

Centre for Social Medicine

ICT and Networking Division - The Rural ICT Initiative

3.1: Target Area of the Project:

The e-health project consisting of 12 Rural IT Centres and a main hub at Loni Township is implemented in 40 remote and tribal villages covering about 150,000 people in six blocks (Rahata, Shrirampur, Rahuri, Sangamner, Akole, Shevgaon) in Ahmednagar district.

3.2 The Intranet & Internet Connectivity

The 12 village e-health Centres are connected to the Tertiary level Teaching Hospital of Pravara Institute of Medical Sciences (PIMS) -Deemed University, Loni through a wireless MAN solution (WMAN). The central site at PIMS is setup using four sectoral antennas with 20 mbps access points. They are also connected through point to multi point wireless links with 10mbps subscriber's module, to the following 12 developmental institutes of the PRAVARA GROUP to empower the rural population and improve their quality of life. The seven lane program will help the villagers for dissemination of information regarding government schemes, marketing of agricultural products, healthcare, education, agro processing and economic development.

PRAVARA GROUP of institutes connected to the village IT centres

1. Pravara Cooperative Sugar Factory, Pravaranagar
2. Pravara Rural Education Society, Loni*
3. Pravara Medical Trust, Loni**
4. Pravara Cooperative Bank, Loni***
5. Krishi Vigyan Kendra, Pravara Institute of Research and Education in Natural and Social Sciences (PIRENS), Babhaleshwar.
6. Pravara Milk Dairy, Nizarneshwar
7. Pravara Vegetable Cooperative Society, Pravaranagar
8. Pravara Arts, Science & Commerce College, Loni
9. Pravara Engineering College, Loni
10. Pravara Public School, Pravaranagar
11. Shirdi Sai Rural Institute (SSRI), Rahata
12. Pravara Kanya Vidya Mandir, Loni

*the nodal office of 80 educational institutes in Ahmednagar, Nasik and Pune Districts of Maharashtra

** the parent body of Pravara Institute of Medical Sciences-Deemed University, Loni and its constituent medical, dental, nursing, physiotherapy, social medicine, medical biotechnology, bio-science management colleges and network of tertiary level teaching hospital, health centres located in rural areas

*** a Scheduled Bank having 40 Branches in rural areas of Ahmednagar district

The village community and stakeholders of the area can access information and services of these 12 institutes from the e-health centres through wireless network.

The internet bandwidth of 2mbps 1:1 is provided at central site from service provider RailTel Corporation of India Limited (RailTel), Ministry of Railways, Government of India. & 2 mbps fall back link from service provide BSNL i.e. Bharat Sanchar Nigam Ltd. The internet bandwidth is shared between the remote sites and pravara group institutions.

3.3 Services available at the e-health centres :

The following services can be availed in 40 villages spread in six blocks of Ahmednagar district through intranet and Internet from these e-health Centres.

3.3.1 Net consultancy with Tertiary level Hospital (e-health):

- First Opinion: Medical Helpline on any medical/health related queries of the general public from the Pravara Rural Medical College Hospital (PRMCH) Faculty.
- Second Opinion: The Rural Doctors (GPs/doctors working at PHCs) can consult experts at PRMCH for a Second Opinion regarding their patient's diagnosis or treatment.
- Patient Consultancy & Scheduling: Patients who wish to consult experts at PRMCH can fix up their visiting schedules/follow-up from their village.
- Video Conferencing with Expert Doctors: Every Tuesday 4.00 to 5.00 PM an expert doctor of PRMCH is available to general public/patients of 40 villages' on Video Conferencing (Namaskar Doctor Program).
- Access to Patients Information: Relative/Villagers can avail information (which is on Public Domain) regarding patients treated at the PRMCH.

3.3.2 Net Consultancy with Agricultural Research Station (Krishi Vigyan Kendra) (e-agriculture):

- Access to Agricultural Scientists from KVK – a Sister institution of Pravara Medical Trust, provide consultancy on-line and off-line to farmers on the quality of seed, pesticide, insecticide spray and scientific farming practices etc.
- Access to agricultural Produce Markets : Centres provide online real time comparative market prices of various agricultural commodities at the nearby wholesale market yards like Pune, Nasik and Mumbai.

- Access to Weather Forecasting: IT centres provide access to online real time weather forecasting information like rainfall, temperature and humidity etc by connecting to NASA.
- Video Conferencing with Agri. Scientists: Agricultural Scientists of KVK conduct weekly video conferencing sessions with the farmers' clubs of the Project area to continuously update knowledge of farmers and also solve their crop & live stock related problems.

3.3.3 Access to Government Schemes/Services:

- Information on Central, State and Local (Z.P) government developmental schemes and application forms are uploaded on the intranet for the easy access of the public.

3.3.4 Career Guidance and Self-Employment Counseling:

- This facility is provided both online and offline to students, unemployed youth, Self Help Groups (SHGs)

3.3.5 Access to internet browsing & other facilities:

- Villagers are provided with free access to internet browsing, downloading, printing and e-mail services at the village IT Centres.

3.3.6 Assist in developing Local Area Portal (LAP) for the Gram Panchayats:

- Members of Panchayat Raj Institutions and the village IT Operators were trained by Digital Empowerment Foundation (DEF), New Delhi & Micro Associates, Pune in 2008 to develop Local Area Portal (LAP).

4. Unique Features of the Project

- We believe that “Pravara Initiative on E-Health, Empowerment and Governance” is unique in more than one way from the point of view of scalability and sustainability;
- Firstly the area of operation (remote rural villages) and the nature & type of service users (tribal people, women, students & unemployed youth, farmers) covered by the project are underserved.
- Secondly the Project design and implementation is participatory (bottom-up) – the local gram panchayat contributes to the Project and takes ownership by donating the physical facilities like room, part support to salary of the local IT Operator, electricity bills etc.
- Thirdly the services of the IT Centre are derived from the priorities and needs of the users. For example, the agriculture, market, weather forecasting services, access to government schemes, banking, entrepreneurship and career opportunities became the entry point for the users before they get into the health/medical help line.
- Fourthly – employs low technology

5. Users Profile of Pravara Rural IT Initiative

On an average daily 1000 people (farmers, women, students, rural doctors etc) avail the services at these 40 Rural IT (Tele-Health) Centres. During 2010-11, as many as 1391 people

used medical helpline, and 7800 people availed the patient information, patient scheduling modules, 3869 farmers consulted agricultural scientists, 5015 farmers used market and weather information, 13514 students & un-employed youth availed the e-education and e-career opportunities modules (of which 8656 students and youth benefited through admission in various colleges including foreign universities), 370 individuals /organizations availed the government schemes facility of which 210 got benefits like Free Cycles to Girls who are going to High Schools, nearly 2200 people participated in Namaskar Doctor Program and 5000 people participated in health education / awareness programs.

6. Impact of the Project on Rural Transformation

There were visible changes observed among the women, adolescents & youth and farmers pertaining to health awareness, health seeking behaviours, early detection of diseases & treatment, enhanced capacity building of rural health workforce, economic viability of farming occupation, net savings of farming operations including pest management, seed selection, INM and IPM operations, getting optimal market prices for their products etc.

Besides, the important target groups which immensely benefited are students and youth of these remote rural and tribal villages who tapped the opportunities in other Indian cities and abroad for higher education, employment and availing government schemes/scholarships etc. Today, students studying abroad due to these e-health centres are in touch with their parents through e-mail and skypeing. The third most important target group that benefited was women who could experience visiting around the world sitting in their village. It was a remarkable experience for most of the women. Almost all the age-groups, especially women, who otherwise were hesitant to go to a doctor benefited with the tele-health modules, by timely consultations with the expert doctors, gaining health knowledge, saving time, energy and money for medical consultations etc.

7. Important Visitors

- HE Dr APJ Abdul Kalam, the then President of India, visited the Project in September 2005 and interacted with the farmers of the area assembled at these Rural IT Centres through video conferencing. He was pleased to witness the socio-economic empowerment and rural transformation that is taking place in the area due the e-connectivity project. Based on his experiences and the inputs gathered from his personal visit, he strongly recommended “Pravara Initiative on e-health, e-empowerment” as one of the key components of PURA (Provision of Urban Amenities in Rural Areas) Scheme of Government of India. Subsequently, a number of Official delegations from various states including Andhra Pradesh, Karnataka, IIM Ahmedabad visited the Project to study the salient features.
- Ms. Maria Norfolk, Chief of Swedish International Cooperation Agency, Stockholm, Sweden inaugurated the first e-health centre under Sida Project at Kolhar Rural Health Centre in May 2006.
- Mr. Lars-Olof Lindgren, Ambassador of Sweden interacted with the village community through videoconferencing and also visited the e-health centres run in tribal areas in 2008
- HRH Crown Princess Victoria of Sweden interacted with the women SHG members and enquired about the utilization of the Project for health education in 2009

- An eight Member Team of Parliamentarians representing Standing Committee on External Affairs, Sweden visited the Project and the beneficiaries in 2009.
- Around 35 doctors, students from America, Australia, Colombia, EU countries, Japan visited and undergone training at the e-health centres during last 5 years.
- Around 30 Central and State Government Officials visited the Project.
- Around 50 NGO representatives visited the centre
- A number of experts from IT field including Mr. Osama Manjar, Digital Empowerment Foundation New Delhi visited the “Pravara Initiative on e-health” Project.

8. Brief Profile of the key personnel involved in the Project

- Padmabushan Shri Balasaheb Vikhe Patil – Managing Trustee of Pravara Medical Trust (former Cabinet Minister, Govt. of India) is the Chief Architect, Mentor and Guiding Sprit of the Pravara Rural IT Project.
- Dr. Ashok Vikhe Patil (ashok.patil@ebox.tninet.se) – former CEO of PMT & President, International Association of Rural Health & Medicine, Japan has been the Strategic Planner to take this initiative to national & international levels by adding various need based facets. He holds a Masters degree in Business Administration (MBA) and Doctor of Philosophy (Ph.D) in Health Economics.
- Dr. M.G. Takwale, Vice Chancellor, Pravara Institute of Medical Sciences – Deemed University, is the Project Holder. He holds a Ph.D in Physics and academician, researchers and administrator and has expertise in non-conventional energy sources at national & international level.
- Mr. K. V. Somasundaram (soma.konduri@pmtpims.org) – Director, Centre for Social Medicine (Former Prof. & Head, Dept. of Medical Informatics), Pravara Institute of Medical Sciences – Deemed University, has been involved in the Project since inception for implementing, coordinating, monitoring and evaluation. He holds a Masters Degree in Statistics and Diploma in Computer Programming.
- Mr. Mahesh Borawake (Mahesh.borawake@pmtpims.org) – IT & Computer Department, Pravara Institute of Medical Sciences – Deemed University, have been involved since inception in designing, developing and technical support of the project. Mr. Mahesh holds a Bachelors degree in Computer Science.

9. Conclusion

We are of the view that free access to diverse and unrestricted sources of information and means of communication benefits all citizens, especially underserved people living in the remote villages/tribal areas. as per their priority needs. Effective implementation and enforcement of various developmental schemes is possible through ICTs. We are confident that a vivid manifestation of this free access to information will help in social democratization, justice, empowerment and accelerating to bridge the gap between rural and urban divide and between 'the haves' and 'the have nots'.