ISSN: 2278-4632
Vol-10 Issue-6 No. 2 June 2020

ICT in Agriculture for Rural Development

Prof. Parag Shrikrushna Meshram
HOD, (Department of Geography)
Mahatma Gandhi Arts, Science & Late N.P.Commerce College,
Armori, Dist. Gadchiroli
Mob. No. - 9595108747
Email ID - meshram.parag@gmail.com

Abstract:

Agriculture is an imperative and vital segment through the greater part of the rural population in emerging economy like India. This paper attempts to talk about a few of the key challenges that India faces in the application of information communication technologies (ICTs) for the small-scale farmers. Paper highlights some of the key issues like weak human capital and technical infrastructure, lack of clear national information policy and lake of a coordinated agricultural information support system for small-scale farmers anchored on ICTs. Paper illustrates with the purpose of it is fetching gradually more obvious with the intention of the accomplishment of any agricultural development program in India requires a regimented an functionally incorporated information deliverance scheme propelled by the application of appropriate ICTs. The paper presents recommendations for this to be realized.

Introduction:

Information and communication have always mattered in agriculture. Constantly in view of the fact that nation encompasses grown- up crops, raised livestock, they have hunted information from one another, what is the most effective planting strategy on steep slopes? Where can I buy the improved speed for feed this year? How can I acquire a land title? Who is playing the highest price at the market? How can I participate in the government's credit program? Producers rarely find it easy to obtain answers to such questions, even if similar ones arise season after season. Farmer in a village may have planted the "same" crop for centuries, but over time, weather patterns and soil condition change and epidemics of pests and diseases come and go. Updated information allows the farmers to cope with and even benefit from these changes. Providing such knowledge can be challenging, however, because the highly localized nature of agriculture means that information must be tailored specifically to distinct conditions.

Opportunities and challenges in the agricultural sector:

Agricultural arena is confronted with the foremost test of rising production to feed a growing and progressively more prosperous population in circumstances of lessening accessibility of natural resources. Key points alarm are water shortages, waning soil richness, effects of climate change and speedy diminishing of fertile agricultural lands due to urbanization. The rising demand, including higher quality food, also offers opportunities for improving the livelihood of rural communities. Innovative approaches and technological innovations are required to survive through these challenges and toward improving the livelihoods of the rural population.

Another main factor is enhancing agricultural production; ever-increasing effectiveness, productivity and sustainability of small scale farms are an area where ICT be capable of constructing a major role. Farming involves risks as well as uncertainties, among farmer facing countless intimidation on or after deprived soils, drought, erosion and pests.

ISSN: 2278-4632
Vol-10 Issue-6 No. 2 June 2020

Key improvements branch from information about pest and epidemics control, particularly early warning systems, latest varieties, innovative ways to optimize production and regulations for quality control.

At the same time growing market admittance; creating attentiveness of modern market information on prices from supplies, inputs and consumer trends can advance farmers' livelihoods substantially and have a remarkable blow on their give and take arrangements. Such information is helpful in making decisions in relation to future crops and commodities and about the finest time and place to sell and buy supplies. Simple websites to match offer and demand of agricultural produce are a start of more complex agricultural trade systems. These sites tend to evolve from local selling buying websites and price-information systems, to systems offering marketing and trading functions.

Use of mobile phone technology enhanced service delivery system on agricultural extension services delivery in India. Findings from the research show that the amount and quality of the service and the speed of services delivery have been improved significantly as a result of the intervention, There are also indirect benefits from this ITC - enhanced services delivery system not only in greater awareness and knowledge in agriculture technology and information but also in terms of farmers' attitudes towards trying new technology and new ways of life in the future. Evidence from the evolution suggests that disadvantaged farmers benefit more from this intervention than those who are better off.

ITC Choupal playing very important role in **Sharing Innovation Agribusiness**. ITC's Agri Business Division, one of India's largest exporters of agricultural commodities, has conceived e-Choupal as a more efficient supply chain aimed at delivering value to its customers around the world on a sustainable basis. The e-Choupal model has been specifically designed to tackle the challenges posed by the unique features of Indian agriculture, characterized by fragmented farms, weak infrastructure and the involvement of numerous intermediaries, among others.

e-KHETI – Rural E-Services in India:

Mobile phone access has been rising speedily yet in the remote rural areas. The extraordinary rate of acceptance of mobile phone technology has raised the wide-ranging potential concerning its possible assistance to extend the revolutionary farming technology, at the same time as well as farmers' understanding and wakefulness of added applicable facts and information.

What is the blow of mobile phone technology taking place in agricultural extension services deliverance? What is its wider impact on farmers' attitudes to new agricultural technology in the future? These are important questions that have not yet been fully explored. Moreover, although there have been some evaluation studies of its impact, the normal assessment method is often subject to serious selection bias (Heeks and Molla, 2009). Finally, in addition to the normal question regarding the impact on the speed, quality and volume of services delivery, it is also important to understand the influence of the experience on farmers' knowledge of agricultural technology and their attitudes towards future adoption of new technology. So for there is no large survey data-based evidence on the Impact of ITC on agriculture extension services delivery in remote areas probably due to the lack of reliable data on outcome variables, as well as variations across extension and non-extension communities and between users and non-users in observable and unobservable factors (Aker, 2010). The pioneering studies of Jensen (2007) and Aker (2008) focus on the impact of mobile phone technology on price services provision for fisher and in the grain market. It is increasingly recognized that ICTis necessary for accessing required information and

knowledge (Richardson 1997; Chapman et al. 2004; Anandajayasekeram et al. 2008; Mcnamara 2009; Aker 2010). ICT kiosks, ICT-equipped intermediary organization and mobile phones are expected to play an important role in strengthening the more complex and time-urgent pathways of information and knowledge-sharing on which agricultural innovations depend.

Agricultural extension services delivery in India:

India has been experiencing major changes in agricultural extension system since the 1990s (Rivera,Qamar, and van Crowder 2001; Birner and Anderson 2007; Anderson 2007, Raabe 2008). The reform included both demand and supply side measures. The demand side measures were the decentralization of extension service provision to the local level, the adoption of pluralistic modes of extension service provision and financing, and the use of participatory extension approaches. The supply side measures included civil service and public expenditure reform, training and capacity building, public-private partnership and utilization of ICT for government services. Examples of initiatives are the World Bank funded Diversified Agricultural Support Project (DASP) and the National Agricultural Technology Project (NATP), Danida and IFAD funded gender focused project and the private sector e-Choupal initiative (Rabbi 2008). The public sector programmes are constrained by many factors including lack of transportation and communication and poor skills of service provider.

Conclusion:

Research shows the use of an innovative mobile phones technology-assisted agricultural service delivery system (KHET) and with a judicious blend of click & mortar capabilities, village internet kiosks managed by farmers – called sanchalaks themselves, enable the agricultural community access ready information in their local language on the weather & market prices, disseminate knowledge on scientific farm practices & risk management, facilitate the sale of farm inputs – (now with embedded knowledge) and purchase farm produce from the farmers' doorsteps – rationale decision making is now information based. e-Choupal enhanced the ability of farmers to take decisions.

Referring to the above discussion it is crystal clear that the inclusion of ICT sounds very loudly for growth and development of Indian rural sector. If whole of this so called deprived rural community which represents more than 70% of human resourceis exposed to the ICT version for agricultural development can yield radical promising changes towards the financial empowerment and development of not only larger scales of population but also the Indian economy which is rural based (Agriculture Based).

Last but not the least, all sorts of possible measures at war food are to be drawn focusing towards the implementation of such much needed master plans providing up-to-date current precise information to the people living in rural sector. Once this goal accomplished/achieved, can better lead the Indian economy to the new heights.

Reference:

- Hussain Majid (2000):- Agriculture Geography, Ravat publication, Jaipur.
- Fule Suresh: - Agriculture Geography, Vidyabharti publishing, Latur.
- Dr. Indira Singh, Dr. Satnam Singh (2006): - Agriculture Geography of India, Srishti book publication, New Delhi.
- Jaymaladiddee, S.R. Jog, V.S. Kale (2000):- Geography of Maharashtra, Ravat publication, Jaipur.

ISSN: 2278-4632
Vol-10 Issue-6 No. 2 June 2020

- KHETI – Rural E-Services in India
- http://www.emeraldinsight.com/journals.htm?articleid=1515331&show=abstract
- http://www.itcportal.com/
- http://www.iicd.org/
- http://www.ictinagriculture.org/sourcebook/module-1-introduction-ict-agricultural-devlopment

