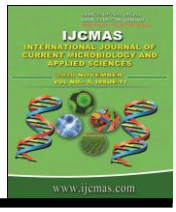
*Int.J.Curr.Microbiol.App.Sci* (2020) *9*(11): 3011-3015

*International Journal of Current Microbiology and Applied Sciences*
***ISSN: 2319-7706*** **Volume 9 Number 11 (2020)**
Journal homepage: http://www.ijcmas.com



**Original Research Article** https://doi.org/10.20546/ijcmas.2020.911.364

# Study about the Perception of Farmers towards the Use of ICT Tools for Farm Communication in Tirunelveli District of Tamilnadu, India

**A. Aravind[1]*, R. Rajasekaran[1] and M. Bhavadharani[2]**

*[1]Department of Social Sciences, Agricultural College and Research Institute, Killikulam, Thoothukudi, Tamil Nadu, India*
*[2]Department of Soil Science and Agricultural Chemistry, AnbilDharmalingam Agricultural College and Research Institute, Tiruchirapalli, India*

**Corresponding author*

**Keywords**

Awareness, Accessibility, ICT, Utilization pattern

**Article Info**

***Accepted:***
22 October 2020
***Available Online:***
10 November 2020

**A B S T R A C T**

Agriculture is one of the most important sector in India which could be benefitted tremendously with application of information and communication technologies. In this regards, extensive use of modern ICT tools need to be promoted to farm level for the transfer of technologies and information in a cost effective manner. This study was conducted in the Tirunelveli districts of Tamilnadu during 2019-20 to assess the perception of farmers towards use of modern ICT tools using for farm communication. Proportionate random sampling technique was used in the selection of 150 farmers as the sample of the study. A well structured interview schedule was used for data collection and appropriate statistical tools were used to analyze the collected data. Among 150 farmers selected for the study, majority of the respondents (80.66%) had low awareness level of using ICT tools, (48.00%) of the respondents had low level of accessibility of ICT tools whereas (90.00%) of the respondents had low utilization of using of modern ICT tools. Among the constraints lack of training for using ICT tools was perceived as a major constraints by(95.34%) of the respondents. Hence this study recommends that government agencies should provide training and awareness programme to disseminate the beneficial effect of using ICT tools for the improvement of the livelihood of the rural farmers.

## Introduction

Information and communication technologies offering new ways for communicating and exchanging information and knowledge in recent days. ICT is a term which is currently used to denote a broad range of services, application and technologies using various type of equipment and software. ICT include conventional tools like radio, television followed by internet, mobile services, websites and portals, expert system, social networking etc through email, chats, blogs, alert messages, MMS etc. farmers can get innovative information through the innovative use of information technology.

In this current scenario, it is expected that integration of ICTs in the agriculture extension will provide needed impetus agriculture sector and ICTs can complement the traditional extension system for 'Knowledge Resource' delivery to the millions of farmers (Saravanan, 2010). ICT in agriculture is an emerging field focusing on the enhancement of agricultural and rural development in India and to facilitate greater access to information that drive or support knowledge sharing. The advancement in ICT can be utilized for providing accurate, timely, relevant information and services to the farmers, thereby facilitating an environment for more remunerative agriculture (Rao, 2007).

The favorable attitudes of farmers towards ICT is very much required in obtaining benefit of effective and efficient information support tool which will lead to stronger conviction and efficient extension programme planning in changing agri rural environment. Reaping the benefits of ICT in agriculture remain an ongoing challenge. The range economic benefits in agriculture is wide and includes better management, better and timely information accessing and dissemination better integrated and production planning, monitoring and follow up, access to the latest result of research and more. Rizvi (2010) founded that access to mobile based advisory services can help to reach poor farmers in remote/rural areas. With this background the present study was undertaken to assess the awareness level, accessibility, availability and to depict the constraints faced by the rural farmers with respect to information and communication technologies.

## Materials and Methods

The study was conducted in the purposively selected Tirunelveli district of Tamilnaduduring 2019-20 to assess the awareness level of farmer on using the modern information and communication technologies for farm communication. Of the nineteen blocks, five blocks having maximum rural farmers were selected for the study. Two villages from each block having maximum farming community were selected for the study. A sample size of 150 respondents was fixed as respondents. The 150 respondents were identified from the selected ten villages from five block were selected randomly. "Ex-post facto research design was used to study the different aspects of ICTs perceived by the rural farmers viz, awareness of farmers towards ICT tools and their accessibility and utilization pattern along with the constraints perceived by them on using ICT tools. The data were collected through a semi structured interview schedule prepared specially for the study. The data thus collected had been analyzed by frequencies and percentage.

## Results and Discussion

### Awareness of farmers towards the use of ICT tool in farm communication

It is evident (Table 1) that majority of the respondents (80.66%) had low level of awareness on using of ICT tools. A considerable percentage of respondents (18.0%) had low level of awareness on ICT tool followed by very few proportion i.e, (1.34 %) of the respondents having high level of awareness on ICT tools. Average awareness score of rural farmers for use of ICT tools came to be quite low viz. 1.21. The study concluded that farmers possessed low to medium level of awareness regarding use of ICT tools for farm communication (Fig. 1).

### Level of accessibility of ICT tools in farm communication

Table 2 reveals that, it was not easy to access internet/laptop, magazines, radio and

televisions by the majority of respondents (96.00, 62.00, 56.66, 58.66 per cent respectively), whereas majority of the respondents (77.30%) were found easy to access to smart phone. Average accessibility score of different ICT tools was found to be 8.97%.

## Utilization pattern of ICT tools in farm communication

Table 3 revealed that 96.66% of the respondents had never utilize internet/laptop in farm communication whereas 3.34 per cent of farmers utilize laptop/ internet rarely to avail information. Smart phone as IC was never utilized by nearly utilized by nearly three-fourth (71.34%) of the respondents as ICT tools. Majority of the respondents had no utilization of modern ICT tools like magazine (94.00%), radio (94.66%) and television (99.34) in the study area.

## Constraints while using ICT tools

Table 4 revealed that majority of the respondents (92.66%) had faced serious constraints of interrupted power supply to utilizing the ICT tools and more than two-third of the respondents (66.66%) had inadequate access of ICT tools as mild constraints, while majority of the respondents had perceived high cost of ICT (80.66%), technical knowledge (88.00 %) and lack of training for using ICT tools (95.34%) as major constraint.

**Table.1** Distribution of respondents based on level of awareness for ICT tools

(N=150)

| Sl. No | Level of awareness | Frequency | Percentage |
|---|---|---|---|
| **1** | Low( 1-1.66) | 121 | 80.66 |
| **2** | Medium (1.67 – 2.332) | 027 | 18.00 |
| **3** | High (2.33-3) | 002 | 1.34 |

Mean=1.21

**Table.2** Distribution of respondents according to their level of accessibility of ICT tools in farm communication

(N=150)

| Sl.NO | ICT tools | Degree of accessibility | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Very easy | | Easy | | Fairly easy | | Not easy | |
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % |
| **1** | Internet /laptop | 0 | 0 | 0 | 0 | 6 | 4.00 | 144 | 96.00 |
| **2** | Smart phone | 18 | 12.00 | 116 | 77.30 | 9 | 6.00 | 7 | 4.70 |
| **3** | Magazine | **7** | 4.66 | 20 | 13.34 | 30 | 20.00 | 93 | 62.00 |
| **4** | Radio | 8 | 5.34 | 23 | 15.34 | 34 | 22.66 | 85 | 56.66 |
| **5** | Television | 10 | 6.67 | 18 | 12.00 | 34 | 22.67 | 88 | 58.66 |
| **Average accessibility score = 8.97** | | | | | | | | | |

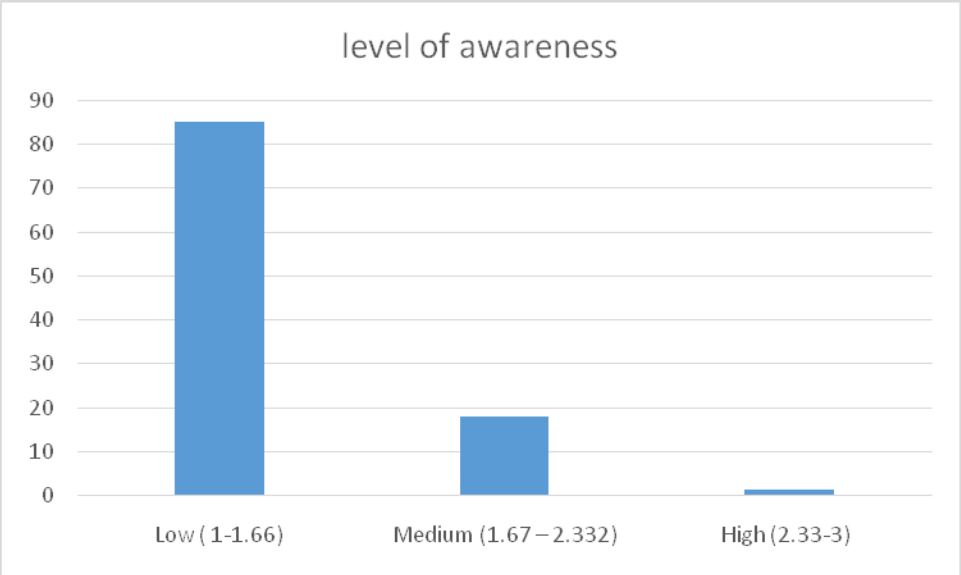
**Table.3** Distribution of respondents by pattern of utilization of ICT facilities (N-150)

| Sl. No | ICT tools | Pattern of utilization | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Regularly | | Occasionally | | Rarely | | Never | |
| | | Frequency | % | Frequency | % | Frequency | % | Frequency | % |
| 1 | Laptop /internet | 0 | 0 | 0 | 0 | 5 | 3.34 | 145 | 96.66 |
| 2 | Smart phones | 0 | 0 | 7 | 4.66 | 36 | 24.00 | 107 | 71.34 |
| 3 | Magazine | 0 | 0 | 0 | 0 | 9 | 6.00 | 141 | 94.00 |
| 4 | Radio | 0 | 0 | 0 | 0 | 8 | 5.34 | 142 | 94.66 |
| 5 | Televisions | 0 | 0 | 0 | 0 | 1 | 0.66 | 149 | 99.34 |

**Table.4** Constraints while using ICT tools

| Sl. No | Constraints | Level of constraints | | | | | |
|---|---|---|---|---|---|---|---|
| | | Serious | | Mild | | Not constraint | |
| | | Frequency | % | Frequency | % | Frequency | % |
| 1 | Poor power supply | 0 | 0 | 11 | 07.34 | 139 | 92.66 |
| 2 | Inadequate access of ICT tools | 23 | 18.00 | 100 | 66.66 | 27 | 15,34 |
| 3 | High cost of ICT tools | 121 | 80.66 | 22 | 4.67 | 07 | 14.67 |
| 4 | Lack of technical knowledge | 132 | 88.00 | 17 | 11.34 | 1 | 0.66 |
| 5 | Lack of training of ICT tools | 143 | 95.34 | 7 | 4.66 | 0 | 0 |

**Fig.1**



The study concludes that awareness level, accessibility and the utilization of ICT tools by the rural farmers are poor in the study area as most of them still continuing traditional farm communication practices. Moreover lack of constraints in using ICT tools and technical knowledge of using them are the major constraints perceived by the respondents. Hence the government needs to conduct training and awareness programme to disseminate beneficial effect of using ICT tools for improvement of the standard of living of farmers.

## References

Rao, N.H. 2007. A framework for implementing Information and Communication Technologies in Agriculture Development in India. Technological forecasting and social change 74:491.

Rizvi, S. M., 2010, Livelihood Solution through Mobile Technology: An assessment technical paper No.1. Rural Research Centre, Institute of Rural Research and Development (IRRAD), Gurgaon, Haryana, India.

Saravanan, R.2010. ICTs for Agricultural Extension: Global experiments, Innovation and Experiences. New India publishing agency, New Delhi 115-168.

**How to cite this article:**

Aravind, A., R. Rajasekaran and Bhavadharani, M. 2020. Study about the Perception of Farmers towards the Use of ICT Tools for Farm Communication in Tirunelveli District of Tamilnadu, India. *Int.J.Curr.Microbiol.App.Sci.* 9(11): 3011-3015.
doi: https://doi.org/10.20546/ijcmas.2020.911.364