



### The Role of Information Technology in Agriculture and Education Sector for Rural Development

#### Abstract

*This article addresses the role of information technology in agriculture and education for rural development. Information Technology is the new tool for rural development. Present era is known as the era of information and communication technology. IT is providing new access and new approaches for rural development, and rural communities are getting benefit from these technologies. In this context, information technology can be effectively used towards betterment of education, health, agriculture, agribusiness, social awareness, social and women empowerment etc.*

**Keyword: Information Technology, Rural Development, Agriculture and Education.**

#### Introduction:

The information technology play in an important role in rural development if used properly can be great advantages for the development at gross levels. The present strategy of rural development mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programs of wages and self-development (Shruti and Tandon 2016). Information Technology plays a very vital role in agriculture and education sector for rural development. Information Technology awareness among the rural people about, the importance of education and agriculture related information, speed of transfer of information from farmer to farmer, market to farmer and teacher to students . Farmers can use new technologies for agriculture development and same time for education purpose (chhachhar et al, 2013).

It also facilitates the farmers by providing them the information about the market price of produce and thus protects them from exploitation. It increases the social networking of women and helps them to release themselves if they are exploited at the domestic, social or professional front, which otherwise is isolated from the society in most of the cases. It also helps children in education by providing them information about the contemporary issues as well as methods of handling the new techniques. In a way, it can be said that information technology is a boon for the development of society.

The effective use of information technology requires that the person should have a certain level of education so as to operate the technology through computer or mobile. Also there is a need of the spread of effective communication networks for receiving the signals. All these facilities are well developed in the urban areas. The rural areas generally suffer from the scarcity of various types of

services and amenities essential for development. Also the rural people are generally less efficient in handling such technologies.

Use of information and communication could improve and can bring the changes in the life of different people whose working in different sectors such as in agriculture, education, health, rural development and agriculture were such technologies adoption can improve the productivity, save the time, energy as well as money of people, groups and organization by information communication technology (Rehman and Saba, 2012).

### **Overview of Literature**

According to Chaudhari et al., (2011), information and communication technology plays an important role in empowerment of the rural communities, which is crucial for rural development. In order to provide the rural people in Maharashtra with better prospects and opportunities for economic development, agricultural development and management and marketing management, increased participation of rural people in usage and adoption of information and communication technologies [ICTs] is envisaged.

Volman and Edith (2001), outlined the rapid development of the use of information and communication technology in education focusing on existence of gender differences in participation in computer activity at primary and secondary education.

Cooper (1993) worked extensively in the areas of rural development and technology program assessment. The analysis of determinants of rural area growth and the economic effects of state technology programs and research focuses heavily on the implications for current public policy.

Berg (2006) considered the existence of market information and heterogeneity and opined that the information technology move the economy from an inefficient to efficient equilibrium.

Mardani et al. (2011), information and communication technologies have a potential for economic growth and social empowerment. Rural economy can be benefited from information and communication technology by focusing on social production, social consumption and social services in the rural areas. The inculcation of a citizen to government (C2G) and citizen to citizen (C2C) interface would provide the link that would also lead to community participation in design and implementation of information and communication technology interventions. This in turn could promise better economic opportunities as well as social inclusion of rural people in the processes of governance. Such attributes in the social set up are essential prerequisites for good governance and rural development. Concerns about education quality and education opportunities with the necessity of developing those most vulnerable are the accumulation of globalization is symbiotic.

The following two sectors are to be discussed in the paper with reference to “The Role of Information Technology in Agriculture and Education sector for Rural Development “.

### **Role of Information technology in Agriculture Sector:**

Agriculture is the back bone of the Indian economy almost of the 70 per cent of the people live in rural areas. Their livelihoods are directly or indirectly based on agriculture. Rural people are facing many problems such as poverty, illiteracy, and agriculture development issues, and farmers have no proper access to information on agriculture. Now days, information technology have brought close to communities and empower the source to poor farmers of different regions and increased their knowledge and information about agriculture technologies and provide information about market, customers preferences as well as weather chance of bargaining with buyers (Singh 2006).

Information technology can be specified in agricultural development and improve the life of rural people and increase their knowledge, and by these farmers can increase agricultural production. One of the information communication technology tool mobile phone can play vital role in the ability of poor rural communities to sustain and similarly increase their agriculture production and cultivation activities (Richardson, 2005). In rural areas, mobile phones can also play significant role in increase the capacity of rural mass especially farmers and contribute their production of agriculture. By the use of IT and e- government services the farmers can save the time, energy and many similarly they can connect to buyers for selling their product good service (Chhachhar et al 2013).

Use of information technology is more effective and important for gathering, transfer and sharing of agriculture related information to farmers and rural mass and can get good benefits and knowledge. By these farmers can get directly information from market about their goods, services and the same time contact with metrological department for getting the weather information (monsoon, threat of floods and other natural calamities) before starting.

Furthermore, there is need to plan, growth, and make innovative in farms and should get advantages from ICT and services (Sideridis, 2002, 2007, 2009). Thus, Information technology has a very important role in agriculture development.

### **Information Technology in Education sector:**

Information technology has brought revolutionary changes in education. The investments of information technology in education have also provided positive changes, high opportunities and improve the standard of education globally. Information Technology in education sectors make new ideas and creativity to produce innovative things. There is a need to provide such facilities in developing countries for development of education (Suba 2012, James 2013, Kozma 2003).

Now Information Technology is very important in education sector. Information Technology also can increase teaching and administrative system of education. The appropriate use of IT to improve the quality of education system in rural area and access to more education programs. Many new technologies introduced for, primary and secondary education system and high quality of education in rural areas.

Information Technology is very important for education sector through, this lot of knowledge and information can be share and disseminate among teachers and students of rural areas and can

make different opportunities for rural people, information and communication technology is one of the powerful tool to increases the educational system in developing countries and can provide easy access in formal and informal education system (Chhachhar et al., 2013). IT application can also improve quality motivation, strength and provide job opportunities. Thus, Information technology has a very important role in education development.

## Conclusion

Present era is known as the era of information and communication technology. Information technology plays a very significant role in agriculture and educational sectors. If used by government appropriately, it can benefit to people in rural areas. Government should focuses more on IT development in rural areas for development in education and agriculture.

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