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Attitude of farmers towards the use of information and communication technology on agricultural production and marketing

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Abstract

The present investigation is conducted in the Marathwada region of the Maharashtra state during 2021-2022 with the objective to study "Attitude of farmers towards the use of information and communication technology on agricultural production and marketing". Parbhani district was selected randomly from Marathwada region. Three talukas from Parbhani district and five villages from each talukas were selected randomly for the study. From each selected village, ten farmers were selected randomly on the basis of awareness about ICT tools to acquire farm knowledge in this way total 150 respondents were considered for the study. An Ex-post-facto research design was followed for the study. Data was gathered using a well-structured interview schedule created with the study's objectives in mind. The collected data was analysed, classified and tabulated. Statistical tools such as frequency, percentage, mean, standard deviation, and coefficient correlation were used to interpret findings and draw conclusions. Among the 150 selected farmers majority of the farmers were medium aged (67.33%), educated up to middle school level (24.00%), large family type (40.00%), high level of farming experience (51.33%), majority of occupation is farming (34.67%), medium source of awareness about ICT tools (77.33), e-learning plays major role in learning ICT skills (47.33), high utility of ICT in extension (76.67) and medium level of knowledge (60.67).

Keywords: ICT, attitude of farmers, Marathwada region

Introduction

In this existing scenario, it is expected that integration of ICTs in agricultural extension will provide needed impetus to the agricultural sector and ICTs can complement the traditional extension system for "Knowledge Resource" delivery to the millions of farmers. ICTs are technologies offering new ways of communicating and exchanging information and knowledge. The phrase ICT was coined by Stevenson in 1997. ICT is the main source of information for all people and has reduced the gap between people and places. It could be regarded as both a driver and an enabler. ICT can spread knowledge in rural areas which can be utilized effectively for the improvement of agriculture and rural development. The ICT enabled extension systems are acting as a key agent for changing agrarian situation and farmers' lives by improving access to information and sharing knowledge.

ICT could be used to facilitate, strengthen, and replace the existing information systems and networks. The term ICT is used to include radio, television, mobile phone, internet, telephone, IPad, video, voice information system, fax and computer. The Information and Communication Technology (ICT) is one of the important driving forces for modern civilization which provides new approaches and ways of communicating, transferring and enhancing the knowledge and information among different communities. With this background in mind the current study was conducted to access the attitude of farmers towards use of Information and Communication Technology (ICT) for agricultural production and marketing.

Materials and Methods

The present study is conducted in Marathwada region of the Maharashtra state during 2021-2022. In Marathwada region Parbhani District of Maharashtra State is selected due to the reason of Vasantrao Naik Marathwada Krishi Vidyapeeth is situated in the Parbhani district and it is a hub for agricultural training programs for the farmers to implement various improved agricultural practices. There are nine talukas in Parbhani district out of which three talukas namely, Parbhani, Manwath, Sailu selected for present study. From each of the selected taluka, five villages were selected randomly. Thus fifteen villages were selected for the present study. From each selected village, ten respondents were selected randomly, those having mobile phones with internet facilities and engaged in agricultural operations were selected, in this way total one hundred fifty respondents were considered for the present study. "Ex-post-facto" research approach was used for study. Data was gathered using a well-structured interview schedule created with the study's objectives in mind. The collected data was analysed, classified and tabulated. Statistical tools such as frequency, percentage, mean, standard deviation, and coefficient correlation were used to interpret findings and draw conclusions.

Profile of respondents

Table 1: Profile of respondents

Age		
Young (Up to 28 years)	26	17.33
Middle (29 to 49 years)	101	67.33
Old (50 years & above)	23	15.33

1. Education

Illiterate	14	9.33
Can read and write only	19	12.67
Primary school level	24	16.00
Middle school level	36	24.00
High school level	33	22
Graduate	24	16
Other	0	0

2. Occupation

Farming	52	34.67
Dairy Farming	20	13.33
Goat Farming	9	6
Business	27	18.00
Service	28	18.67
Other	14	9.33

3. Family Size

Small (up to 4 members)	50	33.33
Medium (5 to 7 members)	40	26.67
Large (above 7 members)	60	40.00

4. Farming experience

Low (up to 8 years)	31	20.67
Medium (9to 30 years)	42	28.00
High (above 30 years)	77	51.33

5. Utility of ICT in extension

Occasionally	16	10.67
Once in a week	19	12.67
Daily	115	76.67

6. Methods of learning ICT skills

Low	71	47.33
Medium	53	35.33
High	26	17.33

7. Sources of awareness about ICT

Low(up to 6)	9	6.00
Medium(7-10)	116	77.33
High(Above 10)	25	16.67

8. Knowledge

Low (up to 4)	50	33.33
Medium (5 to 7)	91	60.67
High (7 & above)	9	6

9. Attitude of farmers towards ICT tools

Less favourable (up to 60)	22	14.67
Moderately favourable (60 - 75)	111	74.00
Highly favourable (above 75)	17	11.33

1. Age

Most of the respondents *i.e.* (67.33) more than half belonged to the middle age group, followed by the young group *i.e.* 17.33 percent and the remaining 15.33 percent of respondents belonged to the old age group the above results were in accordance with, Bhosale (2021) [1].

2. Education

Most of the respondents *i.e.* 24.00% of the respondents were educated up-to middle school level, while 16.00 percent of the respondents educated up-to primary school level followed by 12.67 percent of respondents were able to read and write only. Very few respondents were illiterate *i.e.* 9.33 percent the above results was in line with, Sethy and Mukhopadhyay (2020) [4].

3. Occupation

Maximum no of the respondents *i.e.* 24.00% of the respondents were educated up-to middle school level, while 16.00 percent of the respondents educated up-to primary school level followed by 12.67 percent of respondents were able to read and write only. Very few respondents were illiterate *i.e.* 9.33 percent the above results was in accordance with, Bhosale (2021) [1].

4. Family size

Most of the respondents *i.e.* 40.00% belonging to large sized family, followed by small sized family 33.33 percent and then medium sized family *i.e.* 26.67 percent the above results was in accordance with, Bhosale (2021) [1].

5. Farming experience

Most of the respondents having high level of farming experience (51.33%), followed by medium level *i.e.* 28.00 percent and remaining respondents had low level of farming experience *i.e.* 20.67 percent the above results was in accordance with, Bhosale (2021) [1].

6. Utility of ICT in extension

Most of the respondents utilize ICT daily (76.77%), followed by utility once in a week *i.e.* 12.67 percent and then 10.67 percent respondents utilized occasionally the above results was in accordance with, Erick *et al*., (2020) [5].

7. Methods of learning ICT skills

Most of the respondents get awareness about new technologies from e-learning, followed by workshops *i.e.* 35.33 percent and very few respondents get from conferences *i.e.* 17.33 percent the above results was in accordance with, Chowhan and Ghosh (2020) [2].

8. Sources of awareness about ICT

Most of the farmers (77.33%) had medium source of awareness about ICT, followed by high level of awareness *i.e.* 16.67 percent and very few respondents near about 6.00 percent had low level of awareness about ICT the above

results was in accordance with, Mittal and Mehar (2019) [3].

9. Knowledge

Most of the respondents had medium level 60.67% of knowledge about ICT tools followed by low level of knowledge *i.e.* 33.33 percent and then high level of knowledge about 6.00 percent the above results was in accordance with, Sethy and Mukhopadhyay (2020) [4].

10. Attitude of farmers towards ICT tools

Most of the farmers that is more than half (74.00%) of the farmers had moderately favourable attitude towards use of ICT tools, followed by less favourable attitude *i.e.* 14.67 percent and very few respondents had highly favourable attitude towards usages of ICT (11.33 percent) the above results was in accordance with, Bhosale (2021) [1].

Conclusion

The study conclusively revealed that the majority of the farmers belonged to middle age group, majority of the respondents educated up-to middle school level, primary source of livelihood of most of the respondents were farming, majority of the farmers had small family size also, majority of the farmers had high level of farming experience, majority of the respondents had utilize the ICT on daily basis, majority of the respondents had used e-learning as the major source of method of learning ICT skills, majority of the respondents had medium level of source of awareness about ICT also, majority of the respondents had a medium, level of knowledge.

References

1. Bhosale GB. Attitude of farmers towards use of Information and Communication Technology for seeking agricultural information. (Master's Thesis) Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani; c2021.
2. Chowhan S, Ghosh SR. Role of ICT on Agriculture and its future scope in Bangladesh. Journal of Scientific Research and Reports; c2020. p. 20-35.
3. Mittal S, Mehar M. Socio economic factors affecting adoption of modern ICT by farmers in India the Journal of Agricultural Education and Extension. 2016;22(2):199-212.
4. Sethy S, Mukhopadhyay SM. Use of ICTs by Farmers: A Study in *Asian* Odisha. Journal of Agricultural Extension, Economics & Sociology. 2020;38(5):74-86. Article No. AJAEES.57915. ISSN: 2320-7027.
5. Leyfman Y, Erick TK, Reddy SS, Galwankar S, Nanayakkara PW, Di Somma S, *et al*. Potential immunotherapeutic targets for hypoxia due to COVI-FLU. Shock. 2020;54(4):438-50.