Saral Training Academy: ICT Training for Rural Youth in India

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Tapping into the enormous potential of the school dropouts and the youth of the rural communities, the Saral TA courses in ICT training seek to transfer knowledge and skills in the basic management of specific applications, tailored to the needs of the rural ICT projects, thereby empowering them and stemming, to some measure, the flow of migration to urban areas and giving back to the rural communities valuable assets in the form of trained ICT personnel.

I. INTRODUCTION

India has an estimated population of 1.15 billion, of which more than 70 per cent reside in rural areas. The mainstay of the rural economy is agriculture but this sector has been growing at less than half the pace of overall GDP. According to one estimate, the average income of an urban dweller is four times higher than that of a rural dweller. Even in the social development sector, there is huge disparity between the urban and rural areas. Most striking is the disparity that exists in urban and rural literacy numbers. In 2001, the urban literacy rate was 80.06 per cent whereas the rural literacy rate was just 59.21 per cent.

The disparity in rural and urban living is not unusual for a post-colonial country like India. Policy makers, in recent times, are sincerely trying to bridge these disparities through the improvement of infrastructure and the introduction of technology in rural areas. The Indian government is investing over $35 billion in its flagship Bharat Nirman programme, the largest rural infrastructure development programme of its kind. However, access to infrastructure and services may still be limited not due to lack of capacity to pay for the services but due to lack of trained personnel to man the services. The governmental efforts to bridge the infrastructure gap, especially the digital divide, are discussed in Section II.

Despite the low income of rural communities, there is significant money reaching them through government schemes as well as the wages sent home by migrant workers from urban areas. This money then goes out again for services or goods brought from urban areas. If a second-tier economy of self-sufficiency in an ICT (Information and Communications Technology) service economy within rural communities can be created, the money outflow can be partly arrested. As part of an effort towards this end, government and Non Government Organizations (NGOs) are trying to create rural centres that connect people to information sources, government services, etc. There is also an attempt to introduce ICT

solutions in daily rural life in order to empower local rural communities. In Section III, some of the more widely known efforts in this direction are discussed.

For these centres to work efficiently, trained human capital with requisite knowledge and skills is an essential requirement within the rural communities. The Government of Tamil Nadu is setting up an ICT academy, ICTACT (ICT Academy for Tamil Nadu) with an initial investment of Rs 20 crores to provide such manpower. The Academy will provide training to 5,000 faculty members across Tamil Nadu over the next three years so as to benefit more than 250,000 students indirectly. In contrast to this approach, SaralTA aims to train rural youth directly in ICT for a more immediate and tangible impact. In Sec. IV, we argue as to why the direct approach is the preferred way to go.

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II. DIGITAL DIVIDE IN INDIA

A digital divide separates those privileged with access to information technologies (IT), with the skills and resources to use them from the rest of the society that suffers from either the lack of access to IT or lack the skill to use them or both. Individual ownership of digital resources, particularly access to the Internet, is generally accepted as the measure of the digital divide between communities. However, this approach magnifies the divide because rural communities have mainly collective ownership of digital resources. Surveys have shown that the lack of availability of skilled manpower in the rural community is one of the major constraints in the utilization of the digital resources available with it.

Several measures have been taken by the Indian government to bridge the digital divide and transform India into a Knowledge Society. It commissioned the National Task Force on Information Technology and The Software Development (http://www. it-taskforce.nic.in) and the Planning Commission drew up an IT Action Plan (http://www.planningcommission. nic. in/); these were major policy initiatives towards this end. Policy makers have realized that IT is the best tool to address problems in the social sector such as education, health and rural development. IT can act as a facilitator for bringing in transparency, good governance and empowerment.

In the rural telecom sector, digital data transmission facility within 5 km of every village is the stated goal of the government. A mix of technology options is employed to

achieve the goal. Depending on local conditions, one among the following bundle of technologies will be used:

- Terrestrial wireless
- Satellite technologies
- Wire-line technologies

III. E-RURAL PROJECTS

Parallel to the effort of the central government to improve the digital infrastructure of rural India, efforts are also being made by the state and local governments, private sector, and not-for-profit organizations for using ICT by improving connectivity to improve the informational empowerment of rural communities. A few stellar efforts are listed below:

- **Grameen Gyan Abhiyan:** This project of the government aims to achieve the ICT enabling of 6,37,000 villages of India. The stated goals are:

1) To make a paradigm shift from resource intensive agricultural practices to more of a knowledge-led movement for rural prosperity by making two-way knowledge linkages between the families living in rural areas and their service providers.
2) To develop a knowledge-led rural society as the backbone for national productivity and growth in an inclusive and sustainable manner.

- **Akashganga:** This is being used at the Dairy Cooperative Society (DCS) in the state of Gujarat, which is a farmer-owned, grass-root level unit in the cooperative structure. IT tools are used here to facilitate collection, weighing, quality segregation and timely payment for the sale of milk. A database is maintained and expert husbandry services are also rendered. This has resulted in higher profits for rural milk producers.
- **Akshaya:** This project nurtures entrepreneur spirit of people living in the remote areas of Kerala state. An entrepreneur is trained to set up an e-payment service platform to serve the local community.
- **Gyandoot:** This is an intranet service in Dhar district of Madhya Pradesh state, connecting rural cybercafés that cater to the everyday needs of the masses. It disseminates information on various government schemes, generates certain government certificates, gives access to the latest market price for the rural produce, etc. In effect, it attempts to empower the rural community with reliable and fast information.
- **Warana:** Warana is a cluster of 70 villages in the western state of Maharashtra. In the Warana project, the National Informatics Centre (NIC) developed a highly user-friendly information system in Marathi for marketing of agriculture produce, with a number of online features for selling the produce of village cooperative societies to wholesale outlets in Pune and other cities and towns in Maharashtra. Information is updated daily with the help of villagers themselves.
- **e-Choupal:** An Indian corporate, Indian Tobacco Company (ITC), has set up a network of terminals in villages. Typically, these terminals, named e-Choupal, serve a cluster of 10 villages. The farmers can use the computer to access daily closing prices on local markets, as well as to track global price trends or find information about new farming techniques. They also use the e-Choupal to order seed, fertilizer, and other products such as consumer goods from ITC or its partners, at prices lower than those available from village traders.

All the above efforts and several others are being carried out simultaneously in different parts of rural India. Although the end goal is the same, that is, empowerment of the rural community by making available real-time, need-based information through communication tools, each project is unique in its own way. A few years down the line, a comparative study may have to be conducted on these projects to arrive at the best model to exploit the potential of ICT at the village level. The final solution can emerge through the people, who are actually involved in using this technology at the grass-roots level.

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IV. THE NEED FOR SARAL TA

A key asset for a member of a community in India is his social capital. Social capital refers to networks of mutual support that exist within and between households, extended family and communities. A strong social capital is also converted to political capital in a democratic society. This critical asset is lost when a member of the rural community migrates to urban areas, mainly in search of employment. This is also true for the reverse urban-rural migration but due to better opportunities available at the urban centre, a member of the urban society will rarely exercise the option to migrate to rural areas. In rural areas, to meet the financial service requirement, there exists a network of institutions such as District Credit Cooperative Banks (DCCBs), Primary Agriculture Cooperatives (PACs) and Micro-financial Institutions (MFIs). These financial institutions are getting progressively computerized in alignment with their urban counterparts although on a much smaller scale and level of sophistication.

One of the key findings of a study conducted by Saral Services (http:// www. saralservices. org) on the application of ICT in rural India was that IT adoption by rural-based DCCBs, PACs and MFIs is handicapped due to inadequate supply of IT-trained persons. Now, with the coming in of further ICT initiatives (listed in Section III), the unavailability of ICT skilled manpower is becoming a critical constraint. The problem of finding IT-trained people in rural areas has to be tackled immediately or else the rural ICT initiatives will fail to have a positive impact. Failure of projects in the initial period of ICT revolution in India, may lead to reluctance in taking up such ICT initiatives in the future.

As pointed out earlier, there is adequate availability of literate manpower in rural communities; but because they have not completed their education to a point that is needed by the urban employment market, they are largely unemployable in urban market. However, the rural employment market is not as demanding in terms of ICT skills. And with the urban youth with ICT skills anyway reluctant to work in rural areas, a school dropout in the rural community, reasonably trained in ICT skills, can be easily employed in his own rural communities.

Saral Services, an NGO from Hyderabad city of India has launched an initiative, Saral Training Academy (Saral TA) to identify such unemployed rural youth and give them ICT training, tailored to the needs of the rural ICT projects, so that these youth go back to their rural community and man the various ICT initiatives in their areas. The initiative is in collaboration with Safal Solutions Private

Limited, a software company and a close associate of Saral Services. Saral TA was launched on 3 January 2008.

In essence, Saral TA aims to make the youth employable by giving them the required exposure to ICT and training them in the basic management of specific applications that are being used in the organizations and institutions working and located in the rural areas. The attempt is to match deployment with catchments, to ensure that the requirement of ICT technical personnel is met from within the rural community. This creates other non-farm livelihood option for a rural community and also partly stems from the flow of money and manpower from rural to urban areas.

V. SARALTA OBJECTIVES

SaralTA training modules are designed to impart the following skills to the participating trainee:

- **Computer Literacy:** Ability to assemble a computer by parts to the required specification. Skills to load an operating system on the newly assembled computer. And, finally, the skill to identify and load office and home software, to make the computer ready for use.
- **Package Deployment:** Ability to set up a specific package on a system, with an understanding as to what organizational process is getting digitized.
- **Trouble shooting:** Skill to troubleshoot minor hardware and software problems, but, more essentially, ability to report to the headquarters, the major problems, concisely, precisely and quickly.

The teaching method emphasizes the learning-by-doing method, and theory is used only as a back-up to practical training. The trainees build their knowledge and skill base by working on project work. They hone their communication skills by giving PowerPoint presentations and participating in classroom discussions.

VI. A TERM AT SARAL TA

Saral Services have co-opted organizations working in rural areas as partners. These organizations are encouraged to identify suitable candidates in the area of operations. Eligibility for enrolling in the Academy is X grade pass in the age band of 18 to 24. The partner agencies conduct the first level of screening through a selection test provided by Saral Services, and send the answer sheets to Saral Services for evaluation.

The second and final screening is done by Saral Services. The methodology of selection is a written examination, followed by a telephonic interview. The batch strength is kept at a maximum of 10 students. The course is called Saral TA and is fully residential. The expenses for the four-month course are Rs 40,000 per trainee, all-inclusive. Saral Services has tied up with a financial institution for student loans for the full amount. There are regular reviews of a trainee's performance. Based on the review, participants are counselled from time to time and appropriate action initiated. On successful completion of training, placements are guaranteed.

VII. TRAINERS AND TRAINING MATERIAL

Both permanent and part-time training faculty are available. They are MCA or engineering graduates, with field experience. The training curriculum has a three-week field training module. Here, the trainees are sent to projects, similar to the projects they are likely to work in. Thereby, the trainees get 'hands-on' experience on projects, guided by field practitioners. The Directors of Saral Services are also involved in volunteering time to the trainees. English and Maths classes are

taken by two directors. Another director, who is a trained counsellor, counsels the trainees. It is very likely that the trainee has moved out of rural environment for the first time for such a long period. Thus, he may have not acquired the skills to be comfortable in an urban environment. The Academy, therefore, lays special emphasis on imparting soft skills required for urban living, such as basic etiquette, telephone manners and hygienic living, as part of the course. English classes are also undertaken to improve the communication skills of the trainees. When imparting English language skills, it is emphasized that English is taught as a medium of communication and should not be learnt as something superior to the local language. Yoga, for relaxing the mind, is mandatory for all trainees as a morning exercise ritual.

Trainees attend a week-long training called Jeevan Vidya (life skills), which enables the trainees to remain grounded and connected to the world around them. Care is taken to ensure that the trainees are comfortable in the new environment and are productive.

VIII. FINANCIAL SUPPORT AND PLACEMENTS

SaralTA trainees are provided Vidya loan by BASIX, a non-banking financial company. At the end of the training they are given placements, and afterwards they return their loan in installments. Thus, a SaralTA trainee does not have to put in a single rupee for his/her training upfront. In three to three-and-a-half years, this loan can be returned. Provision exists for early payment of loans if the trainee so desires. Efforts are now on to link SaralTA to government banks, to give the trainee more options.

Thirty-two trainees have successfully completed Saral TA training and are all employed. Safal Solutions has been instrumental in absorbing most of them. They are placed in rural projects in rural areas. Nine are working in rural Bihar, with Bihar Rural Livelihood Development Programme (BRLP), six with Common Service Centres in Orissa, one with Deepak Charitable Trust in Gujarat, three are in PACs in Kareem Nagar in Andhra Pradesh and three in PACs in West Bengal. Two are working with Aajeevika, an NGO in Uttarakhand. Some trainees, who desired to work in an urban milieu for some more time, have been placed as such—one is looking after Saral TA Ixx trainees, three are working as testers in Safal Solutions, one is working as accounts executive in Safal Solutions in Hyderabad. Some trainees have been placed in Hyderabad for more exposure to the projects and for enhancing their skills in areas such as testing and accounting. The ones working in Hyderabad will eventually move to their areas. One trainee opted for self employment and is running a photo studio in his village whereas one has joined a retail outlet in his area.

IX. FUTURE PLANS

Five batches of successful trainees have passed out from the Academy. Some of the trainees from the earlier courses have started pursuing academic courses to upgrade their profile. They are in the process of completing their studies, from which they had dropped out earlier. The Saral TA course seems to have given them the confidence to achieve something bigger.

The enthusiasm shown by Saral TA Ixx trainees, has encouraged Saral Services to launch a pilot training programme named Saral TA 2xx, which is a six-month course in software programming. In this course, the rural youth, who have successfully completed Saral TA Ixx and display an aptitude for programming, are initiated into programming

with C language. The trainees will learn C, PHP, HTML and JavaScript, and do live project work.

The induction of female trainees has begun with one girl in Saral TA 201. More women trainees will be inducted in later programmes. Since the duration of Saral TA 2xx is six months, the loan amount is Rs 60,000. The training is loan-based. There are plans to expand the training to other centres so that training is held near the catchment area. Thus, more training centres will be started in North India, to cater to the demand in that part of the country.

X. CONCLUSION

The Saral TA model has been a success both for participants and the partners involved in the project. One of the factors for success is the choice of Hyderabad as the location of training. The city of Hyderabad is one of the leading software hubs in India; therefore, there is an abundance of manpower for imparting ICT training. Rural India is a reservoir of dropout students, who have the talent but lack the opportunities to tap it. Saral TA hones their talent such that despite not having degrees/certificates, they are given a chance to join a technical course. The role of grass-roots agencies has also been crucial in identifying such youth with potential.

The rapid ingress of the ICT initiative into rural India makes the need of such academies not only desirable, but a necessity. The challenge is to replicate this model elsewhere in India and also in other developing countries, which may not be as advanced as India, in the field of ICT. SaralTA success shows that if the participant can be temporarily shifted to a comfortable surrounding where trainers are available, the trainees imbibe sufficient skills and become tools for ICT proliferation in rural communities.

TESTIMONIALS

"In rural NGOs and institutions, many of the office boys and office assistants are not graduates; NGOs can send them for Saral TA training. After training, these boys could be absorbed in the same organizations as computer assistants, and their earlier positions could be given to other unemployed undergraduates. Offices will, thus, get reliable staff to handle their computers." Madhu Khetan, Programme Director, PRADAN

"Saral TA is a professional, IT-based, residential training academy that provides training to rural youth in ICT, support services and managing specific applications. I am among the first batch of candidates that underwent training and am now working in Hyderabad. Saral TA trained us in basic hardware and networking; software and software testing; Accounts; RDBMS and LINUX and one of the live projects of Safal solutions, which allows us to work in the field as ITFT and make our living. Most important, it enables us to live a life of dignity by providing us the requisite training and jobs thereafter. I am thankful to the Academy." Uddhaba Chandra Lohar, Teaching Assistant, Saral Training Academy

"Saral TA, a residential training academy provides ICT training to the rural youth of India. I learnt to work in the IT field here. In addition, the Academy has a schedule for developing a good personality." Chittaranjan Mohanta, Saral TA lOl, Batch-OS.