



CONSTRAINTS ENCOUNTERED BY FARMERS IN USAGE OF ICT TOOLS FOR THE DEVELOPMENT OF AGRICULTURE

Jayati Singh¹; Dr. Jahanara²

¹M.Sc. Scholar, jayatisingh3094@gmail.com

²Head of the Department

Department of Agricultural Extension & Communication

Sam Higginbottom Institute of Agricultural Technology & Sciences, Prayagraj

ABSTRACT: *The use of computers and technology today has become fundamental to the operation of organizations and society. These allow the transfer of massive amounts of information in a matter of seconds, enabling humankind to advance in a multitude of ways. ICT provides the farmers with the latest technologies and improve their farm income. Hence the present study was undertaken to find out the constraint encountered by farmers in ICT utilization. The study revealed that the majority (90.83%) of the respondents encountered the problem in ICT utilization were lack of training in handling ICT tools followed by lack of confidence in operating ICT tools (85.83) and 75.83 per cent said lack of familiarity of ICT tools and many other constraints. The study focused on constraints affecting the utilization of Information and Communication Technologies (ICT) for agricultural development .Data were derived from 120 respondents from 10 villages in one block.*

Keywords– *ICT, Constraints of Farmers, ICT Utilization, suggestions.*

I. Introduction

Innovations that are guided by small holder farmers, adapted to local circumstances and sustainable for the economy and environment will be necessary to ensure food security in the future - BILL GATES.

Agriculture is one of the important sectors in India. Apart from this India is also a forerunner in IT sector. Empowerment of the rural agrarian community depends on the better accessibility to ICT services. But access to Information and communication technology is far less especially when coming to rural areas. ICT can bring revolution in the agrarian society with proper approachability. However, it is observed that the rural populations still have difficulty in accessing crucial information in order to make timely decisions (Mooventhan et. al 2016).

ICT (Information and Communication Technology) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as various services and applications associated with them, such as video conferencing and distance learning. ICT enables the dissemination of requisite information at the right time (Rao, 2007). Though agriculture and IT are at the economic background, farmer's distress is at rise due to knowledge gap between the scientists and the farmers. The gap prevails because of the short supply of extension personnel. In order to provide the farmers with the latest technologies and improve their farm income, ICT plays a vital role. But this is not the real case at the ground level as farmers are facing several issues regarding the ICT utilization. Realizing this problem, a study was undertaken to know the constraints encountered by farmers in ICT utilization.



II. Materials And Methods

The present study was conducted in Ikauna block of Shrawasti district in Uttar Pradesh to analyze the constraints encountered by the farmers in ICT utilization. A random sample of 120 farmers were selected through random sampling method and a sample of 12 farmers were selected from each village for the study. A well-structured and pre-tested interview schedule was used to study the objectives and the data were collected using personal interview. Percentage analysis were done to analyse the data. And ranking was done according to results obtained.

Percentage: The term 'Percentage' means a fraction whose denominator is 100 and the number of the fraction is called percentage.

$$P = \frac{X}{N} \times 100$$

Where, P = Percentage X = Frequencies of respondents N = Total number of respondents

Secondary Data Collection: The secondary data has been collected through different source of materials, portals, websites and other exiting records. The other relevant data has been collected from various books, magazines, official records, research paper, internet, journals, news articles and other exiting sources of data.

Primary Data Collection: The primary data has been collected through two methods survey and observation. Through schedule, data has been collected from the farmers of selected villages Schedule has been prepared with both close ended and open ended questionnaire.

III. Results and Discussion

The constraint analysis is however important to reach out the voice of the farmers and the problems faced by them in order to enable planners, administrators, development workers and policy makers to implement developmental programmes and interventions which could cater to the needs of the farmers and benefit them in an improved manner. These were studied through recording the responses on two point continuum as yes or no.

The results collected from the respondents regarding the Constraints Encountered by famers in ICT utilization are presented in the following table 1.

Table1. Constraints Encountered by famers in ICT utilization

n=120*

S.No.	Constraints	RESPONSE		RANK
		AGREE		
		F	P(%)	
1.	Lack of confidence in operating ICT tools	103	85.83	II
2.	Low rate of literacy	82	68.83	V
3.	Erratic power supply	45	37.50	VII



4.	Poor internet connectivity	11	9.17	X
5.	Lack of awareness of benefit of ICT	87	72.50	IV
6.	Lack of training in handling ICT tools	109	90.83	I
7.	High cost of equipment	75	62.50	VI
8.	Insufficient ICT tools	26	21.67	IX
9.	Lack of Technical Person at village level	37	30.83	VIII
10.	Lack of familiarity with modern tools	91	75.83	III

Table II reveals that the majority (90.83%) of the respondents encountered the problem of lack of training in handling ICT tools, followed by lack of confidence in operating ICT tools (85.83%) and 86.66 per cent said lack of familiarity with modern tools. Apart from that respondents (72.50%) expressed that lack of awareness benefit of ICT raise problem in development of agriculture. Further 68.83 per cent respondents face lack of literacy as a constraints in usage of ICT tools. 62.50 per cent of the respondents revealed that high cost of equipments creates problem in their usage and purchase. Further next constraints was erratic power supply (37.50%). 21.67 percent of respondents revealed that they have insufficient amount ICT tools, therefore they lack behind in using it. Poor internet connectivity was encountered by least number of respondents (9.17%) which shows that internet supply was quite good in that area.

The suggestions given by the respondents were timely and regional information would help the farming community in speculating the market changes. Majority of the respondents felt that training should be given for handling of ICT tools, further few felt that proper funding should be given to rural area for the benefit of the farmers and agricultural development. So, Government policy can be focused on improving the ICT infrastructure with effective training to the rural farmers will undoubtedly improve the accessibility and brings down the cyber phobia which has been encountered by the farming community.

IV. Conclusion

Development of agriculture in the present scenario depends on bridging the knowledge gap among the end users. In this regard ICT enables better improvement in agriculture. In this regard ICT enables better improvement in agriculture. Sufficient budgetary support for creation of digital infrastructure is needed to reduce the digital gap. To overcome these challenges, mobile based ICT's are being implemented across the country. For instance, farmers can raise queries related to agriculture and allied sectors using their mobile phones to a Kisan Call Centre and various other portals which has been operating in every state of India. Generating awareness among young and middle aged farmers about the availability of ICT services is the first step to be considered to increase farmers participation in ICT initiatives. Various modes of delivery of services such as internet, agri-clinics, mass media, common service centre, Kisan Call Centre, m-Kisan, Agropedia, Agmarknet coupled with physical outreach of extension personnel is one of the ways to successfully implement effective ICT services in the rural community and apart from that government initiatives can help in achieving and strengthening the digital connectivity throughout the country.



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