

## REVIEW PAPER ON DEVELOPMENT OF IT IN RURAL AREAS

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### ABSTRACT

In this paper the emphasis is made upon the contribution of I.T. in the development of Rural Markets of India. This paper focuses on various programs that is introduced by the Indian Government like E-Mitra, Community Information Centers, Drishtee, Aksh etc for the growth of rural areas. This paper examines several ongoing projects like Rural Women's Technology Park, wifi projects that aim to provide IT-based services to rural populations in India. The analysis is made on the fact that how growth Indian economy is effected by the development of rural market of India. These papers discuss the effects of information technology (IT) and its practical contributions to rural development. It also presents rural area's experiences in the use of IT and identifies the requirements and the issues needed to make practical use of IT systems for overall development of rural area. This paper emphasizes on the importance of national collaboration in promoting the use of IT in rural development.

Keywords: Rural development, information technology, rural areas, rural markets

### 1.INTRODUCTION

This paper discusses the effects of information technology (IT) and its practical contributions to rural development. It also presents rural area's experiences in the use of IT and identifies the requirements, analysis and implementation issues needed to make practical use of IT systems. Rural Literacy is ranked at the topmost position of priority. Trends indicate that rural markets are coming up in huge way and growing twice as faster as urban markets. According to a study by **NCAER** (National Council for Applied Economic Research), the number of middle and high-income households in rural India is expected to grow from 80 Million to 111 Million by the end of year 2007 as compared to Urban India that is nearby 59 Million.

This paper outlines the conceptual and empirical case for the use of IT in India's Rural development. Section 2 describes about the other organizations which have a great impact on expansion of IT sector to the Rural Indians, Section describes that the Government has setup the various centers which are spreading the IT web in the rural area through which people can be benefited and exploit the resources acquirable efficiency, Section 4 highlights the various inclinations **of sectors towards rural India and at last conclude the paper.**[1]

## 2. IT SECTOR TO RURAL INDIANS

In this section we are going to discuss few of the other organizations which have a great impact on expansion of IT sector to the Rural Indians

1. *Drishtee*: The organization is most recognized NGO in terms of serving the Rural People of India. They have the logo “Connecting Communities Village by Village” clearly explains their action. They mainly act for enhancing access and empowering communities by supporting rural entrepreneurship. Their focus areas are woman, Rural healthcare, education, Livelihood by way of Rural BPO (business process outsourcing), and financial inclusions. The organization has covered more that 600,000 numbers of villages and demand for approximately one-third of National Income. They promote themselves as one of the major contributor to Indian GDP by way of their active participation in generating Rural Entrepreneurship. They are assisted well by the banking channels, mainly those of the RRBs in their mission.[2]
2. *Aksh*: It is a fibre optic cable company with its core competence in laying and maintaining cable. Its revenue model is driven by the content and data that can be delivered over this cable. The urban areas have access to Cable TV which rural Indians are deprived of. Aksh rapidly laid a large fiber optic network in rural Jaipur district.
3. *ITC*: It is mainly concerned with the agricultural supply chain. Their Kiosks are called e-choupals and are tailored specifically for four products viz. shrimp, coffee, wheat, and soyabeans. There main objective was to provide farmers with internet access to the global market thereby maximizing their profit.
4. *TARahaat*: Initiated in the Bundelkhand of Uttar Pradesh, the kiosks of TARahaat function in line of that of the Drishtee and n-Logue with a mix of e-governance services, market price information, and similar activities. TARahaat has a product of their own called TARAgyan for expansion of education through their TARAkendras.

## 3. I.T AND RURAL DEVELOPMENT

I.T. has varied applications in it, through which the development of the rural area can be doable accurately[3]. Government had introduced a number of programs through which the people of rural India can come forward and use the I.T. enabled services and work more systematically. Some of the programs run by the Government are:

### a) *E-Mitra*:

This service is launched by the **RAJASTHAN** Government for the first time for its rural citizens, so that they can deploy the I.T. enabled benefits to its fullest. E- Mitra is Say

Government started projects, which soon become highly favourite in the region. In year 2002, two projects came into existence namely; **Lok Mitra** and **Jan Mitra**.

Where Jan Mitra is an integrated electronic platform through which the citizens of Rajasthan can avail the benefit if getting the desired information regarding any Governmental Department at kiosks which is very near to their doorstep. These Initiative program of Rajasthan government have not only helped the Government by reducing the burden of attending apiece call, it has reduced the inactivity time for the service and has lead to wage comfort to the citizens also, as with the inception of this service they can easily get the information required at their doorstep.

Lok Mitra is an urban electronic Governance Project which was launched in Jaipur city in year 2002, which helps the citizens of Jaipur (now other cities also) to pay their bills online (land, Water, Bus Tickets and BSNL) leading the citizen to save the inactivity time. This service also ensures people that their money is going directly to the Government and provides a feeling of security related to their bills payment.

*b) Community Information Centers:*

The program is designed especially for providing the world wide web access and I.T. Enabled services to the citizens through which the interface between the Government and the Citizens can be setup. These centers connect **seven northeast states** namely; Arunachal Pradesh, Assam, Manipur, Mehalaya, Mizoram, Nagaland and Tripura. The center helps to acquire the connectivity at the time of unsuitable environmental conditions. The centers are commonly termed as CIC which are generally situated at the school, college or any governmental office. People can come for the World wide web access, and for accessing the internet, a nominal amount is charged from the people through which the regular expenses of the centers are maintained.

*c) wi-fi Projects:*

One of the wi-fi project under which few villages (**of UTTAR PRADESH**) are connected to world wide web is **Digital Gangetic Plan** (DGP). Through the use of DGP wireless network connectivity is created, this program helped the people residing in villages of India to have the access of world wide web through which the information on various issues can be collected ad used, at the same time the people living in rural India can be updated with the new technological changes and the innovative changes taking place in the national and the international markets.

*d) Drishtee:*

Drishtee is present in 5 Sates and is currently acquirable in six districts. It is a private company, which was **previously titled as Cyber Edge**, which has the main work of developing the modules. It is present in Bihar, Haryana, Madhya Pradesh, Punjab and Rajasthan. It is generally suited in the Panchayat or in the bazaars. They prepare the module for the poor section of the society who can't comprehend the international language. The modules are designed for the rural and semi-urban areas especially.

#### *e) Rural Women's Technology Park*

As a model, Technology Parks exclusively for rural women have been facilitated at three locations. The parks will show case location specific technologies relevant to women provide training and also provide backward and forward linkages so that women would optimally be able to use these technologies to improve their living conditions. Some of the technology packages being delivered to women through these Women Technology Parks are - mushroom cultivation, floriculture, animal husbandry, natural dyes, vanilla bean cultivation, medicinal plant cultivation, nursery raising, aquaculture, fibre utilization, sustainable fodder management, post harvest technology, solar energy utilization, processing and weaving of local wool, women's health and information technology.

### **4 .INCLINATION OF SECTORS TOWARDS RURAL INDIA**

Income generation from Rural India has increased dramatically from past few years. Trends have witnessed twice growth rate of the rural market as compared to the urban markets. According to a McKinsey survey conducted in year 2007, Rural India, with a population of 627 million, (approximately 74.3 per cent of the total population), would become larger than the total consumer market in countries such as South Korea or Canada in another twenty years. Moreover, it would grow almost four times from its existing size in 2007, which was estimated at US\$ 577 billion. Several sectors are showing their inclination towards the rural market area due to the Increased possibility of opportunities[1].

#### ***1. FMCG***

According to Federation of Indian Chambers of Commerce and Industry (FICCI), the number of rural households using fast moving consumer goods (FMCG) products has grown from 136 million in 2004 to 143 million in 2007. India's FMCG industry is currently estimated at Rs.200,000 crore. Of this, domestic consumption accounts for Rs.17,189 crore.

“FMCG sector in rural areas is expected to grow by 40 percent as against 25 percent in urban areas,” said Assocham president Sajjan Jindal. “Rising rural incomes, healthy agriculture growth, boost in demand, rising consumerism across India, better penetration of FMCG products in the

rural market are contributing to high growth and rapid expansion of the FMCG industry in rural India

## ***2. Insurance***

According to a report, '*Insurance in Next 2 Years*', by *The Associated Chambers of Commerce and Industry of India (ASSOCHAM)*, in May 2008, the insurance sector size was estimated at US\$ 12.8 billion, and it is likely to see an unprecedented growth of 200 per cent, touching US\$ 51.2 billion by 2009-10.

## ***3. Retail***

According to a study, conducted in *September 2007*, by *Confederation of Indian Industry (CII)* on the Indian rural retail sector, opportunities in Rural Retail were estimated to be over US\$ 34 billion in year 2007. This figure is expected to touch US\$ 43 billion in 2010 and go up to US\$ 58 billion by 2015. India's huge rural market has also attracted retail investments and is seen as a viable opportunity for growth by corporate India. ITC launched the country's first rural mall "Chaupal Sagar" with diverse products being offered ranging from FMCG to electronics appliance to automobiles, with a view to provide farmers a one stop center for all their consumption requirements. Many more new trends could possibly be tried in rural markets to unearth the huge potential[3].

## ***4. Automobiles***

The *Indian Automotive Industry* currently has a turnover of US\$ 34 billion. However, the vehicle market remains untapped in rural India that has a strong purchasing power. Almost 50 per cent of the Indian rural market, which includes 220 million households, is potential automobile buyers. Two-wheeler penetration in rural belts is still very low with less than 10 per cent households owning a two-wheeler.

## ***5. Pharmaceuticals***

The *Indian Pharmaceuticals Market* is regarded as one of the fastest growing in the world. In 2006-07, this market was valued at over US\$ 7 billion with the rural segment having a remarkable share of this market. Industry estimates observed that while small towns contribute 20 per cent to the country's pharmaceuticals market, rural areas statement for 21 per cent. In 2006-07, the rural Indian market was estimated at around US\$ 1.4 billion, having grown at about 40 per cent in 2006-07 against 21 per cent in the previous year.

## ***6. Consumer durables***

A survey carried out by the *Federation of Indian Chambers of Commerce and Industry (FICCI)*, indicated that the consumer durable goods sector is all set to witness 12 per cent growth in 2008. The rural market is growing faster than the urban markets, even though the penetration level in rural area is much lower. The rural Indian market, which accounts for almost 70 per cent of the total number of households, witnessed a 25 per cent annual growth while the urban consumer

Durables market reflected an annual rate of 7 to 10 per cent.

## 5. CONCLUSION

This paper has briefly surveyed several initiatives to provide IT-based services in rural India. In this paper, information about the organizations which have a great impact on expansion of IT sector to the Rural Indians. This paper provide information about the rural area market in various sector of IT enabled services which are growing at a fast rate .This paper focuses providing several services to rural people with the common motive of having increase in the connectivity and thus creation of larger market in the rural areas have been overviewed. All the services have difference in degree of connectivity, level of service offered and basic organizational structure. It is clearly seen that the range of IT enabled service proportion is increasing at a rapid rate in the rural areas of India. Finally this overview will helpful in fruitful information for further research [1].

## REFERENCES

- 1) Link of IT Rural market in India:  
<http://www.articlesbase.com/information-technology-articles/perspective-role-and-contribution-of-information-technology-in-rural-markets-in-india-786063.html>
- 2) Nirvikar Singh, “Information Technology and Rural Development in India”, page no120-145, year no.2004
- 3) FICCI-BISNET , University of California, Santa Cruz USA, Department of Science & Technology ,Annual Report 2001-2002, Developed and maintained by FICCI-BISNET