USE OF ICT TOOLS FOR EFFECTIVE TRANSFER OF TECHNOLOGY

Dr Harsha Mendhe¹, Dr Sachin Sadaphal² and Sunil Fulsawange³

1. Assistant Professor, Department of Extension Education, College of Agriculture, Gadchiroli, Dr PDKV Akola.
2. Assistant Professor, Department of Extension Education, MPKV Rahuri
3. Assistant Professor, English Language, MPKV Rahuri

Abstract

ICT has been one of the most ambitious fields in the present world. ICT and agriculture amalgamation caused our country to regulate overall economy and trade. By observing potential and fast spreading capacity, we can utilize the ICT in agricultural research to increase production. We can explore the possible contribution of information science to effective and stable production of agricultural commodities by several models such as crop growth prediction, decision support, computer modeling and development of software packages for agricultural research. ICT, therefore, can play an important role in disseminating agricultural information to the farmers by using various multimedia sources like radio, TV, internet, websites etc. It will provide information related to crops, climate, rainfall, production technologies, market arrivals, market prices etc. Thus ICT is taking prime lead in development of agriculture in India.

In every era, we have seen that there has been a remarkable connect between human beings and technology. Information communication Technology has a great role as decision support system to the farmers. ICT helps in growing demand for new approaches. It also helps in empowering the rural people by providing better access to natural resources, improved agricultural technologies, effective production strategies, markets, banking and financial services. ICT in agriculture also known as e-agriculture, focuses on the enhancement of agricultural and rural development through improved information and communication process. ICT can revolutionize Indian farming sector and can benefit all farmers including small landholders. Agriculture is the most important sector with the majority of the rural population in developing countries depending on it. ICT promises a fundamental change in all aspects of our lives, including knowledge dissemination, social interaction, economic and business practices, political engagement media, education, health, leisure and entertainment. Despite large, well educated, well trained and well organized agricultural extension manpower, around 60% of farmers in the country still remain un-reached, not served by any extension agency or functionary. ICT can play a significant role in combating rural and urban poverty and fostering sustainable development through creating information rich societies and supporting livelihood. ICT is an umbrella term that includes any communication device or application encompassing: ratio, television, mobiles, computers, hardware, software and internet are keys to these systems that
are designed, developed and managed by ICT professionals with the objectives of to contribute to the understanding of the adoption and use of ICT in agricultural organization and to identify the reasons why some individuals in agricultural service organizations use ICT more than other individuals.

**Scope of ICT in agriculture**

1. Advances in agriculture provides opportunities for agriculture graduate and post graduates to establish internet connected rural knowledge centre. A virtual university linking such village knowledge centers to agricultural universities and research institutions, can be established to get up to date, authentic technical advice.

2. ICT has many potential applications in delivering agricultural extension and can bring new information services to rural areas.

3. To sustain self sufficiency in food, it is essential that the advancement in ICT must be extended to farming community.

4. ICT helps in empowering the rural people by providing better access to natural resources, improved agricultural technologies, effective production strategies, markets, banking and financial services etc.

5. Information services, to the farmers can be improved through the creative use of ICT.

6. Farmers use information on weather, markets, agricultural developments and practices.

7. Information and communication management for sustainable agriculture is considered today's critical requirements and it has great scope to make enormous strides in the ICT sector.

8. The internet is emerging as a potential tool to contribute to agricultural development. Website and rural portals in regional languages can be developed and hosted on the world wide web through internet. This provides information in the form of graphics, video, audio etc.

**Information Communication Technology tools in agriculture**

Information and communication technology have opened up a whole new set of options in technology transfer in agriculture to improve the speed, accuracy of the communications in relatively lower costs. ICT are emerging as an important tool in economies world-wide. These technologies are revolutionizing the way people access and disseminate information, improve communication and facilitate sharing of knowledge and skills. ICT have impacted all sectors including the agriculture sector. Information needs of farmers are changing from information on crop technology and package of practices to market prices in national and international markets and value addition opportunities. The farmers concern has shifted from high production to high returns, and hence issues like quality, timeliness and post harvest technology and storage are gaining prominence in the farmer queries. Information on Government schemes, input prices and availability, early warning and management of diseases and pests is also important. Information is crucial in agricultural production.
The ICT tools like Radio, Television, Audio conferencing, Internet, Social Media, e-mail, on-Line Expert Systems, Call Centers and information portals on Agricultural marketing information, have enhanced access of Extension personnel and farmers to the latest information within and outside the country.

Conclusion

The use of ICT in agriculture is limited due to lack of infrastructure, information management skilled personnel etc. The new ICT tools and technique can play a great role to improve communication and co-ordination among extension workers and farmers. ICT support the extension functionaries. It will gear up by the advance of efficient and effective technology Innovations. Availability of information over internet assists the process of agricultural extension and makes it speedy and more effective. Technological change will definitely accelerate developments in the field of agricultural extension and ultimately, farmers will be able to harvest the benefits to the desired level. Thus the ICT is one of the best system results in the overall development of the agricultural system of the country and it is the best tools for prospering of Indian Agriculture.

References:

Chattopadhyay, B.N. (2012) Information and communication Technology (ICT) for Agricultural Development in “ICT applications for transfer of Agricultural technologies” Pp. 52-92
