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AN ASSESSMENT OF THE IMPACT OF PHONE IN PROGRAMM FOR FARMERS – A STUDY OF KOTA GOVERNMENT DIVISIONAL PUBLIC LIBRARY INITIATIVE

Library & Information Science

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ABSTRACT

This paper discusses impact of telephonic initiative for farmers with concentration on the concept of public library, agricultural Information in Rajasthan India, Mobile Telephonic in Agricultural Information, Information Communication Technology, Information need among farmers as well as Challenges Associated with Agricultural Information. Farmers having to be the people mostly surrounded public libraries but It was found that Public Libraries so far done nothing for the farmers who have been potential users of Public Libraries. Library timings do not suit the farmers. So, Public Libraries should take immediate initiatives to initiate telephonic system to services the rural communities for their farming activities. Public Library with the assist of government required to provide above listed services immediately. In addition to these services some new and innovative technology-based services like, Computer literacy for farmers, skills for farmers, Calls or SMS alert on new issues through mobile phone like crop diseases and marketing etc. in local language, should be introduced.

KEYWORDS

Public Library (PL), Agricultural Information (AI), Mobile Telephonic for Agricultural Information (MTAI), Information Communication Technology (ICT), Information Need (IN), Challenges.

INTRODUCTION

Information and communication technologies (ICT) particularly the mobile phone has immensely penetrated every field of life like education, business, commerce, and agriculture. Mobile phone-based communication has rapidly grown in the recent past and became the most used communication tool among all ICTs of the current age. Recent statistics showed that 62.9 percent of the population worldwide already own a mobile phone with 4.68 billion users on the planet (STATISTA, 2018). This trend is also similar in Pakistan as the country has seen an abrupt rise in mobile phone users from 88 million in 2008 to 152 million in 2018 (PTA, 2019). This rapid growth of Mobile telephony has emerged as a successful communication tool which has not only transformed the working style of many sectors but also created new professional dimensions in various businesses including agriculture (SULLIVAN & OMWANSA, 2015; ASONGU & ASONGU, 2019). In the agriculture sector, smooth exchange on information is a key to the successful adoption of farm innovation needed for the agricultural development but due to lack of resources and poor infrastructure in many developing countries, a huge communication asymmetry exists between the latest agricultural knowledge and farmers (BALOCH & THAPA, 2016). In this scenario ICT, particularly the mobile phone has shown a great potential to facilitate communication by enabling the smooth exchange of knowledge between the various stakeholders in agriculture (AKER, 2018).

Brief About Kota City

Kota (formerly known as Kotah) is the third largest city of Rajasthan and is situated on the eastern bank of Chambal river. It is a city of great historic importance. In 12th Century AD it was part of the Hada territory. Bundi and Hada were the major cities in the region. But due to its starategic position it soon surpassed these cities. Kota became an independent state in 1631 when Rao Madho Singhal, the second son of Rao Ratan of Bundi was appointed ruler by Mughal Emperor Shaw Jahan. Now Kota city is the district headquarter of Kota district.

Concept of Public Library

Public Library in current environment becomes the community hub and providing more or more services to the community. The Public library is an institution for the people, of people, and by the people. It is for all, without the distinction of cast, creed, color and Public library has to play a crucial role in modern society in meeting many of its social needs like communication, education, recreation and socio-cultural development. This role is more curial in developing countries like India where societal change are faster than elsewhere and the people need to be better informed in order to be successfully involved in the process of change and development. For the Public library to play this role effectively it must be established on a statuary foundation. At least this has been the universal consensus with regard to be the Public library. Establishment of the Raja Ram Mohan Roy library Foundation has given an impetus to the development of Public libraries. The foundation seeks to assist State Government in the establishment of rural libraries. Thus, in comparison with the condition on the eve of independence; the present conditions in India are more conductive to Public library development.

"A Public library is a library that is accessible by the general Public and is generally funded from Public sources, such as taxes". Public libraries in India is not much more appreciated by Govt. and NGO's also before 21stcentury and specially if we see the scenario of North Indian libraries than we will get unseated because South India is more and more powerful in comparison to other regions of India. Reasons may be many. In North India Rajasthan and Punjab both are the state mostly depends on agriculture and now both are fast growing state in India.

About Govt Divisional Public Library Kota Rajasthan India

Figure 1 front view of Govt Divisional Public library Kota Rajasthan India

Government Divisional Public library Kota is most innovative public library of India. Its well known for library services for visually impaired and services for transgender. Library also includes extension services for farmers. Phone -in -Programme for Farmers (P-2 F-2) is designed to rendered expert advisory services for farmers.

Phone-In-Programme For Farmers

Phone -in -Programme for Farmers (P-2 F-2) is designed to rendered expert advisory services for farmers. In which GDPL Kota invite expert to rendered the Agri-Information to the Farmers. Agri-Information stand for Agriculture encompasses crop and livestock production, aquaculture, fisheries and forestry for food and non-food products. Agriculture was the key development in the rise of sedentary human civilization, whereby farming of domesticated species created

food surpluses that enabled people to live in cities.

Figure2 Phone-In-Programme for farmers

Agricultural information in Rajasthan India

Agricultural Information is the systematically collected, published and unpublished data relating to the agricultural activities. The users of agricultural information include researchers, organizers, policymakers, instructors, students, field laborers, program administrators, and farmers. In the contemporary framework, the farming community can be categorized as literate and illiterate farmers based on their educational levels. In the Rajasthan State in India, agricultural information is provided to literate farmers through Krishi Vigyan Kendra (Farm Science Center) in the form of vocational learning or electronic media, but this approach to information provision could not be accessed by illiterate farmers. Traditionally, illiterate farmers can be instructed by audio-visual modes.

The economic rationale for the farmers' access to information is to enable them to the manage risks and uncertainties regarding production and marketing of their product. The better the farmers manage these risks and uncertainties the more profitable obtained. ICT facilitates awareness and access to market information among the farmers. There are more than 200 ICT development agencies in different stages of implementation in India e.g., Bhoomi, Drishtee. These agencies provide information relating to, for instance, climate reports, and marketing information e.g., Krishi Vigyan Kendras/Farm Science Centers at Ahmednagar, Baramati). Farmers obtain production and marketing information from various sources. Some of these sources utilize ICTs while the others are Non-ICT sources. In the western infertile part of Rajasthan, the farmers' access to information is foreseen to be extremely poor, ill-timed, less credible, and not cost-effective. Acceptance of mobile phones as an advent of delivering agriculture-related data relies on the accessibility of mobile network in the rural terrains and link between the public library and farmer or community.

Mobile Telephony for Agricultural Information

Several studies postulate that mobile phone technology use is important to farmers and supports crop production (Baumüller, 2017; CIARD, 2018; De Silva & Ratnadiwakara, 2014; Duncombe, 2018; Furuholt & Matotay, 2019; Gayi & Tsowou, 2019; Wellard, Rafanomezana, Nyirenda, Okotel, & Subbey, 2020). The use of mobile phone technology in the crop farming value chain enables small-scale farmers (SSFs) to access farming information that supports optimal decision-making and increases crop productivity. Consequently, it is envisaged that SSFs using mobile phone technology may have the potential to improve food security and reduce poverty in many part of the world. Mungera and Karfakis (2018) describe SSFs as people who own between 0.1 and 10 hectares of land. Small-scale farmers commonly have access to less than 2 hectares of land (NEPAD, 2016; Vanlauwe et al., 2018). This study reiterates that SSFs are characterized by limited access to land, low skills, family labour, and subsistence farming practices based on rudimentary inputs and are rainfall dependent with low bargaining power.

In Tanzania and Zambia, more than 70% of the total population derives their livelihoods from agriculture (Kalinda, Filson, & Shute, 2014; Misaki, Apiola, & Gaiani, 2017). Hence, an innovation that increases agricultural productivity cannot be ignored as it improves the livelihood of most farmers. Studies that address challenges facing SSFs may be pivotal in reversing a decline in food production and deserve attention (Kalinda et al., 2018). One of the many difficulties SSFs face are getting reliable farming information, thus leading to poor and weak decision-making during farming phases (Misaki, Apiola, & Gaiani, 2019). This is one of the reasons that have prompted technology innovators to design mobile phone technology solutions to improve the quality and quantity of information flow. The application of mobile phone technology has, in some studies, been shown to be beneficial to SSFs (Aleke, Ojiako, & Wainwright, 2010; Chisita, 2014; Sanga, Mussa, Tumbo, Muhiche, & Haug, 2015).

Small-scale farmers generally use mobile phone technology to acquire information to enhance crop productivity, prevent plant diseases, and develop better marketing strategies (Bhandari, Bohara, & Satyal, 2015; Carmody, 2016; Chhachhar & Hassan, 2018; Heeks, 2018; Ogbeide & Ele, 2019; Shyam, 2019). Unfortunately, only a few studies have explored mobile phone technology use in public libraries and identified challenges facing SSFs. For example, most of the studies have focused on the impact of application of mobile phones (Balraj & Pavalam, 2016; McCole, Culberttson, Suvedi, & McNamara, 2014), the effectiveness of mobile phone technology use (Nwaobiala & Ubor, 2017), the assessment of farmers' attitudes (Fadairo, Olutegbe, & Tijani, 2018), farmers' empowerment (Saravanan & Bhattacharjee, 2019), comparative factors involved in mobile phone use (Arinloye, Linnemann, Hagelaar, Coulibaly, & Omta, 2014), and potentiality of the role of public libraries to mobile phone technology in agriculture (Adebo, 2017).

Information Communication Technology and Farmers

In agriculture, like in many other sectors, information is becoming a major input, whilst, knowledge and information plays a central role for farmers to respond to opportunities that could improve their agricultural activities. Information communication technologies (ICTs) are therefore continued to be the best hope in developing countries to accelerate their development process. Mobile phones are one of the most exciting forms of ICTs particularly in the context of developing nations. They are speeding up ways in which farmers get, exchange, and or manipulate information. Increasingly, they enable farmers to focus and extract useful and up-to-date information from social and business networks. With mobile phones farmers assert to have had made tentative decisions much more easily than without. Mobile phones are, therefore, becoming increasingly important to agro-based entrepreneurs as an infrastructural device for improving efficiency of agriculture markets, promoting investment, and contributing to empowerment. Thus, mobile phones are becoming increasingly important to agro-based entrepreneurs as an infrastructure service for improving efficiency of agriculture markets, hence contributing to farmers' empowerment.

Information Needs for Farmers

Information needs are thus a factor that may drive farmers to seek information to fill the gaps in their information and knowledge. Benard et al. (2018) had indicated that, information needs represent gaps in the current knowledge of the user. In day to day work; lack of self-sufficiency constitutes an information need Farmers require different types of information for day to day agricultural activities such as valued crops, fertilizer, weather, market etc. Moreover, the level of information needs may differ between farmer, or a group of farmers, depending on a range of factors, such as age, level of education, socio-economic status, type of information sources available, level of awareness, and ease of use of information (Rahman et al., 2020). According to Naveed and Hassan (2021), rural farmers are not getting the right information in a timely manner, leading to slow development of agricultural activities. Phiri et al. (2019) argued that in order to provide timely, appropriate and relevant information to farmers, it is necessary to classify their information needs. The study by Benard (2011), Sabo (2007) ,Seenuankaew et al. (2018), Ngoma (2019), revealed that the information needs for farmers differ and depend from how and where to purchase agricultural equipment, information on improved seeds ranges, information on marketing, loans or credits, weather condition, irrigation and Information on soil fertility.

Information has consistently been a significant portion in the development of human society and has formed over a long period of time the way in which we think and act (Meyer & Norman, 2020). Information is crucial for increasing agricultural production and improving marketing and distribution approaches (Mojaki & Keregero, 2019). Information also opens windows of giving out skills, best practices, sources of financial aids and new markets. By the same token, information enables farmers to make informed decisions regarding production and marketing and managing their lives successfully to manage with everyday difficulties and to realize their chances (Haumba & Kaddu, 2021). As discussed by Madu (2019),

information has a vital portion to play in improving and sustaining agricultural production of any country or nation. Also, Haumba and Kaddu (2021) declares that access to information is a vital tool for empowering individuals to make well-versed decisions or act for them or for community development. Supporting the above views, Pradhan and Beriha (2020), had indicated that agricultural producers already know that information is important and valuable and all they need is its well-timed accessibility in order to improve agricultural production. According to Haumba and Kaddu (2021), lack of sufficient and relevant information has impacted negatively on any development method including agriculture. Kassem et al. (2020) confirmed that access to accurate, timely and right information enables farmers to make better decisions about what to produce, when to produce and where to sell it than those who do not have such information. Similarly, Kavi et al. (2018) note that the likely profits of using current agricultural information are improvement in farming techniques and knowledge of when to apply manure or fertilizer, how to treat diseases and what crops to plant.

Challenges Associated with Agricultural Information

Several Challenges facing farmers in accessing and utilizing information technology have been identified. A key failure point of traditional extension models is the number of farmers per extension officer – they cannot visit all the smallholder farmers effectively and in a timely manner. Problems of technology in agricultural production includes inadequate ICTs know how, inadequate of ICTs advantage recognition, complex, shortage of infrastructure, costly, uncertainty issues, poor training, and inaccessible software by farmers (Nzonzo, 2016). Chete and Fasoyiro (2014) conducted a study on the effect of technology-Based Initiative (Mobile Phone) on Market Access by Women Farmers in Nigeria. The authors enumerated barriers and challenges to developing rural technologies facilities for farmers to include insufficient content and for rural society, human resource ability, control weakness, strategic coordination, lacking infrastructures, investment risks, and poor rural infrastructure. Nzonzo (2016) pointed in a study on technology adoption and its' implications for Agriculture in Sri Lanka. The findings of their exploration indicated that the vital inhibiting element that impacts the application of technology in farming is affordability of technology. Inadequate training and farmers unable to utilize information technologies resources is another variable impacting adoption. Other elements like uncertainty issues in the technology and its systems; inadequate technical infrastructure and technology skills are the issues affecting the access and utilization of information technologies resources by farmers.

CONCLUSION

“It is of vital importance that in each community there is a place where people gather, exchange information and learn. Such centres should be libraries.” - Bojana Dimitrijevic, a deputy of the Jagodina Town Assembly, Serbia, speaking about Jagodina Public Library's AgroLib-Ja service for farmers.

“The Public library's service responds to the main objective of the Rural Development Regulation: to stimulate not only traditional farmers' activities in livestock and crop production, but also in commerce. The library's new internet site for farmers offers the possibility to advertise agricultural produce for free and will be very useful for small farmers who have to compete with bigger producers.” Govt Divisional Public Library's mobile information and business support service for farmers.

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