Website : www.asthafoundation.in
Progressive Research : An International Journal
Vol 17 (1) : 84-86 (January-2022), Print ISSN : 0973-6417, Online ISSN : 2454-6003
Society for Scientific Development in Agriculture and Technology, Meerut (U.P.) India

Use of Information Communication Technology among Farmer's of Vidisha District

Mujahida Sayyed[1] and Rajmohan Sharma[2]
[1]*Department of Maths and Statistics, College of Agriculture, JNKVV, Ganjbasoda, M.P.*
[2]*Department of Genetics and Plant Breeding, College of Agriculture, JNKVV, Ganjbasoda, M.P.*

Abstract

For the assessment and utilisation of ICT among the farmers of Vidisha district, the structured questionnaire and multi stage sampling technique was used to select 50 respondents. For the description and analysis of data we have used descriptive statistics. The study showed that majority of farmers (60%) was between the age 30-40 years with 58% farmers having secondary education. Majority of utilization on types of ICT tools with mean 2.9, 2.8 and 2.5 were Mobile phone, Television, Radio and Interne respectively. The recommendations of this study were that efforts should be made by the service providers to improve network coverage in the study area through information technologies and efforts should be made to educate the farmers on the use of IT tools.

Key words : *Information, communication, technology, farmers, ICT.*

Introduction

Information is nothing but data in a properly decoded and arranged manner and Communication is the exchange of this information. When new digital technology is applied for this communication, it is called Information and Communication technology. We are in the knowledge era or information age. The focus is now on information and communication technologies (ICT). In India 70% population living in rural areas and for rural population agriculture is an important sector to earn their lively hood. The role of ICT to enhance food security and support for rural livelihoods is increasingly recognized and was officially endorsed at the World Summit on the Information Society (WSIS) 2003-2005. This includes the use of computers, internet, geographical information systems, mobile phones, as well as traditional media such as radio or TV. Interestingly, (1) reported that television was as main communication tool in many household's of tribal farm women of Kabirdham district of Chhatttisgarh India.

ICT combined with recent surge in big data technologies and high-performance computing has created incredible potential to upgrade the current conventional way of farming. Information and communication technologies have become the world's most common way of transmitting voice, data and services in the developing world. (2) assess the effect of Information and Communication Technology among Rural Women Rice Farmers and found that the majority of the rural women rice farmers had a formal education, which reflected on their level of ICT utilization. (3) introduce role of ICT and e-governance for rural development. (4) introduce some application of GIS Technology in Watershed-based Management and Decision Making. (5, 6) provide Information and communication technologies for sustainable agricultural development among rural farmers in Ekiti State Nigeria.

Research Methodology

The study area was the farmers of Vidisha district of Madhya Pradesh. Technique which is used here was multi stage sampling technique to select 50 respondents while data was collected using structured questionnaire.The objectives of the study were achievedthrough descriptive statistics such as the mean score, percentages, and frequency.

Results and Discussion

Table-1 shows that 60% farmers were between the ages of 31 and 40 years, 26% were within the age range of 20 - 30 years while 14% were between the age of 41 and 50 years. This indicates that the three groups of respondents were predominantly in their middle age.

The distribution of the respondents according to their educational qualification as shown in Table-1 which equally indicates that a 86% farmers have the formal education which is greater percentage of formal education while 14% had no formal education. Out of the pooled percentage (86%) of those that had a formal education, 28% attended primary school, 58% attended secondary school. This implies that the majority of the farmers' attained one form of educational level or the other. Hence, most of them can be classifiedas literate farmers as they can read and write. As such, it is expected that farmers in the studyarea are likely to be more efficient in the use of ICT tools.

Received : December-2021; Revised : December-2021; Accepted : January-2022

Table-1 : Percentage distribution of the respondents according to their Socioeconomic Characteristics.

Socio-economic characteristics	Frequency	Percentage	Mean
Age			
less than 30	13	26	
30-40	30	60	33.33
more than 40	7	14	33.33 year
Education			
No formal education	7	14	
Primary education	14	28	
Secondary Education	29	58	

Table-2 : Distribution of respondents according to the types of ICT tools available in the Area.

ICT Tools	Available		Not Available	
	Frequency (n=50)	Per-centage	Frequency (n=50)	Per-centage
Mobile phone	48	96	2	4
Radio	44	88	6	12
Television	50	100	0	0
Internet	30	60	20	40
Computer	18	36	32	64
e-mail	20	40	30	60

Table-2 indicates ICT tools available to the rural farmers in the study area. The result revealed that majority (96.0, 88.0 and 100.0) of the farmers identified with mobile phone, radio, and television respectively, as the most available information communication technology tools in the study area. However, majority of the respondents reported limited or unavailability of ICT tools such as internet (60%), e-mail (20%), and computer (18%). While the majority (100%) of the respondents said, that remote sensing was not in existence in the area. The limited availability of some of these ICT tools as indicated in the study may be a result of limited financial capacity to have access to some of these ICT tools. The significance of farmers' financial capacity is quite paramount in the acquisition of farm implements and equipment and payment of labour.

Table-3 : Distribution of respondents by the level of ICT Utilization.

ICT tools	Mean	Rank
Mobile phone	2.9	1
Radio	2.5	3.5
Television	2.8	2
Internet	2.5	3.5
Computer	1.9	5
e-mail	1.7	6

The result of the analysis on the level of ICT utilization among the rural farmers as indicatedin Table-3 shows that ICT tools such as mobile phones (= 2.9), radio (= 2.5), television (= 2.8), were frequently utilized in the study area. Others such as the internet, e-mail, audiocassette, and computer were underutilized. This implies that the majority of the farmers will find it difficult to access and utilize vital agricultural information and materials which can be found, accessed and utilized through the internet. The rural farmer's dependent on mobile phone, radio and television may be as a result of the various advantages attached to the said ICTs tools or because of the limited availability of other forms of ICT tools in their locality. This finding is in agreement with (7) who reported that farmers recorded a high level of usage of conventional ICT tools such as mobile phones, radio, and television. The level of internet utilization as indicated in the study equally agrees with the finding of (8). The findings indicate low ICTs utilization among the rural farmers in the study and as such, one would expect slow agricultural development processes in the area.

Conclusions and Recommendations

The farmers with a formal education directly correlated with the utilisation of ICT. However the farmers still faces the basic problems like poor coverage, lack of electricity, high cost of ICT tools and insufficient knowledge of using ICT tools, which off course directly affect the use of ICT by the farmers. Hence proper power supply is needed to be maintained for the smooth running of system. Different section need different type of steps to be taken. Poor network issue also a very big challenge efforts should be made by the service providers in the study area to improve farmers' access to Information Communication Technologies. Efforts should be made to educate the farmers on the use of IT tools.

References

1. Raju Tanden, Chaturvedi M.K., Pandey P.K. and Payal Dewangan (2021). The Socio-Economic, Socio-Psychological and Socio-Communication Characteristics of Tribal Farm Women of Kabirdham District of Chhatttisgarh. *Progressive Research : An International Journal,* 16(2): 180-183.
2. Ngozi O.M., Innocent N.I. and Obogeh A.K. (2020). Assessment of Information and Communication Technology (ICT) Utilization among RuralWomen Rice Farmers in Ayamelum Local Government Area of Anambra State, Nigeria. *International Journal of Agriculture Innovations and Research*, 8(5): 306-308.
3. Gujarathi D.M. and Patil R.S. (2009). Role of ICT and e-governance for RuralDevelopment, *International Referred Res. Journal,* 1(9): 556-559.
4. Tim U. Sunday and Mallavaram Sumant. (2003). Application

of GIS Technology in Watershed-based Management and Decision Making, Watershed Update, 1(5): 237-240.

5. Adekunmi A.O. and Awoyemi A.O. (2017). Use of Information and Communication Technologies for sustainable agricultural development among rural farmers in Ekiti State Nigeria. *Advances in Social Sciences Research Journal,* 4(12): 150-159.
6. Usha Pant, Ram Bhajan, A.S. Jeena and A.K. Singh (2021). PYSCA-1: A mutant line for apetalous flower in yellow sarson (*Brassica rapa* var. yellow sarson). *Frontiers in Crop Improvement*, 9(1): 55-57.
7. Nenna M.G. (2016). Assessment of information communication technologies (ICTs) among cassava farmers in Anambra State, Nigeria. *British Journal of Research*, 3(2): 2394-3718.
8. Olaniyi O.A. (2013). Assessment of utilization of Information and Communication technologies among poultry farmers in Nigeria : An emerging challenge. *Transnational Journal of Science and Technology,* 3(6): 29-43.