

# AN OVERVIEW OF DIGITALIZATION OF RURAL INDIA AND ITS IMPACT ON THE RURAL ECONOMY

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## **ABSTRACT**

*The article discusses the steps towards digitalization of rural India and its impact on the economy. Large number of initiative were taken like Lifelines India, e-choupal, Choupal Sagar, Gyandoot, n-lounge etc. Its impact is also far and wide like Increase in Employment Opportunities, Improvement in standard of Living, Reduction in Risk and Uncertainty etc.*

## **INTRODUCTION**

India, which was considered as primarily an agricultural economy, is developing at a very fast rate. It has now become a knowledge economy. It has got the world's largest pool of scientists, doctors, engineers and experts in every field. Till few years back India's metros were developed which had all the latest technologies. The evolution of information and communication technologies (ICTs) revolution in India has created a technological divide between the urban areas and rural areas many of India's companies and well-educated enjoy the benefits of ICTs, these technologies were not accessible or affordable for the majority of the population. The divide is exacerbated by the deeply ingrained disparities of gender and social class, which determine who can or cannot use technology. Despite recent Liberalization, Privatization and Globalization since the 1990, accessibility is also hindered by language barriers, and a lack of suitable content and applications in local languages. But now that is not the case. India's rural areas are also developing at a very fast rate. According to a marketing research firm report by Francis Kanoi "Contrary to the perception that Direct-to-Home (DTH) television technology is an urban or a metro phenomenon, 70 per cent of its DTH subscribers reside in rural areas and towns with a population under a million. And metros like Delhi or Mumbai contribute only 2-3 per cent to the overall DTH subscriber base of 13.2 million" In rural areas the market leaders are Dish TV and DD's direct plus DTH while in metros Tata Sky, Dish TV and Sun Direct DTH services are the preferred brands. The states of Maharashtra, Goa, Punjab, Uttar Pradesh, and Rajasthan are the leaders in DTH subscription, contributing over 6.4 million DTH connections or 48 per cent to the overall DTH subscriber base. DTH has become popular in rural areas because it always gives the consumers a variety to choose from and pick accordingly. In rural areas there are almost 10-12 hours of power cuts. it will be easier for the people to access their favourite programmes or daily soaps through DTH. All they need is a small generator and their digital TV will work while cable will not.

### **Steps towards Digitalization of Rural India**

Cisco and BT have established Life lines India. It is a telephone-based help line that provides advice and guidance to rural farming communities. Majority of the rural population is illiterate and therefore a voice based program is highly useful to the farmers. Large number of farmers call on their helpline for problem relating to cattle or pest infestation to their crop etc and are getting benefitted by it. There is one instance of a farmer whose cow was giving very less and poor quality of milk. He called on these help lines and followed their instructions meticulously and with few days found improvement in the quality and quantity of milk given by the cow.

The program, which launched in November 2006, can point to many solid achievements:

- Participating farmers have increased profits from 25 to 150 percent due to a consistent improvement in crop quality and productivity.
- The FAQ database now contains more than 125,000 entries.
- The program has expanded to encompass more than 100,000 farmers in nearly 5,000 villages.
- Call volume has risen from 1,100 per month at launch to more than 200 calls daily.
- The program has expanded beyond agriculture and now supports teachers with advice on curriculum, pedagogy, policy and administration.

In Dhar district of Madhya Pradesh government has launched Gyandoot (messenger of knowledge) Project. In this project a reliable intranet connects villages throughout the district. Access is through numerous cyber-kiosks run by local entrepreneurs. A wide range of services is offered: mandi [market] information, landholder records, Hindi email, forms and news on employment, matrimonial, education and health. This project won the prestigious Stockholm Challenge Award for the year 2000.

M.S. Swaminathan Research Foundation of Chennai and International Development Research Centre [IDRC] of Canada have initiated a project similar to Gyandoot project named, The Information Village Research Project (IVRP). in Chennai. About 8 villages around Pondicherry form the test bed for the project. For the villages covered under the project, Villianur, Pillayarkuppam, Kizhur, Embalam, Veerampattinam, Thirukanchipet, Pooranamkuppam and Kalitheerthalkuppam, information technology is no longer a dream of the 21st century It has redefined their lives. It provides information on fisheries, agriculture , buses, healthcare, jobs etc. online. Best of all the project uses 60% of solar energy and is totally wireless.

According to an India Today report “Every morning, Madurai, a fisherman, prays for his safety and a good catch. These days the ritual stretches half an hour more. Before setting out to sea, Madurai sits before a computer terminal gathering information on the sea-like wave height, turbulence and fish density. So do hundreds of other fishermen in Veerampattinam, a coastal village 15 km off Pondicherry city”.

In this project the village information centre (VIC) receives information by voice mail and dispenses it through a public-address system. Farmers receive advice on rotation of crops,

fertilisers and pesticides. They no longer travel up to 20 km away to know the market price of their crop. Erratic power supply does not bother these villages as 60 per cent of the project work is by solar power. Motorola has donated two-way radio dispatch equipment to connect the villages so that they are not handicapped by the lack of telephones in the villages.

The recent elections were totally computerized for the first time in India and carried out on India made machines. People every where, even in rural areas took it with ease. There was no need for ballot boxes to be manually carried and there is no question of poll rigging. Results were announced within three hours of beginning the software driven 'counting'

ITC has launched its new innovative rural mall "Choupal Sagar". It stocks wide range of products from consumer durables to the grocery items. It also provides training facilities to farmers for new techniques of farming, E-kiosk for market intelligence and requisition of farm inputs, warehouse for the storage of farm products, information center for online information on weather condition and community prices.

An organization called n-louge focused on providing commercial telephone and internet connection to every village. It decided to provide an Internet Kiosk with a computer, an Internet connection, a printer and some accessories like web cam in each village. It was a hub of rural connectivity, as well as education and training, health care, agricultural consultancy and e governance.

### **Economic Impact of Digitalization of Rural India**

The economic impact of digitalization of rural India is far and wide. To quote in the words of Kane J. Shore a Journalist "*What a difference five years can make. In that time, a project to bring the Information Age to villagers in southern India has... given 50 000 "information shop" users in a dozen "information shop" users in a dozen communities high-speed wireless telephone and Internet access. It has also helped improve more traditional Indian communication methods, such as public loudspeaker networks and community newspapers.*"

- **Increase in Employment Opportunities:** First and foremost benefit of digitalization is increase in employment opportunities in rural areas. Large number of small entrepreneurs have got employment in provision of Internet kiosks in rural areas
- **Improvement in standard of Living:** The second benefit is the improvement in standard of living of the people by improving their income. Large numbers of people are getting benefitted by these facilities. They are using internet services and other facilities provided by various schemes like lifelines India and are getting awareness regarding various plant diseases, new methods of farming etc. They are also getting information on various diseases of farm animals and methods by which they can remain healthy and their output also increases.
- **Reduction in Risk and Uncertainty:** Rural community is making full use of available techniques and is reducing risk and uncertainty by getting market information online. Fishermen are checking weather conditions before venturing into the sea. They are also carrying mobile phones with them so that in case of any emergencies they can contact their relatives or authorities and they can get help.

- **Saved life during Tsunami:** “Residents of the village of Nallavadu, Pondicherry on the east coast of India escaped December’s deadly tsunami after some quick-thinking, and forewarned, citizens managed to broadcast an alert of the oncoming waves. After receiving a phone call from a relative in Singapore who had heard of the earthquake and resulting tsunami headed for India, villagers broke into the community centre set up by the IDRC-supported M S Swaminathan Research Foundation (MSSRF) where a public address system used routinely to announce sea conditions to the fishermen was housed. The warning was successful and the entire village’s population of more than 3,500 evacuated the area in time ” (Digital Review of Asia Pacific) This is only one instance in which ICT could save lives of large number of people.
- **Increasing e-literacy in rural areas:** Large number of rural youth is getting training in using computers, MS Office and Internet. Internet Kiosks are conducting educational and training programs for rural youth. Under various programs large number of rural youth is being trained through village knowledge centers.
- **Increasing awareness about Spoken English:** Rural people have become aware of importance of spoken English, since English is the main language required for Internet.

## CONCLUSION

Digitalization of rural India gives a very rosy picture. But it is not so. There are large number of problems and challenges ahead. Discussion of all these is beyond the scope of this paper. But it can be said that Indian farmer is no longer traditional and illiterate. It is found that whenever he has got the opportunity he has made full use of available technology and has benefitted with it.

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