentralized decision making. In order to bring in maximum village contribution and participation, the endeavor had been to locate the CLCs in the community areas to ensure the community's involvement.

SEWA collaborated with local selfgovernment bodies like Village Panchayats, District Rural Development Agency and other like-minded organizations in setting up the infrastructure for the CLCs. These local self-government bodies provided a small building or room to house the CLC and some basic amenities. Initially, all efforts were made to obtain the place for CLC from the Gram Panchayats themselves. Wherever this was not possible, the next best alternative was considered. Thus, SEWA's CLCs were set up in the village community centre, Gram Panchayat areas, schools/institutes and in extreme cases, even in rented places. In Patan and Surendranagar districts, where SEWA



started running CLCs from its own constructed buildings, the land was provided by *Panchayat*. Wherever space permitted, an in-house CLC had been started at the district association premises of SEWA. This also served as a showcase of technology as women members poured into district offices at all times for their work and were exposed to the CLC concept and encouraged to try out and use the CLC for their routine work. Currently more than 30 CLCs had been operational in ten districts of Gujarat. (Exhibit 3)

A unique innovation in rolling out CLC, was the concept of mobile CLC. The geography and demography of Kutch translated into a dispersed livelihood profile. This meant that reaching out to the dispersed populace was an additional challenge here. In the wake of postearthquake operations, SEWA was offered a bus for reaching out relief and other facilities to the remote villages. Post earthquake this bus worked as mobile school for the salt workers' children since almost all day care centers had collapsed. There was a need for continuing the day care centers to help the children who were in trauma. This school proved to be a blessing later on for salt workers' children who had to live with their parents in the desert areas for almost 8 to 9 months. The mobile school provided not only education but also recreation and entertainment activities.

¹ Gram Sabha is a body consisting of persons registered in the electoral rolls of a village or a group of villages which elect a Panchayat.



The pro-active leadership of SEWA developed the concept of a Mobile-Van which took the various facilities and functions of a CLC to these remote villages. This novel concept has been replicated with added activities according to the need of the people residing in the remotest villages in Kutch. It was an ambitious step ahead to make CLC at your doorstep a reality. Recently a bigger bus has been procured to function as a mobile CLC. The mobile van is a unique concept of reaching out to the remotest area and the poorest of people like those in the remote salt pans. It therefore also achieves mainstreaming of remote areas and the poorest of the poor who reside there by offering all facilities of CLC to these people.



The route planning for mobile-CLC-Van has been done in a way that it reaches a village on affixed days of a week based on a pre-decided schedule. The design of the route is such that all remote villages are covered and almost all facilities of a CLC are meted out to the people. It offers health and treatment facilities, computer training facilities, library, facility for sale of RUDI products, IEC (e.g. Sewa Video) material. It even carries huge robust tents that are put up while the van is in a village. These tents serve as day care centers and child care centers.

The CLCs under a district were coordinated by respective IT team leaders who were incharge of all IT activities in the district. IT team leaders were continuously trained in different areas related to their work. They were given extensive training in handling hardware problems. As a result, they were able to handle even very complex problems on their own. In addition to class room trainings, IT team leaders were also sent on exposure visits to understand new applications/ IT tools so that they could be replicated at CLCs in the districts. Capacity building of these IT team leaders was done so that their level of proficiency in handling and managing the CLCs was enhanced. This had enabled IT team leaders to increase productivity and spend less time in carrying out planning and other activities at the CLCs.

The mobile van is an unique concept of reaching out to the remotest area and the poorest of people like those in the remote salt pans.

Technology at CLC

Hardware

Each CLC began by housing 3-5 computers. In addition to the desktops, CLCs were equipped with the necessary peripheral hardware - printers, fax machines, scanners (where needed), digital

cameras (in a few CLCs), and local area network (LAN) to connect these pieces of equipment. LAN networking at the CLC had been made a part of the basic set up, allowing for sharing of course-content and



practice sheets amongst the training participants, resulting in inspired group work.

Communities at the cluster level had quick and easy access to these tools of modern technology housed at the CLCs. Under supervision, they were encouraged to experiment with these ICT tools. Often, the idea that rural people were not 'urban educated' or did not know English made them wary of even trying out a keyboard or clicking a mouse. They also wondered how using a computer or having access to electronic emails could help them. Gradually, through orientation workshops, SatCom programs and in general village meetings (Gram Sabhas), they began understanding the nuances of technology and often came up with their own ideas of how they could use these tools effectively in their work.



In case of technical problems, routine trouble shooting in the CLCs had been handled by the IT team leaders themselves. When the problem was complex, an IT person from the main office in Ahmedabad was sent to address the problem. However, the guiding vision had been to make all the CLCs capable of solving their problems themselves.

To start with some of the users were afraid to even touch the equipment. Mamtaben Rathwa from Bodeli (a predominantly tribal and backward area of Vadodara district) says "I was afraid to touch the computer in the beginning. I wondered if something went wrong then I might be held responsible. Also I was afraid that if something went wrong it would take about a week or two for repairs as initially the IT staff from Ahmedabad was the only one who could do that. We had to wait for them." Her trainer Leelaben explains "I told her that she was used to using other electrical equipments at home. The computer was just another such equipment that she could learn to use with ease."

Software

The front-end user interface at CLCs started with software applications for microfinance and artisan-producer groups. It included small desktop applications for collecting, storing and transmitting data in pre-determined formats which had been implemented at the district association offices of SEWA and at some CLCs. Later on, operating systems and software packages from Microsoft were also installed at CLCs. The quest had been for constant exploration and implementation of new technologies in various areas so that women-member benefited. For the same,

two new technologies, namely the MIS system of Microsoft Navision and the Oracle applications had also been taken up. The members of the spearhead team for a particular activity, along with team leaders and computer-literate members were imparted training in using these software applications.

Typically, it was seen that if the front end user interfaces were available in the local language, the members were able to relate to and learn the intricacies quickly. On an average, it took about three to four days of



classroom training and a similar duration of handholding for the member to confidently start using the software package. The efficiency in transaction, processing, coupled with the speed of operations excited the team leaders whose majority of time, until now, was spent in painstakingly filling up pages of registers for immaculate record keeping. As a result, the drudgery of record keeping was eased and she could spend time in taking informed decisions, once the information summary and other reports were made available to her through the software. This additional time available to her enabled her to qualitatively reach out to more women in her community.

Content

Suitable and appropriate content (on CD-ROMs and other forms of electronic media) were provided at the CLC on desktop computers. Over the years, SEWA had used the medium of video to depict best practices in hygiene, healthcare, and childcare. These video films also documented the struggles about lives of the members and how they were able to attain a degree of selfconfidence and respectability in their communities. The CLC played these videos on a regular basis and this proved a 'crowd puller' with twin benefits of exposure to modern technology and how it could benefit them. These video films were also played at village meetings at a pre-determined schedule and venue. It was observed that providing interesting and relevant content at the CLC increased the traffic at the CLC and also motivated these people to operate new technology, tools and applications. In addition, neo-computer literates used this content for further practice sessions, along with their regular curriculum.

SEWA members, when visiting CLCs, often asked about usefulness of modern technology for rural women. To answer this frequently asked question, a short documentary film was played which highlighted the role of ICT in the lives of the poor, rural women - using telephones, cell phones, fax machines, photocopiers, video cameras, laptops, personal computers. The film had intentionally touched upon the minutest of IT technology (e.g. Calculator) as well as the advanced IT tools. Against the backdrop of the harsh reality of their environment and their daily struggles, the film gave an account of how the utilization of ICT began at SEWA and the advantages as experienced by these women. The documentary also provided a fair amount of clarity on the work done in ICT at SEWA and the impact experienced at the grassroots.

Connectivity

Connectivity, especially in Indian rural setting, had always been a challenge. However, penetration of basic telephony system in the state of Gujarat had been fairly adequate; hence dial-up connectivity with a modem connecting to the closest Internet Service Provider (ISP) was possible in most of the districts where SEWA had operations. The national telecom carrier (BSNL) provided ISDN (Integrated Services Digital Network) connectivity in rural exchanges, which had turned electronic now, at reasonable rates and 128 Kbps of

bandwidth. In first round, district associations were equipped with ISDN connectivity to enhance internet usage and promote other means of electronic communication. Thus, members had access to internet with medium to low bandwidth at the district offices where internet access had been used primarily for electronic mailing, data transfer across locations and accessing the World Wide Web (WWW). A beginning was made in transferring all reports and data of the districts to SEWA offices over the internet.



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In next round, CLCs at village level were connected with internet through ISDN lines. In some cases connectivity was established through VSAT procured by SEWA. With internet connectivity CLCs were provided with videoconferencing units which had proved very useful in facilitating discussion and addressing of problems by engaging experts who could otherwise not reach the rural areas. Even then connectivity had continued to pose challenges as a number of CLCs were not connected with others. The problem needed early resolution as in the case of craftrelated activities SEWA was planning to establish common production centers at the village level. The challenge had been in finding ways to connect all the levels of production. Similarly for salt workers who worked in fields that lied in deserts faraway from the villages, there was a need for speedy information on the quality, grade and technical details about the salt that they were producing. They needed some kind of connectivity with the labs at the villages/district centres. Similarly, there were other examples where the need for connectivity was felt. Connectivity not only helped individuals in their respective trade activities but also helped the community gain access to larger markets. Reemaben Nanavaty, Director, Rural Economic Activities-SEWA, says

"There is need for communication tools when enterprises start growing. Often the community itself identifies the means of communication which will help them to achieve their goals. The organization needs to respond to this requirement by providing appropriate communicating technology and tools."

This led the ICT Team to work out a plan for deploying different means of connectivity up to CLC level in villages. The options available for establishing connectivity between two clusters included VSAT, mobile phones, radio connectivity, leased lines, and Wi-Fi. ICT Team studied the feasibility of implementation for these options vis-à-vis factors like availability of infrastructure, cost, maintenance and other issues for its implementation.

Connectivity problems at few of the CLCs were resolved when ISRO provided support in the form of set of equipments. This comprised of audio system (including amplifier), speakers, computers, battery, dish antenna, and video camera (with stand). These equipments were used to organize 2-hour video-conferencing programs (two-way exchange of both audio and video) where members could interact with experts from Ahmedabad at a very nominal charge. Every month, there were 9 such programs scheduled, covering different topics.



Training, capacity building, awareness creation and careful planning were seen as the cornerstones on which SEWA could carry out the activities for overcoming the challenges.



Activities at CLC

The CLC was seen as alleviating the problem of distances in remote areas. By linking up with enterprise related activities, SEWA envisaged CLC as an integrated approach to development which focused on

Training Activities

SEWA's Community Learning Centre has evolved as a multi-purpose training centre running a wide variety of activities to uplift rural, poor women and children who had no access to formal education and livelihood opportunities (Refer to box for range of technical trainings). SEWA attempted this by harnessing the potential of ICT. The objective was not to teach stand-alone technology, but to use technology to spark learning and inspire collaborative learning that enabled participants to apply their skills in meaningful initiatives which improved the economic well being of the community. In SEWA's CLCs, women and young girls from low income neighborhoods were given access to ICT resources, imparted skills and given hands-on experience to help them succeed in their careers, contribute to their communities and lead outstanding lives.

One such example has been Vanitaben (she comes from a remote area of Kutch where one can not find proper conveyance till miles) who had studied up to 7th class only. She was unmarried and living with her mother and had no source of income. When she got to know that SEWA is implementing computer literacy project with Microsoft India, in her village Naredi (there were no computers in Naredi and nearby villages), she showed her interest to join the computer training programme which included long travel in challenging circumstances. After receiving training, now she can repair computers on her own. She can do data entry work also by which she earns significant income for her family. She received TOT (Training of Trainers) and is presently coaching other members. capacity-building of SEWA members. Training, capacity building, awareness creation and careful planning were seen as the cornerstones on which SEWA could carry out the activities for overcoming the challenges.

Examples of Technical Trainings

- Calculator operations
- Mobile operation and SMS
- Fax operations
- Xerox operations
- Computers related trainings
- Basic computer training
 - Software
 - Hardware
 - Multimedia
 - Internet surfing
 - GIS
- Telephone repairing
- Handling TV and Video operations
- Equipment connections
 - Video shooting
 - Video replays
 - Connection of SatCom Operations
- Photography
- Usage of milk testing and fat testing machines
- Salt testing
- Industrial salt making

Simultaneously she started taking part in the other SEWA activities and this facilitated her to know more about the outside world as she used to come to Ahmedabad every month to attend monthly meeting. This in turn, has transformed her life and boosted her inner confidence. She has been called by the village *Sarpanch* to help them in their computer work. She is self-reliant and lives with dignity. Even her mother is respected by all villagers. Examples like this have helped inspire populace to seek such



trainings. For ex, in each CLC in Mehsana district there is continuous waiting list for trainees. They feel that there should be more computers and training batches. The CLC team has solved this problem when they received hardware training and themselves assembled working computers from old and unusable computers.

CLC met the needs of young women for a creative and safe learning environment where they could work with adult mentors to develop IT skills, explore new ideas and build self-confidence. Similarly, children, who were disadvantaged by poverty and lacked access to resources and opportunities, were also covered under the training program. ICT in this instance was also used to get children back into school by making learning fun. Many children were inspired to re-enter formal schooling system after their learning experience in CLCs.

SEWA realized that one of the most challenging aspects of ICT intervention was computer training. While using a telephone or calculator or fax machine required minimal coaching, the operation of computers necessarily presumed a basic skill. Hence, it was perceived that lack of knowledge of operating a computer was an obstacle in its more widespread use. The problem was compounded by the lack of self-confidence coupled with the myth that computers are meant only for 'properly educated and urban people' who knew English language. Through trial and error and extended brainstorming sessions, solutions to these challenges were worked out and implemented successfully at CLCs. Each round of training threw up facets not previously experienced, which were then fed back into the training system for the next round, thus ensuring continuous improvement of pedagogy and practice.

The training curriculum was prepared on the basis of the training need assessment. Initially, members received the basic IT training. Members from various activities



like craft, micro finance, nursery plantations, adult literacy, salt production, dairy, village development committees were identified for each batch of computer training by the district association office and also at the behest of the members themselves. From amongst these members, few were further identified who received a 'Training of Trainers' and in turn imparted training to new batch of members. This was done with the objective of members providing training to their colleagues as it was observed that when the members themselves trained their colleagues, the latter were more open to learning, did not hesitate in asking questions and motivation levels were higher. Thus, a number of master trainers were trained and these women conducted trainings on basic computer usage. The table below gives brief details of trainings conducted

Types of Training	Number of Trainees
Total trained members	8000
TOT training	1000
Non-Computer training	25000

In the initial period, while the CLCs were being setup and made fully functional, training programs were held at Ahmedabad and at the district offices. In some cases, an academic institution had trained the members of SEWA at nominal costs, in their premises. This comprised the first batch of fifty women trained on computers. Once the CLC set-up was formalized and equipped, almost all the training sessions were



conducted at CLC premises. Thus logistics became easier as these CLCs were more conveniently located for the members. Often, the participants themselves decided about the venue for holding the training session. Care was taken to ensure that a particular batch had maximum trainees from the nearby villages of the CLC. Given the vagaries of nature or at times, a sustained electrical failure, the district association's computer training centre was designated as the venue.

As mentioned earlier, initial training of members was done by tying-up with local IT institutes. These included the LD Engineering College (a leading engineering college) in Ahmedabad as well as private institutes at Bodeli and Bayad. Also, BBIT and DDIT institutes at Anand and Nadiad respectively and ACT (for Multimedia and Hardware) were involved in training programs. However SEWA's endeavor had been to develop more teachers from amongst the trained members themselves so that they could impart the training to others and they could themselves be provided with a livelihood. For the same, some of the members went through a

refresher course and were then trained on software packages used in the district office. Data entry in these software packages was taken up by the trained members. This helped in increasing their means of livelihood. An example of such an initiative was software for SEWA's insurance activities. Earlier all the data was being entered in the main office at Ahmedabad, which was very time-consuming. However, after training, the insurance data was entered into the software by the members themselves at the various district offices which was collated and sent to the insurance company. This and more was explained by Bhavanaben Vadesingbhai Rathava of Village Simaliya, District Vadodara. She spoke with the sparkle in her eyes and the dreams that she has in them

"I successfully completed the data entry of transactions related to insurance. The impact was that I was asked to help out in using other software packages in the district office, which is further strengthening my capacity. I have now begun to wonder how they make these packages. For now, I am getting employment from using computers but finally, I want to do more, much more, by using computers and other ICT tools."

Training Programmes-Some Learnings

There were some important learnings from the training imparted to members. One was the development of pedagogy which reflected the rigor applied by trainers and coaches. Trainers at SEWA evolved an instinctively changing pedagogical style over the training sessions which were based on the profile of the members. For example, to demystify the seemingly complicated pieces of equipment, a full computer system was related to a human body, with CPU as the brain, the keys of the keyboard like a human body's fingers and toes and so on. The participants were told that like a human required all parts functioning smoothly to be a functional, complete being, a computer also required all parts to function simultaneously. This type of introduction to technology ensured interest and involvement on the part of trainees.

Thus, though the curriculum remained consistent, the pedagogy and pace of training was flexible and dynamic. At times, the training had to begin with basic English literacy skills and at other times, the practical problems faced by working women who were also home makers and mothers, had to be given due consideration, which resulted in slower pace of teaching. After some explorations and training sessions, it was observed that capacity building for use of technology has to be highly customized, based on many parameters like region, demographic profile, livelihood, motivation levels, scale of activity, etc. Towards this end, a book in regional language, which is icon-based and graphic intensive has been prepared by the IT Centre. Thus a 'one size fits all' approach was discarded in favor of a more process-oriented evolutionary way of teaching.

During training sessions, it also came out that 'older' members (typically about 40 years of age and higher) tended to just pick up the necessary basics like keyboard operations, opining that the younger members should be the frontrunners and given all opportunities in ICT usage. They encouraged their daughters (and sons) and other younger colleagues to use computers in their work and even explored and guided them in the ways modern technology could help them find alternate means of livelihood.



As SEWA learnt from the training sessions where computer training was imparted to its members, it further refined the computer training module. Consequently, a classroom-based module of fifteen days, comprising of basic computer related terminology, keyboard operations, operating system, and simple desktop applications was developed which was imparted to the members. It was ensured that the theory practical sessions' ratio was 1:2. Towards the latter stages of the module, practical sessions were the norm and custom-built work sheets were provided to participants as a practice resource.

However, the course content was not kept rigid and it was modified as per the needs of member groups. For example, artisan groups did not need number crunching exercises. It was perhaps more useful for them to know a simple, designing software. Through this, they could experiment with shape, color and composition and had a 'simulated' design ready for reproduction on the piece of cloth. This was especially

significant for better marketability as designs and patterns were iteratively evolved. Using design software for this purpose made the whole process more efficient, quicker and almost paper-less.

At the end of the session, a small examination was conducted, which was more to test their basic concepts, and NOT memory power. Letter grades were assigned based on the performance, which also instilled a fair degree of competitive spirit among the trainees. Participants were provided a certificate of course completion on behalf of SEWA, symbolizing their involvement and enthusiasm in the training. The completion of training gave a sense of achievement to the members. Saritaben Mukeshbhai Rathava of Village Aleekherava, Vadodara District says

"I felt like a 10th grade student because I appeared in an exam after a long time. I was scared, at first, did not know even about CPU or mouse. But, today, I am able to record all my routine activities using the computer."

Video Conferencing

CLC also gave an opportunity to members to experiment with using video conferencing as a means of communication. Video conferencing had its genesis in SatCom operations of SEWA. (See Exhibit 1 for details of SatCom). The idea was that emerging technologies could be merged with SatCom, enabling more interactivity and multimedia interventions. Districts like Kheda, which had a medium range of bandwidth, had successfully logged onto cities of Ahmedabad, Delhi, Washington and Kabul to share experiences with their counterparts in those regions.

SEWA was approached by World Bank Institute (in 2003) to guide women in Afghanistan about the Micro-enterprise activities. They realized it would be difficult to organize the interaction between women in the two nations without two-way video-conferencing. SEWA members

visited Delhi and participated in a video conference with Afghanistani women. These 2-hour sessions have grown into a regular affair (held every 3 months) and Ahmedabad office of SEWA is now equipped with all the facilities to organize video-conferencing. SEWA has provided guidance on artisan-works, marketing of micro-enterprises, packaging issues. it was soon realized that if video-conferencing is possible across borders then SEWA can surely utilize the same facilities to connect different villages. The CLC was seen as the core to provide connectivity as it had the requisite equipment and technology. It was also envisaged as the fountainhead of overall SEWA activities with the community.

Women running micro enterprises in the garment industry and master craftswomen from rural areas used video conferencing



equipment to dialog with their sisters in Dacca, Kabul and other developing regions of the world. Visually experiencing each other across thousands of miles and sharing camaraderie sans boundaries exposed the women to other cultures, ways of thinking and that there were millions like them who faced the constant, daily struggles in their

lives. Similarly, video conferencing had been experimented and explored by members of SEWA, across districts of the state and with other national locations to interact, share and update each other with the latest happenings, solutions to problems and learning from each other.

To quote an example of successful use of video conferencing in enhancing livelihood opportunities, the spearhead team leaders of craft activity visited the Dhokawada CLC in Patan district to access the newly created designs (sent by electronic mail) developed by professional designers from premier institutes or fashion houses. These designs were basically incorporated in the artisans' value-creating activities (embellishments on products) to respond to trends in the international markets. After discussion among the crafts-women, the artisans modified the design, electronically, to reflect traditional motifs and thus an interesting east-west fusion was attained - all by using internet communication, aided by simple tools of designing.

Information Dissemination

One of the main intentions to establish CLC was to create an information hub for the village community where poor and deprived members would be served by getting useful information. SEWA's ICT diffusion and also infusion in agricultural sector provided the necessary digital opportunities for productivity increase, for income generation, for decrease in regional disparity, and for improving farmers' linkages with the market.

To start with, the advisory services covered wide range of subjects starting from alternate cropping systems, producer oriented marketing opportunities and optimization of agricultural inputs - seeds, water, fertilizer, insecticides, pesticides and. Wherever possible, fodder-bank, grain-bank and seed-bank have been initiated at CLC to facilitate small and marginal farmers. These farmers also received information regarding weather forecasts which were helpful in preparing location and farming system specific action plans. The farmers had online access to market where they received day to day information on emerging market trends. Thus farmers benefited by an effective information system where they got knowledge i.e. what people wanted, at what price, where to get it, and who could supply it. This improved information flow and communication services and led to reducing poverty as people became more efficient because SEWA's ICT approach brought information to the wider audience and also enabled the audience to share its view.

Apart from agriculture sector related information, villagers also received information regarding functional schemes of government. These included information about all government schemes on agriculture, poverty alleviation, rural employment, social safety nets, food for work program and livestock related services which were disseminated through CLC. By this initiative, SEWA hoped to empower citizens by providing them with free access to information, making administration more participatory and ensuring greater transparency. All the information in this category was provided free of charge. The villagers benefited as they did not have to travel for miles or get hassled by



bureaucratic red tape in order to get useful information and access various government services.

As a result, one of the biggest hits had been application forms that were distributed by SEWA which allowed people to pitch for dozens of poverty-alleviation schemes about whom the villagers earlier did not even know. Now they could take benefit from these services. The Government also benefited as it was able to "virtually" reach out to the citizens. Thus ICT based CLC, by bringing public services closer to the citizens, restored their faith in the government machinery. Citizens also started shedding their former servile attitude and sought information with confidence. They were now able to access government services and schemes which opened many windows of opportunity for them. These opportunities helped them develop their personal capacities in the course of empowering them to build a better and more stable tomorrow, for themselves and for their country.

Also, demand-driven information was delivered at the CLC by keeping in mind local-specific needs which was used in day to day life. Local members were also allowed to expand the variety of services they wanted to provide to the community. Diffusion of local knowledge along with adoption of cutting-edge, scientific knowledge empowered rural citizens in improving their living conditions and enabled them to make informed decisions for exercising sustainable livelihood practices.

Village Database

A database on the village cluster and profiles of its women members (along with her household's information) had been developed at the CLC level. The chief aim of this exercise was preparedness to face disasters. The process was accelerated by the tools and technology available readily at the CLC, along with trained members. In addition, usage of fax machines, landline and cellular telephones aided this process. The information was expected to aid if and when disaster happened. In the absence of a CLC or such tools, field workers filing reports from remote locations would have to travel to the nearest district office,

resulting in loss of precious time at the time of disaster. Having a CLC nearby could help them file reports using computers and then either email them or fax them to the desired location. Hence, even hourly updates could be provided. Thus, the structure and processes flowing out of a tangible construction like CLC enabled data based decision-making and instilled confidence and motivation at the grassroots. The information processed and disseminated through the CLC provided a strong 'second line' of organizing and expedited timely action.

The preparedness came in handy during the floods of July and August, 2004 when certain districts of Gujarat like Anand, Vadodara and Sabarkantha experienced the devastating floods. It was at the CLCs of these districts that information was collated (brought in by members and organizers from the disaster sites), formatted and analyzed as needed and handed over to government agencies in almost real-time. To cite an example: Analysing the data, gathered from the affected villages, at the CLC of Kheda revealed that mosquito bites were on the rise in certain villages. An immediate 'informed' decision; taken jointly by the local government bodies and the district association office of SEWA in Kheda, to supply a thousand mosquito nets to the affected villagers could be activated within twenty-four hours of the information first reaching the CLC. This led to prevention of malaria and also resulted in better surveillance procedures in the villages. Similarly, it was possible to pass on hourly updates to the District Collector from the affected sites, explaining the type and extent of damage and the status of relief work in these districts.



CLC also provided a forum for on-going community education about the dynamics of disasters and their repercussions. Also, in the event of any disaster taking place, CLC would be the place where affected people might take refuge and where rescue and relief operations might be monitored. These centers would also be the origin of activities i.e. planning and administration that would form a part of disaster strategies.

In the new information architecture being developed for SEWA the data generated at the grassroots would be fed into the database maintained at the CLC which would subsequently be uploaded to the main centralized servers of SEWA. The district association office of SEWA would thus be strengthened considerably with all

the information made readily available. Currently, the scope and extent of SEWA activities generated huge data, which could be utilized in much better and more creative ways. The database management systems could provide applications, which could deliver custom-built reports. These analytical and Decision Support Systems (DSS) like reports would empower the members and spearhead team leaders towards best practices, efficacious interventions and scenario-building for meaningful and necessary projects to be taken up for the future. This would be related to education, social security, their existing livelihood as well as alternative activities to help the remote rural areas link with the urban centers.

Centralized ICT Cell

Support for CLC was provided through creation of a centralized ICT Cell at the main office of SEWA in Ahmedabad. Thus, a team of ICT professionals was formed, headed by the Chief ICT Coordinator (with an experience of almost two decades in the ICT industry and business management), whose primary function was to ensure smooth deployment of ICT in the designated districts and management of this project. The team comprised of both, experienced and fresh, and well qualified software developers, hardware engineers, computer trainers, database administrators and proficient users of computing technology. They were backed up by a cadre of young talent sourced from the districts locally, designated as District IT Team Leaders. The latter were guided on a daily basis by centralized ICT Cell on managing the ICT at districts and the team made regular visits to these districts.

The overall mandate for the team was to be solution-driven. As an inherent reality in

Indian rural set-ups, there were vast challenges and seemingly insurmountable problems. The concept of using technology seemed alien and perhaps wasteful. However, as a supporting arm to SEWA members, and following the steps already ingrained by the founders of SEWA, the mandate for the team became easier to achieve. Consequently, a robust local area network was established centrally, with over forty computers connected to a stateof-the-art computer server (with Xeon processing abilities) in the premises of one of the SEWA offices. This enabled efficient in-house working, group work and elimination of redundancies and paper work in the routine working. Other outputs of centralized ICT cell were development of MIS, Oracle implementation and development of in-house software targeted to leverage the technology which ICT provided for rural development and to achieve the goals of poverty alleviation and economic upliftment.



Management Information Systems (ERP)

The MIS project was started in the last quarter of 2004 to implement standard software to help micro producer women in their work. The software would help women artisans get detailed reports on the market demand for their work. Detailed analysis on what product, embroidery design and color combinations sold the most, could be obtained. Moreover, customer orders could be tracked. Information flow between members and SEWA in real time could lead to efficiencies. The income cycles of the artisans could also be made more efficient and an accurate record maintained for deciding future intervention. Similarly, production cycles could be planned based on international fashion forecasts to cater to international buying houses.

The IT team carried out a lot of research on the kinds of software packages available, the fit of these packages with SEWA, the availability of a local partner who could implement the package at SEWA. The organization zeroed upon a Microsoft package - Navision. Navision had the advantage of being specially designed for small and medium enterprises. It offered many features that other software did not. It best fitted with SEWA requirements of being simple and easy to adopt. Navision had been user-friendly and offered the flexibility of being available in local languages. SEWA was also able to identify a capable local implementation partner who had the experience of successfully implementing very complex systems in various organizations with whom a MOU was signed.

The project team comprising of members from all departments was established. A detailed study was carried out by the SEWA IT team and the implementation partner to understand the present processes involved. After a series of discussions with the management and the member artisans, the process and functional requirements were finalized. Business reports required to track artisan details, analyze market trends, profitability, customer preferences were finalized. The idea was that the information from these reports would help in accurately accessing the quantity and quality of work that artisan members were carrying out. This would help in identifying training needs. Further it would help in coordination of work between the main production centers.

The output of Centralized ICT Cell were targeted to leverage the technology which ICT provided for rural development and to achieve the goals of poverty alleviation and economic upliftment

Operationalizing the MIS project envisaged integration of all the processes involved in the trading of the embroidery work of the artisans of the Kutch and Patan districts so that these women could improve their livelihood by gaining access to bigger and more profitable markets. "I am proud of having learnt technology skills in addition to my homegrown crafts skills. I want to know more about what the world wants today so that I can deliver quality work and thus, help generate more employment for myself and my community", says Bairajba Karashanji Jadeja of Santalpur Village in Patan District who is one of the many beneficiaries like Gauriben mentioned in the beginning. The determination and confidence of these simple village women to take on the world and compete in the global markets speaks of their faith in their skill.



Oracle Implementation

The motive of SEWA had been to be able to provide services to its members so as to enhance their incomes, secure their livelihood and improve their quality of life. SEWA had a membership base of about a million across the country, with about half a million from Gujarat alone. SEWA members' accessed information about all the services provided by SEWA and at any point of time chose to take part in one or many activities. In this process a lot of data was being generated at various points regarding the members. Basic profile of each member along with value added information on the member's activity, impact of specially targeted interventions, economic progress and other macro and micro parameters was maintained in various forms - both electronic and manual by individual team leaders and spearhead team leaders at the district and project offices.

All this information needed to be collated. analyzed and used for further decision making, from time to time. However as data integration had not been possible among the various SEWA branches in the present IT setup, collated data on members was not available. Many times a member had not been able to avail a service because her membership data had not been updated. In some other cases a non-member had been using SEWA's services whereas a regular member had been left out. At times SEWA lost opportunities in being able to clearly identify the needy members. It was also seen that many members were repeatedly getting help from SEWA, whereas the shy ones were left out. Further, in the present scenario information of socio-economic patterns in the districts and villages were difficult to collate. In times of calamity, when the aim would be to ensure that each family in the affected area got the required aid, the database on the area would be very useful. In such misfortunate situations a database of member information would not only help in relief but in the resurrection of the area. Furthermore, as volume and scope increased exponentially, response time needed to shorten and fresh inputs needed to be incorporated at an increasing pace. Consequently, a repository of information was required to be built up for reference at any given point in time. A comprehensive database would thus help SEWA carry out its activities more effectively and reach out to needy members.

To fulfill the need for a comprehensive database, The ICT team explored the possible options available. During the course of this exploration to simplifying the information solutions for SEWA members, one of the world's leading software companies Oracle approached SEWA to use its products meant for the scale of operations such as those of SEWA. A team from Oracle was invited to study the present systems at SEWA and suggest the possible solutions to address the database problems. A high level team spent a number of days at SEWA offices to understand the current systems. A number of discussions and studies were held. The entire IT staff traveled with them to ensure that no area was left unexplored. Oracle had, through this study, submitted a proposed system. They reasoned out that as large corporate houses kept databases of customers and suppliers. SEWA had its members' databases, which needed to be stored in an appropriate fashion, with lightening and easy access. Oracle also offered some of its software solutions for creating a robust centralized database of the members, with their profiles and with a provision for regular and timely updates from the districts. This would prevent duplication and enable relationship building at the logical level and help track the activities and their impact on the beneficiaries. SEWA is convinced about the necessity to implement the proposed system. However, the proposed system of Oracle implementation would require support as the costs are fairly large for SEWA.



In-house Software

The ICT team had developed a number of software in-house. These were being implemented in the district offices. The software was used to enter data related to the various activities that were carried out in the districts. The data entry in these software packages was done by SEWA members themselves, who had received

computer training from SEWA. A detailed description of the software built in-house and available at the districts is given in **Exhibit 4**. Continuous up-gradation and improvements were constantly undertaken on the software. User manuals were given to the districts along with the software for ready reference.

ICT linkage to Sustainable Livelihood

The integrated approach to development hinged on building capacities of SEWA members such that they could enter the mainstream economy and sustain their livelihoods. In cognizance of this basic objective, SEWA sought to develop and strengthen the technology skills of SEWA members most of whom were from rural communities. Thus apart from training in ICT, which had its direct impact, SEWA used technology solutions in other trades too. It involved training of members in other trades through specially developed courses which was delivered using ICTs. At SEWA, the endeavor had been to link courses to a sustainable means of livelihood, thereby ensuring asset creation and selfemployment. Hence, trainers were encouraged to provide industry exposure to the members and also instill a business sense for that type of activity. During course formulation time itself; industry experts, government agencies and academic institutions were consulted on how best to provide livelihood opportunities through

that course. Exposure visits to similar micro enterprises, small scale manufacturing units as well as real case studies comprised the curriculum.

Training of members had been designed for plumbing, tractor and sewing machines' repairing and drip irrigation system. Trained members could maintain such systems in their community, thereby ensuring regular upkeep of equipment and earning servicing fees in the process. This triggered off further demands for such services in villages and remote areas. Thus, members demanded such training courses, even if they had to pay small fees. ICT provided an easy means to take up training and refresher training in these trades via infrastructure in terms of basic hardware and software which was available at the SEWA district offices and at the CLCs. Through various capacity building and training programs, a cadre of technologyfriendly SEWA members is gradually emerging and taking shape.

Radhaben of village Manpur, District Sabarkantha got associated with SEWA when she was given training as Handpump *mistry* (repairer). She organized a group of women Handpump *mistries* who took up the repair of faulty handpumps in different villages. Initially they were ridiculed by the village-folk that it was not a women's job. However after successful repair work and restoration of water supply everyone appreciated and they were called again after six months when the handpump malfunctioned again. While working on repair of handpumps she started using calculators and received training through computers. Having received training through computers she now wants to learn computers as she would like to go further and feels that computer training will help.



RUDI

During the year 2004-05, SEWA Mahila Gram Haat initiated the Rural Distribution Network for the procurement and sales of the goods produced in rural areas under the brand name of RUDI (Rural Urban Distribution Initiative). The products include cereals, pulses, spices and other products used on daily basis such as tea and sugar. The products are procured,

processed, packed and sold by the SEWA members. The prime objective has been to create multiple employment opportunities at every level. To facilitate production in the units and marketing of the products, IT technologies were used. Standard and inhouse software were developed to automate processes and for data capturing. Thus ICTs have a direct impact on livelihoods of SEWA members.

Technologies for Salt workers

SEWA had been carrying out a lot of activities to help salt farmers in Gujarat. These salt farmers lived a miserable life. They worked far from their homes in the salt farms making salt and earning a living. Their living and working conditions were

wretched. These farmers toiled for hours in these inhuman conditions but still did not earn enough to eat two square meals a day.



One of the ways that SEWA had been trying to help them had been by equipping them with tools to improve the productivity, efficiency, and quality of salt produced. A computerized salt testing lab was set up in the Surendrenagar district. The testing lab was equipped with state of the art testing facilities and equipment. Salt farmers were trained to use the testing facilities. Use of mobile phones has helped to overcome the problem of distances between the production sites and the testing lab. These salt farmers now test their own salt and have improved the quality of salt produce which has fetched upto 50 percent increase in price.

Micro Credit

SEWA developed software applications that addressed the complicated aspects of the existing micro-credit system and facilitated transparency and control by members. The current system of micro credit exercised by the Self Help Groups (SHGs) had been automated in parts, especially for transaction processing. Based on the needs articulated by the members of the self-help groups and their need to take informed decisions, a robust Information System (IS) was developed which could be deployed across districts and locations. For

The current system of micro credit by the Self Help Groups has been automated for transaction processing.

this purpose, a study of the system had been undertaken, with a focus on scope for reengineering, which could eliminate some of the redundant and time-consuming processes. As the SHG transactions were widespread and in millions, the planning and strategic deployment of such a system was vital.



Other Emerging and Potential Applications

Another scope for the use of ICT had been in IT-enabled enabled services (ITes) at the district and CLC level. Trained members could offer small transaction processing services to the local government bodies and agro-based organizations, amongst others, which exist in that area. One application of this can be CLC providing rural telephony using internet connectivity. Similarly, best practice content could be provided, through

a CLC-based call centre, in the local dialect. These call centres can further develop into BPO centres. These CLCs which have a rich schedule of ICT related activities can serve as sales point of software and hardware companies who want to make inroads into the rural markets. A range of other concepts could be developed suited to the needs of the local populace, which will be owned and managed by the women themselves.

SEWA has started interventions in Gandhinagar district to develop it as a milk hub linked to the Mother Dairy (owned by GCMMF - *Gujarat Cooperative Milk Marketing Federation Limited*, a Rs. 1 billion turnover milk cooperative). 64 cooperatives have been recently set up for the same and are managed by the SEWA's women members. The collected milk undergoes computerized quality testing and the milk collection centres are linked to the dairy through computers. The ICT training imparted to the women members has thus been crucial in setting up this new initiative.

Overcoming Challenges

The challenges faced in the operation of the CLCs had been diverse in nature. To start with, before setting up a CLC, a study was undertaken to determine the training needs and willingness of the local population. This exercise took up a considerable amount of time. One of the problems that SEWA faced while setting up the CLCs was that local bodies (government or village institutions) were not able to give a rent-free place for the CLC. Thus some CLCs had to be set up in rented places which increased the costs of operation.

Operation and maintenance of the CLCs had been a very challenging task as the local population was largely illiterate and it took lots of effort in managing, training and running the CLCs. Women in these districts had never seen a computer, sometimes not even a calculator and hence lacked the basic understanding of IT tools. It had been a challenge to train such people. Moreover the amount of training that these women needed

before they made some use of the IT knowledge was immense and very time taking.

While operating CLC, major work had to be undertaken in trying to stabilize activities in these CLCs. Sometimes extreme steps had to be taken like closing a CLC itself when the operations did not stabilize. To state an example, the CLC at Dholka in Ahmedabad district was set up in a rented place as local bodies could not provide a place free of cost. Within months of commencement of activities SEWA realized that the demand for training was not as per the estimations. To add to the woes the landlord was also creating problems. After a lot of deliberation and discussions it was finally decided to close down the CLC. This also came as a good example to show that certain processes needed to be followed and jumping into initiating activities without community involvement would not work.



Another challenge had been about promoting CLCs in the cluster villages. In the case of Dhokawada CLC, people were not willing to come to the CLC. One of the major reasons was that other villagers also wanted to build the same CLC in their villages. In fact other than Dhokawada, none of the villages in surrounding areas had given land for establishing the CLC. It was only after the construction and start of activities at Dhokawada that everybody offered land. Also, there was lack of motivation for people from other villages who felt that the CLC was off the normal travel route. However, slowly SEWA's district activities and operations shifted to this CLC and thus people realized the importance of CLC at their doorstep and started visiting the CLC. Other activities were also started in this CLC which not only attracted women but also men and youngsters. Slowly and steadily this CLC gained in popularity.

Connectivity in remote areas had been a known challenge as there had been cases when CLCs ready with IT equipment, had to wait for connectivity. Thus even if facilities like video conferencing existed, for seemingly no identifiable reason CLC may not get a clear line and the women who

had assembled at the CLC for training had to be given another optional training.

One more challenge had been in adoption of technology at grass-root level. There had been need of investment for introducing relevant technology to the grassroots. However with technology becoming obsolete at an increasingly faster rate, it had been difficult (expensive) to adopt the latest technology. Similarly, there had been need of investment on developing infrastructure for networking more than 500 remote villages with SEWA's district offices and Headquarters. Often this required tie-ups with IT companies or potential partners who would like to invest in tools and technologies being used by SEWA members.

A major challenge had been sustainability of operations at CLC. While operationlizing the CLC concept, SEWA had kept an eye on achieving sustainability of operations. It was achieved by establishing backward-forward linkages with government functionaries that provided space, electricity and telephone for functioning of the CLC. The cost in setting up a single CLC centre, with availability of three computers (2 clients and 1 server), was calculated as following:

Capital Expenditure

• Main server (with standard desktop and CD writer)	Rs. 35000/-
• Client computers (2)	Rs. 40000/-
• LAN networking, Modem, Telephone line	Rs. 10000/-
• Scanner, Printer, Web cam, Speakers	Rs. 10000/-
• Power supply	Rs. 5000/-
Thus the total set-up costs would be Rs 100000/-	

Monthly Operating Costs

• Electricity Charges	Rs. 500/-
• Stationary	Rs. 500/-
• Remuneration for two persons	Rs. 2000/-
• Cleanliness	Rs. 200/-
• Computer Expenses (Depreciation)	Rs. 400/-
• Telephone, Fax, Internet	Rs. 1000/-
• Event Costs	Rs. 250/-
• Extra Costs	Rs. 250/-
Thus, the total month expense would be Rs. 5100/-	



Assuming the set-up costs could be amortized over the period of 5 years (through a bank loan or some other form of financing), the monthly cost on account of the capital investment came to Rs 1800. Adding this to the Rs. 5100 monthly operating costs, SEWA got a figure of Rs. 6900 per month for break-even of CLC. While making these calculations, an assumption was made that space costs were nil as space was provided by the village people at no charge for the CLC.

In order to break-even, CLC had to generate Rs. 6900 as revenue. One way was to charge Rs. 2 as membership fee per month from the users of services at CLC. If a CLC covered approximately 15 villages and supported at least 2000 people, then the membership fees alone could generate a minimum monthly income of Rs 4000. The deficit of Rs 2900 could be overcome by generating revenue from following steps.

- CLC could take up data entry work from others to better leverage the computers that it had.
- Different kinds of skill development trainings can be provided to the poor beneficiaries and could be charged a nominal fee of at least Rs. 50. Following is the list of training activities proposed.
- Computer training
 - Educational classes
 - Sewing training
 - Patch-work training
 - Mobile repairing training
 - Tyre repairing training
 - Food processing training
- Opening of booth for copying facilities, fax, Internet, STD/PCO.
- Selling of handicrafts
- Selling of RUDI products, Bajaj bulbs and other FMCG products.

CLCs are undertaking some of the activities from above list to generate revenue.

In order to achieve sustainability, SEWA also worked out different financing scenarios. One option was to extend the loan payback period from five years to six years, resulting in bringing the breakeven figure down to under Rs 6600. Also if older PCs could be re-used or duties on new computers could be reduced; it would lower the start-up costs by Rs 10000. The monthly gap between revenue and expenses could be further narrowed.

Shardaben Parmar from Mehsana district told us about the various initiatives for income generation activities that she started at CLCs in Mehsana district. She has started utilizing free computer time for preparing project reports of college students in Mehsana district. This included report-typing, preparing presentations, and burning CDs of the same. These student customers also availed of many other services offered at CLC. The good quality of computer work in the reports increased the demand of services at CLCs as the first few students who used their services got excellent grades. They also became brand ambassadors of the CLC services amongst other students. The same services were extended as the CLC started burning and selling CDs with other content. Thus there has been a snowballing of demand for such services.

Many CLCs have taken up additional computer work to utilize free computer time. The good quality of computer work (reports, presentations etc.) have increased the demand of services at CLCs.



Linkages

In developing the SEWA's holistic development model by establishing CLC, SEWA planned to establish linkages with other bodies. As a result of progress made by CLCs, various bodies like government organizations, corporations, education institutes, and industries had shown keen interest in building a long-term partnership with SEWA. One such association was established in Mehsana where SEWA's strong relationship with Indian Farmers Fertilizers Company Ltd. (IFFCO) benefited to a large number of people in the area. IFFCO provided useful trainings to the poor farmers and also distributed sprinkler, seeds, fertilizers, organic fertilizers. IFFCO had one computer centre, which they provided to SEWA for imparting computer training to SEWA members. SEWA's IT team imparted 15 days basic computer training to 40 members at IFFCO computer center. Later, selected members were also given computer hardware training.

Again, in Mehsana, SEWA's linkages with the government started benefiting the members as Taluka² Development Officer asked for list of the trained beneficiaries. He wanted to provide computer work to the local poor members, who had received computer's basic training at local Panchayat, under government's E-Gram scheme. Additional government linkages were established by CLC with DRDA³ which helped deprived members in obtaining loans for starting small enterprises. Under social development activities, SEWA had made linkages with Kendriya Kamgar Sikshan Board. The Board provided trainings to the poor laborers on life skill development, quality enhancement, female feticide, and AIDS.

In each CLC, people would benefit from online consultation and training as SEWA had tied-up with Apollo hospital. The origin for the same could be traced to the health camps conducted at SEWA's initiative in the rural areas, and where pre-identified government and charitable trust run hospitals offered their services. Later on, the concept of telemedicine was explored with the CLC as the hub for information and communication exchange in multimedia format. This was executed in collaboration with Apollo hospital when teleconferencing equipments were donated by Indian Space Research Organization (ISRO). In the first half of the two hour programs conducted at CLC, Apollo hospital staff gave information about the common medical problems and preventive measures for them. The second half of program had question sessions where members could ask questions about health problems and seek medical advice. Women members were also provided medicines at lower cost from Apollo Pharmacy shops.

The potential of harnessing ICTs for further strengthening the enabling framework and improving South-South Cooperation had been another objective of this project which could be achieved through linkages at national and international level. These spanned across various SAARC countries and SEWA was often asked to present at various international forum.

At the national level linkages, the SEWA ICT team made a visit to VIIT, Baramati with the aim to study how IT could be used as a way of communication and data warehousing. The study was extensive and many of their approaches were considered for application in the Gujarat setting.

³ DRDA District Rural Development Agency. DRDA has traditionally been the principal organ at the District level to oversee the implementation of different anti poverty programmes under the Ministry of Rural Development, Government of India.



² Taluka An administrative unit of governance in India

Another exposure visit was made to NIRD, Hyderabad where the participants were exposed to various lectures on IT management for rural development. Exposure visits to various garment manufacturers were made to study the use of IT in their operations. The knowledge gained from these visits had been used extensively in designing the MIS system in the SEWA Trade Facilitation Center (STFC). Discussions were also organized with agencies like nLogue Communication, which followed an entrepreneurial model, offering e-governance enabled services to be offered at nominal costs to the villagers, plus a host of commercial services like internet surfing, emailing, bill payment. In addition a number of other exposure visits had been made. The endeavor had been to apply the learning from these visits in SEWA's area of operations.

The potential of harnessing ICT for further strengthening the enabling framework and improving South-South Cooperation had been another objective of this project.

A delegation from Afghanistan visited villages of SEWA's operations to look at the various activities. One of their areas of interest was the ICT implementation at the grassroots level. A number of ideas were shared on how IT could be used for poverty reduction. Other exploration visits were that of teams from Laos, and the 'youth for action' groups. Both the groups were interested in the ICT activities of SEWA. They were also involved in a feasibility study in Sri Lanka. One of the components of the study was how IT could be used as a tool for self-sustainability.



Connecting with outside world

Raniben from Patan District, an expert in bharat embroidery, narrated about her exposure visits across the globe. When SEWA organized the artisan groups and started selling handicraft products, they asked the women producers to sell the same in exhibitions to get a feel and understanding of customers and markets. During one of the visits she realized that there was a need to focus on improving quality of products of SEWA to compete with the best in the market. ICT came as an enabling tool for these women to better manage the design, quality and production processes so that their products could outsell the competing products. Exposure is not only limited to their occupation but also made them aware of other aspects of their daily life. Raniben, on return from one such visit to USA where she was impressed by the cleanliness, organized the villagers to clean up all the garbage from the village. This was later taken up as Gram Safai activity across different villages.

SEWA's biggest achievement to date, undoubtedly, had been instilling a sense of personal empowerment among the beneficiaries.



Promotions

A number of posters had been made to promote the activities being held in the CLCs. These posters were displayed in the villages to instill the desire to learn and to attract the villagers to the CLCs. With time the CLCs, through their range of activities,



had themselves become a medium of promotion. The range of activities that were conducted in these CLCs attracted people in Also, with the benefits of computer training becoming more and more visible, the CLCs were attracting more and more participants. Many of the members who had been computer trained or trained in the IT related technologies, had received employment or had been able to use the training in their trade. This had been a source of motivation for others to participate in the activities at the CLCs. One of the CLCs found an unusual student in a practicing doctor near the CLC. On completion of his training he asked his other family members to enroll for computer training at the CLC. Now he often advises even his patients to visit the CLC and avail of benefits and services.

Achievements

Perhaps one of the biggest successes in this project, so far, had been the setting up of CLCs at the village level. Placement of ICT equipment in CLCs and district offices had reduced the mystery and myth of hardware and software and brought ICT to the doorstep of the villager. This visual, tangible and operational seat of ICT had energized the woman member and made her believe that ICT was here to make an impact on their lives. She now believed that if not herself, at least the younger generation would utilize these tools in a regular fashion and get exposed to the world outside. The exposure for harnessing suitable options for the youth to be gainfully employed in their own land was an outcome achieved by setting up CLC.

Another achievement had been providing training to semi-literate and illiterate women, some of whom had been marginalized farmers, salt workers, dairy farmers and artisans. They had never been to a school or even held a pen in their hand. Their enthusiasm in learning the Basic English alphabet which would enable them to decipher the main text and icons of the software was a motivating and progressive factor in this project.

An impressive number of SEWA members had been linked with or had received jobs through IT with salaries of upto Rs. 4500 per month. Some of the trained members of Anand and Mehsana districts were employed with local IT training institutes and other organizations as data entry operators. Members, who had already received a basic training course in IT, were trained on the software that was installed in the various districts offices. Members entered data into these software and earned an extra amount for doing so. For example,



Dakshaben (village Simaliya, District Vadodara) learnt computers and is responsible for the MIS data entry work. The software was in English and while she is not conversant with that language, she learnt the essentials in order to complete the task assigned. Thus, she has motivated others to learn technology and software tools and patiently takes them through the basics. The subtle but deep rooted change in her life is represented in her words "I feel more confident now, to use computers, after successfully completing MIS data entry work related to insurance processing. I can prepare reports, write letters etc. using computers. I am now teaching other young girls and women on how they can use computers in their daily life". As reflected in her words, her life now revolves around two things teaching computers to more and more young girls and women so that their lives can get transformed as well and in using computers to the best for her own work.

trained members of many districts now use computers to maintain their activity accounts (e.g. insurance, trade), correspond via e-mail and plan their activities. This had seen more women using their IT training in their trade.

However, SEWA's biggest achievement to date, undoubtedly, had been instilling a sense of personal empowerment among the beneficiaries. From women who were hardly recognized in their societies, they were now respected in their community for their ICT skills and creativity. The younger women feel they were able to approach the job market with greater confidence. There had also been an emergence of solidarity as the women learn computers together at the CLCs. They also often discuss their problems, creating a sense of unity among them and also bringing forth their otherwise inert leadership qualities.

Women leaders in their communities utilize their newly acquired computing skills in their planning process. They develop micro-plans using the desktop software applications, with vivid images and graphics. It had also become easier to benchmark the progress in the plans and highlight variances and achievements. As a pilot in the path-breaking "Jeevika' project, women members in village development committees were trained in using Geographical Information Systems (GIS) to plan digging of a well or pond, road network for the village. Latest GIS packages were

quite user-friendly, easy to use (at the click of a mouse), so as 'a picture speaks a thousand words', these women were immediately able to identify optimal locations and plan more wisely for their village development activities.

The impact of ICT had been reflected in other technological applications as well. Women members had begun to use telephone as a means of communication more widely. They had realized the value of time and opportunity cost savings, in addition to the ease and convenience of use. Thus, spearhead team leaders like Puriben and Jomiben use the telephone (and sometimes even the fax to communicate across district offices) to fix up meetings of their group, logistics setting for travel and appointment seeking with government and other officials in different locations. The introduction of the "Theliphone" scheme by SEWA Bank, whereby SEWA members could avail of a loan to procure a handset and access to cellular services, had heralded the era of mobile communication amongst the rural poor members of SEWA. They could respond to gueries of fellow members, talk to their spearhead team leaders or organizers, thus ensuring continual communication and quicker onthe-field solutions to problems.

Mobile phones were also used in micro enterprises by the women and even in agricultural-produce selling. Thus, sesame seed growers like Jasuben of Surendranagar



district were using their mobile telephones to know the market prices of their produce in nearby market yards. They then made an informed decision and thus, were able to ensure maximum gains for their yield taking care of the bottom-line like a seasoned businesswoman. Similarly, salt workers in the saltpans and tobacco rollers used telephones and mobiles to get latest market information and decide their selling strategy on this basis.

In recognition of the work done by SEWA, rewards and recognition have been pouring. These awards have been awarded to individual members as well as SEWA movement as a whole. To state a few, 44 of SEWA members received awards of The National Virtual Academy (NVA) from the President of India. This recognition was given to SEWA members for their efforts in spreading ICT in their villages. As recognition, they were elected as fellows of NVA. These NVA fellows have been working towards building every village as a knowledge center. The mission had been towards building 100,000 knowledge centers and these fellows would facilitate the mission in fulfilling its target.

Japan Women in Development Fund has also supported and recognized this project. In 2006 during their general body meeting it was selected as the best programme from among the 84 programmes in 37 countries.

SEWA received an opportunity to present the project in JWDIFs Annual General Meeting in Tokyo.

Another award bagged by SEWA was The Economic Times-Nasscom IT Users Award. This award had been given each year to recognize excellence in IT usage across industry verticals. The awards had been an acknowledgement of the work by certain organizations that they have undertaken in deploying IT for gaining significant benefits. The IT User Award winners were companies who had implemented breakthrough IT technologies and attempted to remain at the cutting-edge of the ICT spectrum. In the newly created NGO category of the awards, SEWA was chosen the best IT user for the year 2004. This award was bestowed to SEWA for the diligence and dedication exhibited by SEWA members in adapting technology and using it to better their lives and the activities they were involved in. As users of software systems they had used technology to communicate better, to pass on information in a timely fashion, for increased efficiency in their work and for capacity building through training programs. It also recognized the vision, which SEWA members had crafted for ICT and the detailed planning involved in executing plans.

Vision

ICT at SEWA had been driven by a clear vision and followed the same path of organizing, capacity building and economic empowerment, like other successful activities at SEWA. There had been general consensus that ICT should be deployed as a leading tool for poverty alleviation. Accordingly, the pace of growth of ICT at SEWA had been hand-in-glove with a shared purpose and a conviction that ICT could lead to a perceptible change in the

lives of the poor. SEWA stands out in its exemplary success in communicating the vision of the top management to the members at the grassroots.

Jamuben (village Dhokawada, District Patan) talks about her vision about ICT "For me computers should help me in my work and benefit all. They can help me manage the flow of materials in a more efficient manner. We can use them to



obtain the prices of commodities in various markets. Internet also has the potential to make anyone capable of knowing the world. I will be happy when every girl and boy in the village is happy."

SEWA had set a target of providing computer training to more than 15,000 rural women in a span of 3 years. The larger plan

includes establishing a school of Science and Technology for poor rural and urban informal sector women workers and the science and technology will focus beyond IT, though IT will be the integral point. For the same, SEWA would establish partnerships with IT organizations which could help SEWA members in technical matters.

The Road Ahead

Ms. Monaben Dave and her team were thinking about the early days of ICT initiatives as she entered for a meeting with Ms. Reemaben Nanavaty before they presented the future plan for ICT initiative to the Executive Committee. She reminisced how ICTs had been deployed for alleviating the problem of distances in remote areas along with linkages with Enterprise related activities to ensure sustainable livelihoods.

The team recalled that women members were engaged in a number of income generation activities for the betterment of their lives against all odds before ICT based interventions. They had been resilient against hardships, sometimes as acute as earthquake and chronic as persistent droughts. Banking on the openness of community to new ideas, CLCs were envisaged as the hub of enterprise for sustainable livelihood through value addition in present occupation and development of newer skills. The activities in the villages were organized about the CLCs and they had added a new cohesiveness to the effort of enhancing the livelihoods of SEWA members. The team had to present a plan to the Executive Committee for its replication across all villages where SEWA operated.

While Ms. Monaben saw the transition of ICT initiative as capacity building of women from "can they" to "they can", some pieces of the jigsaw remained unresolved. Ms. Reemaben Nanavaty impressed the need to improve the management and efficiency of institutions like CLC. The issues involved use of appropriate technology in village settings. Cost-related issues hindered adoption of expensive equipments in village setting. There were additional issues of maintenance and upkeep of equipments apart from safety issues. However SEWA was always guided by words of Ms. Elaben Bhatt "Give them the best technology and facilities as whenever given a choice they will want the hest."

SEWA was also conscious about the need to have financial sustainability at different levels while ramping up the ICT operations. One idea was to have these CLCs emerge as entrepreneurial hubs where the trained persons could start CLCs in new areas. This would also provide an opportunity for second and third generation members of SEWA to move into occupations other than the traditional ones. However in order to establish and maintain infrastructure, funds would be a major issue.

SEWA members have always been open to new ideas which they saw as opportunities to improve their lives.



Conclusion

The question often asked, whether technology can (which is often described as truly democratic) allow equal opportunity to be used by all and help the women members in their quest for a better tomorrow? If managed well, can technology improve productivity and help augment the income of these women? Often it is also questioned that whether the income of women increases with computer training or it just changes their occupation. Furthermore if women are imparted computer training whereas there are no computers in the village how it will be helpful. The experience of SEWA with ICT answers all these questions. Here the issue is not only earning livelihood but about learning, being exposed to technology and owning it. SEWA members can be engaged in any occupation but they need to be informed such that they do not remain isolated from technology.

This project on unorganized poor, women workers - belonging to the informal sector of the economy has brought a pro-nature, pro-poor, pro-women and pro-livelihood orientation to a job led economic growth strategy in rural India through harnessing science and technology for environmentally sustainable and socially equitable development. The learning and outcome of this phase will prove significant for the path of the project and its ultimate goal. The pioneering work done in this project can serve as a platform for future ICT interventions, which support the long-term goals of SEWA and similar organizations working for women's empowerment.

SEWA has clearly traversed the path of technology with utmost care. It has used a mix of both technology as a tool and technology as a context in its operations. For many members ICTs help as mere tools in better conduct of their daily tasks while for others they are context as they redefine the opportunities that they can avail of. ICT for women and their upliftment have been transforming in both these forms, either directly or indirectly.



Exhibits



Exhibit 1: SatCom

SatCom stands for Satellite Communication which was initiated by SEWA in 1997. SEWA used satellite communication for its capacity building and communication programs. Its main aim was to use a combination of telecommunication and satellite communication to conduct educational programs, cutting across a range of themes that would lead to community development. These included themes such as: (a) Organizing (b) Leadership-Building (c) Forestry (d) Water Conservation (e) Health Education (f) Child Development (g) *Panchayati* Raj System (f) Financial Services. Resource persons to conduct these programs had been drawn from SEWA as well as government organizations, academic institutes and sometimes, from industry also. They were experts in their own field who were interested in reaching out to women who wanted to better their lives.

SatCom programs had been held on a pre-determined theme on every nineteenth of a month (sometimes on another day also). The rural development coordinators, based on the inputs received by them from the districts, decide a particular theme and inform the same to all the members. SEWA had twelve receiving terminals across the state of Gujarat, with one terminal used per district. About seventy (on an average) members to a hundred and fifty members gathered at the district association office, setting stage for an absorbing session of learning and awareness building. Thus, one SatCom session ensured a reach of eight hundred to thousand women workers of the informal sector. Sessions on forestry, water resources management and child development, among others helped strengthen these campaigns and improve the efficiency of members as they were more tuned about the way to go about their tasks. In addition, the member who were the 'Agyevans' - leaders of their member groups, disseminated this knowledge to others in their group at local village-level meetings.

While SatCom was started about ten years back the districts procured their own receiving terminals. Apart from the afore-mentioned themes, the programs had also been conducted for taking forward and strengthening the SEWA movement. The 'Agyevans' or representatives were given an orientation and explained the dynamics of working as they do in the highly vulnerable informal sector and thus, a motivational approach is taken in these types of sessions. One such example of using SatCom for strengthening SEWA movement was in 2001 when a detailed survey of the members was initiated to develop a comprehensive database. The know-how on how to fill up the two-page questionnaire was imparted through a couple of SatCom sessions. This made it easier for the Agyevans to answer and complete the questionnaire. Similarly, when a need for identification cards arose, members were explained the concept and benefits of such a mechanism through SatCom.

One of the significant impacts observed of SatCom is that district associations were strengthened uniformly and consistently. For example, if the notion of insurance had to be explained, along with the gains to be got, a common message was beamed to more than a thousand representative members of SEWA, who then passed it on, in their turn, to others in their community. Thus SatCom became an optimal model of communication and information dissemination and a tool for advocating best practices.



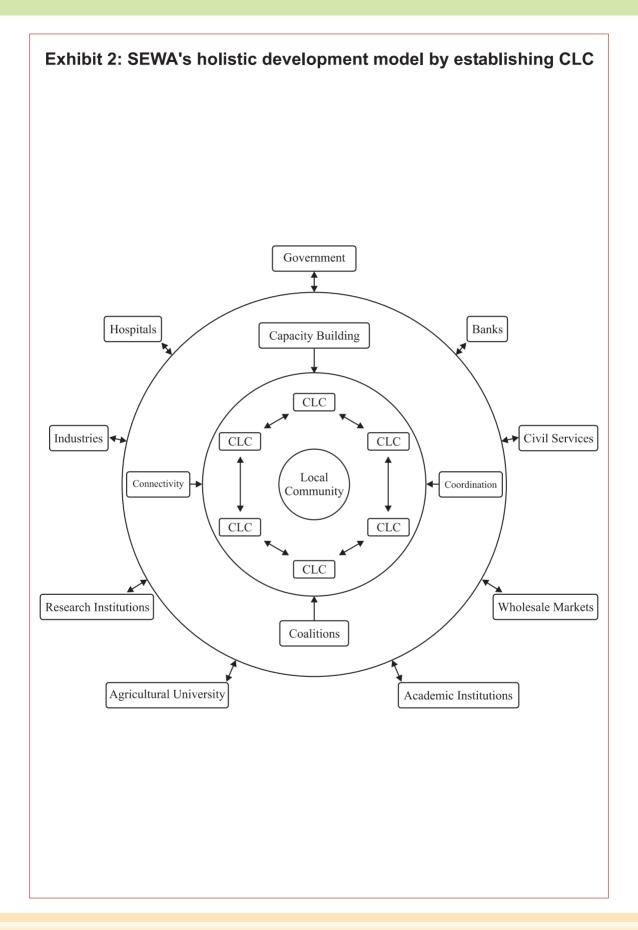


	Exhibit 3: List of CLCs of S	SEWA
1	Sanand	Ahmedabad
2	Gomatipur	Ahmedabad
3	Bareja	Ahmedabad
4	Dholka	Ahmedabad
5	Ahmedabad	Ahmedabad
6	Viramgam	Ahmedabad
7	Bagodara	Ahmedabad
8	Chandiyel	Ahmedabad
9	Saraspur	Ahmedabad
10	Anand	Anand
11	Mogar	Anand
12	Chikhodara	Anand
13	Sinhol	Anand
14	Pij	Anand
15	Dahegam	Gandhinagar
16	Ahmedabad	Gandhinagar
17	Mansa	Gandhinagar
18	Kalol	Gandhinagar
19	Valad	Gandhinagar
20	Naliya	Kutch
21	Nakhtrana	Kutch
22	Dayapar	Kutch
23	Visnagar	Mehsana
24	Mevad	Mehsana
25	Nandasan	Mehsana
26		Mehsana
27	Ganeshpura Mehsana	Mehsana
28	Jotana	Mehsana
29		Mehsana
30	Vijapur Kadi	Mehsana
31	Gadsai	Patan
32		
	Radhanpur	Patan
33	Anternesh Dhokawada	Patan
34		Patan
35	Radhanpur Park	Patan
36	Koliwada	Patan
37	Suka Vantada	Sabarkantha
38	Bayad	Sabarkantha
39	Ambaliyara	Sabarkantha
40	Jitpur	Sabarkantha
41	Aniyor	Sabarkantha
42	Demoi	Sabarkantha
43	Dhangdhra	Surendranagar
44	Kharaghoda	Surendranagar
45	Ajitgadh	Surendranagar
46	Visavadi	Surendranagar
47	Jetpur	Vadodara
48	Bodeli	Vadodara



Exhibit 4: Software Development

■ District Management System:

This software has been developed in Gujarati language using Gujarati 'Saral' Font. This software has been specially developed taking into consideration the details about the members of SEWA. This software has been installed in districts of Anand, Bayad, Bodeli, Mehsana, Radhanpur, Kutch (Naliya and Nakhatrana), Surendranagar, Ahmedabad, and Gandinagar (Version 1.0). Updated version 1.2 has been installed in Anand and Bayad, Mehsana, Radhanpur, Kutch (Naliya and Radhanpur), Surendranagar, Ahmedabad and Gandinagar. The SEWA member enrollment process is a yearly activity. Membership details are entered in books. Tracking of these details is very difficult process. This DMS software will help in storing of all this information. It will generate a unique number for each member and will also generate various reports

■ Share Capital System:

This software was used to enter the details of all the artisans and segregate them according to their work and seniority. Relevant reports were then generated and proper shareholders were identified

■ District Training (Computer) Information System:

This software provides and maintains data regarding the computer trainees. This software was installed at the CLC level. This software is continuously updated as per requirements.

■ Vehicle Maintenance System:

This software takes care of notifying the vehicle booked as well as helps in finding out the mileage and depreciation of the vehicle. Also helps in maintaining the vehicle. As different departments of SEWA often book the vehicles at different times, and the bill of the booked vehicle is also printed on preprinted stationary through this Vehicle Maintenance Software. This software helps in generating customized reports as per user and District associations' requirement. After introducing this software the administration of vehicles has become easy and speedy to maintain the vehicle and doing the billing.

■ Front Desk Management System:

This software provides facilities for online entry (entering phone numbers in the computer) as well as offline entry. Data such as number of phone calls made, received; fax sent and received; photo copies made and also dictionary of all the phone number can be entered. A report pertaining to the status of all the abovementioned parameter is generated at the end of the day. This software has helped in eliminating the expenses by reducing the duplication of fax and phone and also in easily searching the phone number.



List of Abbreviations

ACT Academy of Computer Training, Ahmedabad AIDS Acquired Immuno-Deficiency Syndrome

BBIT Bhailabhai and Bhikabhai Institute of Technology

BSNL Bharat Sanchar Nigam Limited

CD Compact Disc

CD-ROM Compact Disc Read Only Memory

CEO Chief Executive Officer
CLC Community Learning Centre
CPU Central Processing Unit

DDIT Dharamsingh Desai Institute of Technology, Nadiad

DMS Data Management SoftwareDRDA District Rural development Agency

DSS Decision Support System
ERP Enterprise Resource Planning
FMCG Fast Moving Consumer Goods

GCMMF Gujarat Cooperative Milk Marketing Federation Limited

GIS Geographical Information Systems

ICT Internet and Communication Technologies
IEC Information, Education and Communication
IFFCO Indian Farmers Fertilizer Cooperative Limited

IS Information Systems

ISDN Integrated Services Digital Network

ISP Internet Service Provider

ISRO Indian Space Research Organization

IT Information Technology/ies

ITeS Information Technology enabled Service/sJWDIF Japan Women in Development Fund

LAN Local Area Network

LDCE Laljibhai Dalpatbhai College of Engineering, Ahmedabad

MOUMemoranda of UnderstandingMISManagement Information SystemNGONon-Governmental OrganizationNIRDNational Institute of Rural Development

NVA National Virtual Academy PCs Personal Computers

RUDI Rural Urban Distribution Initiative

SAARC South Asian Association for Regional Cooperation

SatCom Satellite Communication

SEWA Self Employed Women's Association

SHG Self Help Group

STD/PCO Subscriber Trunk Dialing/ Public Call Office

STFC SEWA Trade Facilitation centre
TLA Textile Labor Association
TOT Training for Trainers

VIIT Vidya Prathishthan's Institute of Information Technology

VSAT Very Small Aperture Terminal

Wi-Fi Wireless-fidelity
WWW World Wide Web



Community Learning Centres (CLC) in Gujarat



SEWA's Sister Organizations

Self Employed Women's Association	www.sewa.org
SEWA Trade Facilitation Centre	www.sewatfc.org
Sewa Gram Mahila Haat	www.sewamart.com
Banascraft/Kutchcraft	www.banascraft.org
Shree Mahila Sewa Sahakari Bank Ltd.	www.sewabank.com
Gujarat State Mahila SEWA Cooperative Federation	www.sewa.org/gsmscf
Shri Mahila SEWA Anasooya Trust	www.anasooya.org
SEWA Insurance	www.sewainsurance.org
SEWA Academy	www.sewaacademy.org
SEWA Research	www.sewaresearch.org
Video SEWA	www.videosewa.org
SEWA Bharat	www.sewabharat.org
Homenet South Asia	www.homenetsouthasia.org
SEWA ICT	www.sewaict.org
SEWA Sanskar Kendra	www.sewasanskarkendra.org



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