

Constraints Faced by the Farmers in Extent of Utilization of ICT Advisory Services in Dindigul District of Tamil Nadu

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Abstract

In the present era, it is inevitable to study the usage of ICT which plays a key role in modern society. The mobile phone is an influential e-tool possessed by farmers which is handy. Farmers can get all information and advisories easily through agricultural mobile applications. The application of the mobile phone has emerged as an efficient tool for fast and innovative ideas for the deployment of advisories in agriculture. This paper aims to review and identify the constraints faced by the farmers in using various ICT tools for the utilization of advisory services. The Present study was conducted in Dindigul district of Tamil Nadu. Data were obtained from a sample of 300 farmers in six selected blocks namely, Dindigul, Natham, Sanarpatti, Vadamadurai, Nilakottai, and Ottanchatram. The results showed that the majority of the constraints faced by the farmers were lack of training on ICT (81.33 per cent), high cost of data pack (94.66 per cent), lack of locally relevant information (88.33 per cent), poor internet availability (86.66 per cent), linguistic drawback (71.00 per cent), lack of awareness on ICT-related agri. mobile apps (54.67 per cent), lack of e-skill to use modern ICT tools (50.66 per cent). So, based on the present study, it is recommended to make aware of ICT tools and their usage by farmers and arrangement of various training on ICT.

Keywords: Constraints, ICT, extent of utilization, advisories and training

Introduction

ICT encounters the range of development of modern technical practices by farmers in recent times. In this context, Information and Communication Technology (ICT) can revolutionize the Indian farming sector and can benefit all farmers in the production and marketing fields. There is an immense opportunity to enhance the spread of agricultural information that farmers receive with the use of ICT. During COVID-19 Mobile-based agro-advisory services play a crucial role in facilitating the information and knowledge sharing on weather reports, online marketing, crop advisory services, pest and disease management, seed availability and livestock services in addition to the extension services. Although possession of mobile phones by the majority of the farmers, the e-literacy level of farmers is low. It is also a constraint for them to adopt the advisory services in consultation with the extension personnel and could not involve in the timely interventions provided by the government. ICT can make agriculture more remunerative with the latest information. It saves time, money, effort, and dependency on many factors in the extension chain. Keeping this in view, a study was planned to analyse the constraints in the usage of ICT by farmers. The study will give immense help to the farmers and enhance the usage of ICT tools for the acquisition of ICT advisory services and improve their e-literacy level.

Methodology

The study was conducted in the Dindigul district of Tamil Nadu. An ex-post facto research design was used for the study. Based on the online training list obtained from KVK and SDA a total

of 300 farmers were selected purposively as respondents. The sample was selected from six blocks viz., Dindigul, Natham, Sanarpatti, Vadamadurai, Nilakottai, and Ottanchatram which belong to five taluks of Dindigul, Natham, Vedasendur, Nilakottai, and Ottanchatram. Primary data were collected from the respondents with the help of a pre-tested structured schedule by the personal interview method. Data were analysed with help of suitable statistical tools.

Results and Discussion

In the present study, an effort was made to categorize the constraints faced by the farmers in the utilization of ICT advisory services.

Table 1. Constraints faced by the farmers in the utilization of ICT advisory services

n=300

S. No.	Constraints	Frequency	Per cent	Rank
1	Poor internet availability	260	86.66	III
2	High cost of data pack	284	94.66	I
3	Lack of e-skill to use modern ICT tools	152	50.66	VII
4	Lack of training on ICT	244	81.33	IV
5	Non-trustworthy of information provided on the internet	40	13.33	XVIII
6	Difficult to recall information	94	31.33	XI
7	Lack of timely availability of advisory services	112	37.33	IX
8	Lack of locally relevant information	265	88.33	II
9	Lack of self-confidence in usage of ICT tools	76	25.33	XIV
10	Lack of satisfactory solution to the individual problem	80	26.66	XIII
11	Delayed response for queries	125	41.67	VIII
12	Information on the agriculture website and apps is not updated	98	32.66	X
13	Lack of awareness on ICT-based agriculture mobile apps and portals	164	54.67	VI
14	Linguistic drawback	213	71.00	V
15	Inability to read (Illiteracy)	21	7.00	XXII
16	Covert personality to discuss and raise queries in online training and meetings	33	11.00	XIX
17	Feel discomfort to provide self-information in registering number in mobile application / Information sharing (Privacy)	65	21.67	XV
18	Inability to make online payments through Gpay, Phonepe, etc.,	90	30.00	XII
19	Lack of technical support from extension personnel	60	20.00	XVI
20	Unavailability of ICT tools	55	18.34	XVII
21	Difficult to find relevant information due to more contents in social media	30	10.00	XX
22	Deviation from core purpose	25	8.33	XXI

It could be observed from table 1 that among various constraints experienced by the farmers, high cost of data pack was reported by majority of the farmers (94.66 per cent). The reason behind this constraint is that recently, mobile network companies increased the cost of data pack with double the average price before and it also might be due to the economic status of the farmers who are not willing to spend more money on recharging the data pack, followed by around eighty-nine per cent (88.33 per cent) of the farmers reported that lack of locally relevant information as another major constraint. The specific area-based advisories are not available in mobile-based agriculture apps, portals and social media. Only the district-based and crop-based information are available. So, there is a demand from the farmers side in getting local area-specific advisories in a timely manner. Eighty-seven per cent (86.66 per cent) of the farmers faced poor network availability was also a major problem. The reasons might be due to poor internet infrastructural facilities available in the rural areas. Lack of training on ICT was reported by (81.33 per cent) of the farmers, this might be due to the medium e-literacy and the farmers may not able to operate the mobile phone on ICT tools in an efficient manner. The State Department of Agriculture (SDA) and KVK are majorly focusing on imparting training on crop production, protection, and marketing areas but there is no specific training available for farmers on ICT. This might be the reason for this constraint.

Furthermore, seventy per cent of the farmers felt the linguistic barrier were another constraint. Farmers generally prefer the local language as easy to follow up than any other language. But most of the agriculture mobile applications and agri portals are available in the local language. During the study, farmers revealed that in Tamil Nadu local language apps like the uzhavan app and TNAU agritech portal are preferred used to get advisories on various fields. The reasons may be the lack of awareness of ICT-based agri. mobile apps and services available on the internet (54.67 per cent), lack of e-skill to use modern ICT tools (50.66 per cent) by half of the respondents. This might be due to the lack of training on usage of ICT tools.

It was shown the delayed response for queries (41.67 per cent). The reply to the raised questions is overdue online. Lack of timely availability of advisory services (37.33 per cent). According to the study, farmers reported that obtaining their advisories from sowing to harvest season in a timely manner. When disseminating advisories, timing is essential because, without synchronization, farmers may not be able to utilize them. Information on the agriculture website and portals is not updated (32.66 per cent). This constraint was informed to be some agriculture portals that had not updated the information for a long time. Difficult to recall information (31.33 per cent) it might seem to be the reason for age-old farmers and information is not in their memory at the stage of use due to the interval of application and size of the content, inability to make online payments through Gpay, Phonepe, etc., (30.00 per cent). It might be due to the lack of ability to operate and old age factor to perform.

Followed by the other constraints namely, lack of satisfactory solution to the individual problem (26.66 per cent), lack of self-confidence in the usage of ICT tools reported by twenty-five per cent, feel discomfort to provide self-information in registering number in mobile application / Information sharing (Privacy) (21.67 per cent), lack of technical support from extension personnel (20.00 per cent), unavailability of ICT tools (18.34 per cent), non-trustworthy of information provided on the internet (13.33 per cent), covert personality to discuss and raise queries in online training and meetings with eleven per cent followed by difficult to find relevant information due to more contents in social media (10.00 per cent), deviation from core purpose (8.33 per cent), inability to read (Illiteracy) (7.00 per cent).

As the farmers are moving away from agriculture it is time to retain them in agriculture. The root cause of these constraints should be identified with timely evaluation by the extension person to overcome farmer's problems with the utilization of ICT.

Conclusion

The study revealed that prominent constraints were a lack of specialized skills in e-tools, local content of advisories, network connectivity and lack of training on ICT were the major problems faced by farmers in the utilization of ICT advisories. The modern ICT is the technological network to fill the gap between farmers and extension personnel. This could be alleviated by proper training and support of guidance by the extension personnel, KVK scientists and experts from agriculture university by making the farmers aware and involving them in ICT activities for the betterment of the farming community.

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