

Original Research Article

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## Constraints Faced by Extension Personnel and Suggestions for Effective Use of ICT

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### ABSTRACT

The extension personnel are the key role players in providing farm information in interesting and understandable form to farmers. The efficiency with which these information reach farmers determine the level of agricultural productivity. ICT can help extension personnel for effective and timely transmission of technology to farmers. But there are some constraints which prevent the effective use of ICT by extension personnel. Keeping these points in view an attempt has been made to study the profile of extension personnel, constraints faced by them while using ICT and suggestions to overcome the constraints. The study revealed that majority (53.33 per cent) of the extension personnel were middle aged, more than three-fourth (80.00 per cent) were males, exactly three-fourth (75.00 per cent) belonged to rural area, majority (62.50 per cent) had medium achievement motivation, majority (65.84 per cent) had medium level of innovation proneness, majority (60.84 per cent) had medium job commitment, 53.34 per cent had medium level of mass media liveliness, majority (61.67 per cent) had not undergone any training on ICT and 63.33 per cent had medium level of infrastructure facilities. The major constraint experienced by the extension personnel was lack of training on ICT (80.83 per cent). High cost and lack of fund for equipments ranked second followed by lack of farmers interest in ICT based transfer of technology. The most important suggestions given were adequate and timely training on ICT (85.83 per cent). Regular maintenance of already installed equipments (71.67 per cent) and awareness about uses and effectiveness of ICT among various stakeholders (71.67) ranked second and third respectively.

#### Keywords

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### Introduction

Extension personnel have a critical role in the development of farming and farming community. They are the link between scientists, research stations, agricultural universities, policy makers and the farmers. ICT can help the extension agents to ease their extension activities. The application of ICT offers excellent possibilities for

strengthening the transfer of technologies between research and extension system and further onward transmission to the end users. But extension personnel are facing many difficulties in the utilization of ICT. So the present study was carried out to find out the constraints faced by the extension personnel while using the ICT and the suggestions offered by them to overcome those constraints.

## **Materials and Methods**

The study was conducted in six randomly selected districts of Saurashtra region. 120 extensional personnel were selected proportionately from each district. Structured interview schedule was used for the study.

The respondents were asked to record their constraints and suggestions for the effective use of ICT. The collected data were classified, tabulated, analysed and interpreted to make the finding meaningful.

## **Results and Discussion**

The results have been discussed in three parts. First part deals with the profile of extension personnel, second part deals with the constraints faced by extension personnel while using ICT, third part deals with the suggestions offered by them to overcome the constraints.

### **Profile of extension personnel**

The profile of extension personnel given in the Table 1 as the selected characteristics of extension personnel.

The data presented in the Table 1 revealed that more than half (53.33 per cent) of the respondents belonged to middle age category followed by 46.67 per cent in young age category. It was also observed that not a single respondent belonged to old age category.

Majority (80.00 per cent) of the respondents were males and only 20.00 percent were females. It was observed that three-fourth (75.00 per cent) of the respondents belonged to rural area followed by 19.17 per cent belonged to semi-urban area and only 5.83 per cent belonged to urban area. Majority (62.50 per cent) of the respondents belonged

to medium level of achievement motivation followed by 22.50 percent belonged to high level of achievement motivation and 15.00 per cent belonged to low level of achievement motivation. Majority (65.84 per cent) of the extension personnel had medium level of innovation proneness followed by 20.83 per cent had low level and 13.33 had high level of innovation proneness respectively.

Majority (60.84 per cent) of the respondents had medium level of job commitment followed by 23.33 per cent had high level of job commitment and 15.83 per cent had low level of job commitment.

More than half (53.34 per cent) of the respondents had medium level of mass media liveliness followed by 25.83 per cent had high level of mass media liveliness and 20.83 per cent had low level of mass media liveliness. Majority (63.34 per cent) of the respondents had medium level of infrastructure facilities followed by 20.83 per cent high level had high level of infrastructure facilities and 15.83 per cent low level of infrastructure facilities.

### **Constraints faced by extension personnel while using ICT**

The respondents were asked to record the constraints faced by them while using ICT and the obtained data is given in the Table 2.

It was found that the constraint 'lack of training on ICT' ranked first among the constraints faced by the extension personnel while using ICT. 80.83 per cent of the respondents faced this constraint. The constraint high cost and lack of fund for equipments was ranked second which was faced by 74.17 per cent of the extension personnel.

The third rank was to the constraint lack of farmers' interest in ICT based transfer of

technology which was faced by 64.17 per cent of the respondents. The other constraints faced by the respondents were poor technical know-how (61.67 per cent), lack of motivation to use ICT based extension(57.50

per cent), difficulty in developing content in local language (42.50per cent), slow internet connectivity (26.67 per cent), back ache/ headache/ hand pain (25.83per cent) and adverse effect on eyesight (23.33per cent).

**Table.1** Distribution of extension personnel according to their selected characteristics (n=120)

<b>Selected characteristics</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age</b>	Young (Below 35 years)	56	46.67
	Middle (35-50 years)	64	53.33
	Old (Above 50 years)	0	0.00
<b>Gender</b>	Male	96	80.00
	Female	24	20.00
<b>Native place</b>	Rural	90	75.00
	Semi-urban	23	19.17
	Urban	7	5.83
<b>Achievement motivation</b>	Low	18	15.00
	Medium	75	62.50
	High	27	22.50
<b>Innovation proneness</b>	Low	25	20.83
	Medium	79	65.84
	High	16	13.33
<b>Job commitment</b>	Low	19	15.83
	Medium	73	60.84
	High	28	23.33
<b>Mass media liveliness</b>	Low	25	20.83
	Medium	64	53.34
	High	31	25.83
<b>Training undergone</b>	No training	74	61.67
	One training	17	14.17
	Two training	13	10.83
	Three training	10	8.33
	More than three training	6	5.00
<b>Infrastructure facilities</b>	Low	19	15.83
	Medium	76	63.34
	High	25	20.83

**Table.2** Constraints faced by extension personnel while using ICT (n=120)

Sr. No.	Constraints	Frequency	Percentage	Rank
1.	Poor technical know how	74	61.67	V
2.	High cost and lack of fund for equipments	89	74.17	II
3.	Lack of training on ICT	97	80.83	I
4.	Poor infrastructure facilities	76	63.33	IV
5.	Back ache/headache/hand pain	31	25.83	X
6.	Adverse effect on eyesight	28	23.33	IX
7.	Lack of farmers interest in ICT based transfer of technology	77	64.17	III
8.	Slow internet connectivity	32	26.67	VIII
9.	Difficulty in developing content in local language	51	42.50	VII
10.	Lack of motivation to use ICT based extension	69	57.50	VI

**Table.3** Suggestions offered by extension personnel for the effective use of ICT (n=120)

Sr. No.	Suggestions	Frequency	Percent	Rank
1.	Awareness about the uses and effectiveness of ICT among various stakeholders	86	71.67	III
2.	Adequate and timely training on ICT	103	85.83	I
3.	Enough fund should be provided for ICT facilities and services	58	48.33	IV
4.	Maintenance of already installed equipments should be regular	101	84.16	II
5.	Uninterrupted power and internet facility should be ensured	32	26.67	V
6.	Selection of ICT tools should be proper, location specific and need based.	30	25.00	VI

**Suggestions offered by extension personnel for the effective use of ICT**

Suggestions for the effective utilization of ICT were collected from the respondents and are listed in the Table 3.

The most important suggestion given by the extension personnel was that adequate and timely training on ICT should be given. It was suggested by 85.83 per cent of the respondents.

The suggestion maintenance of already installed equipments should be regular

ranked second among the suggestions. This suggestion was given by 84.16 per cent of the respondents.

Awareness about the uses and effectiveness of ICT among various stakeholders ranked third among the suggestions. It was offered by 71.67 per cent of the respondents.

The other suggestions given by the respondents were enough fund should be provided for ICT facilities and services (48.33 per cent) followed by uninterrupted power and internet facility should be ensured by 26.67 per cent of the respondents and

selection of ICT tools should be proper, location specific and need based (25.00 per cent).

In conclusion the ICT offer a wide opportunity in the agricultural extension field. But the extension personnel are facing various difficulties while using them. Lack of training on ICT is the major constraint recorded by the extension personnel followed by high cost and lack of fund for equipments and lack of farmer's interest in ICT based transfer of technology. Among the suggestions offered adequate and timely training on ICT ranked first followed by regular maintenance of already installed equipments and awareness about the uses and effectiveness of ICT among various stakeholders.

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