

## Original Research Article

### CONSTRAINTS FACED IN THE USAGE OF ICT TOOLS BY FARMERS IN ANANTAPUR DISTRICT OF ANDHRA PRADESH.

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#### Abstract

The study investigated constraints faced by farmers in utilization of information and communication technologies (ICT) in Anantapur district of Andhra Pradesh. The research was conducted in purposively selected district and proportionate random sampling was used to select respondents. Ex-post facto research design was used; different categories of constraints were collected through literature review, expert opinion. Interview schedule were administered to them. Data collected were analysed and ranks were given based on frequency and percentages. The major constraints faced by the farmers in use of ICT tools were high cost of ICT gadgets like smart phones, computers etc, high cost of servicing charges of ICT gadgets, lack of sufficient skills in usage of ICT tools by rural communities, lack of uninterrupted power supply, lack of servicing centres of ICTs in villages and difficulty in understanding the language of ICT gadgets. Some major suggestions drawn from the respondent farmers were reduce the costs of ICT tools, Provide subsidies on ICT gadgets, Reduce servicing charges, Giving continuous power supply, Providing of messages in local languages and Establish service centres in villages.

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**Keywords:-** Agricultural Extension, Constraints, Farmers, Information Communication Technology.

#### INTRODUCTION

Information and Communication Technology (ICT) is the combination of three magical words, 'Information', 'Communication' and 'Technology'.

Information and Communication Technologies (ICTs) are the technologies that are used to link technological devices such as personal computers and mobiles with communication technologies such as telephones and their telecommunication networks. PC, laptop and mobile phone with e-mail and Internet provides the best example. ICTs are range of electronic technologies which when converged in new configurations are flexible,

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adaptable, enabling and capable of transforming organisations and redefining social relations. The range of technologies is increasing all the time and there is a convergence between the new technologies and conventional media. This rapid and ongoing convergence means that devices such as web camera, digital cameras, digital video cameras and players, personal digital assistants, slide projectors and mobile telephones are also compatible with more traditional media such as radio (digital, satellite), television (cable, digital, satellite). Thus most devices can now be linked to others to share and exchange information and allow it to be used in such a way that they can also be categorised as ICTs. Even books are being incorporated into ICTs either through the potential for informal web publishing or more formal digital book publishing with designated readers or e-books, e-journals, e-magazines, e-newspapers, e-library, etc. ICTs, therefore, are an expanding assembly of technologies that can be used to collect, store and share information between people using multiple devices and multiple media.

ICT when applied to rural based business can help improved communications, increase participation, disseminate information and share knowledge among the small business community (Narula and Arora, 2010).

Obstacles to ICT use were generally structural i.e, time, location, illiteracy etc. and not personal (Micheal and Maier, 2007)

Low outreach is due to lack of sufficient staff and low operational budgets which posed constraints on the ability of extension staff to visit farmer's field. Only 6 states have operating village level extension staff and 40 per cent of extension posts are vacant overall. (Sulaiman, R and Van den Ban, 2003)

Though agriculture and IT are at the economic background, farmer's distress is at raise 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 faced by farmers in utilization of ICT tools.

## 1. Material and Methods

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The present study was conducted in Anantapur district of Andhra Pradesh during the year 2017-18. An Ex-post facto research design was used in the present investigation. The Anantapur district was selected purposively for the study due to large area (19.13 lakh ha) in Andhra Pradesh. Out of five divisions, three divisions were selected randomly. Three mandals from each division were selected by using random sampling technique. From each of the selected mandal, four villages were selected following random sampling procedure. Thirty four farmers from Gandlapentamandal, forty seven farmers from Bukkarayasamudramandal and thirty nine farmers from Beluguppamandal were selected from the villages by proportionate random sampling method. Thus a total of 120 farmers were selected for the study.

Data was collected through a well-structured interview schedule which was developed keeping in view of the objective of the study. The collected data were coded, classified and tabulated. The statistical tools such as Frequency, Percentage, Mean and Standard Deviation were used for meaningful interpretation of findings and for drawing conclusions.

## 2. Results and Discussion

**Table 1: Constraints faced by the farmers in utilization of ICT tools**

S. No.	Constraint	F	%	Rank
1	High cost of ICT gadgets like smart phones, computers etc.	111	92.50	I
2	Inadequate infrastructural facilities for maintenance of ICT tools.	63	52.50	XIV
3	Lack of sufficient skills in usage of ICT tools by rural communities.	102	85.00	III
4	Low level of education.	77	64.16	IX
5	Inadequate internet facilities.	65	54.16	XIII
6	Lack of uninterrupted power supply	101	84.16	IV
7	Insufficient training and practical exposure towards ICTs.	75	62.50	X
8	Lack of awareness of benefits of ICTs.	70	58.33	XII
9	Insufficient servicing centres of ICTs in villages.	92	76.66	V
10	High cost of servicing charges of ICT gadgets.	109	90.83	II
11	Difficulty in understanding the language of ICT gadgets.	90	75.00	VI
12	Non-availability of ICT gadgets and spare parts in local markets	74	61.66	XI

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13	Poor connectivity of internet in villages.	83	69.16	VII
14	Poor economic condition of rural people	61	50.83	XV
15	Lack of subsidies on ICT gadgets.	80	66.66	VIII

It is evident from the Table 1 that high cost of ICT gadgets like smart phones, computers etc. (I rank) was the major constraint, which was followed by high cost of servicing charges of ICT gadgets (II rank) lack of sufficient skills in usage of ICT tools by rural communities (III rank) lack of uninterrupted power supply (IV rank) lack of servicing centres of ICTs in villages (V rank) were the major problems expressed by the farmers.

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The other problems faced by the farmers on utilization of ICT tools were, difficulty in understanding the language of ICT gadgets (VI rank) Poor connectivity of internet in villages (VII rank), Lack of subsidies on ICT gadgets (VIII rank), Low level of education (IX rank) Insufficient training and practical exposure towards ICTs (X rank), Non-availability of ICT gadgets and spare parts in local markets (XI rank) Lack of awareness of benefits of ICTs (XII rank) Lack of internet facilities (XIII rank), Inadequate infrastructural facilities (XIV rank) and Poor economic condition of rural people (XV rank).

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**Table 2: Suggestions to Overcome the Constraints**

S.No.	Suggestions	F	%	Rank
1	Reduce the costs of ICT tools.	116	96.66	I
2	Provide infrastructure facilities.	61	50.83	XIII
3	Provide trainings on development of skills in usage of ICT tools.	81	67.50	VIII
4	Provide educational facilities near village.	58	48.33	XIV
5	Providing of internet facilities.	69	57.50	XI
6	Giving continuous power supply.	101	84.16	IV
7	Provide trainings on ICT tools usage.	89	74.16	VII
8	Create awareness campaigns on benefits of ICT tools.	79	65.83	IX
9	Establish service centres in villages.	92	76.66	VI
10	Reduce servicing charges.	104	86.66	III
11	Providing of messages in local languages.	95	79.16	V
12	Establishment of large markets.	66	55.00	XII
13	Strengthen the internet connectivity.	75	62.50	X
14	Provide remunerative prices to their produce.	56	46.66	XV
15	Provide subsidies on ICT gadgets.	109	90.83	II

Based on the constraints, the suggestions were drawn from the respondent farmers to overcome them were presented in Table 2 based on their magnitude. Suggestions were ranked based on frequency percentage.

Aperusal of the Table 2 indicated that, majority of the respondents suggest reduce the costs of ICT tools(rank I), followed by Provide subsidies on ICT gadgets (rank II), Reduce servicing charges (rank III), Giving continuous power supply (rank IV), Providing of messages in local languages (rank V), Establish service centres in villages (rank VI), Provide trainings on ICT tools usage (rank VII), Provide trainings on development of skills in usage of ICT tools (rank VIII), Create awareness campaigns on benefits of ICT tools (rank IX), Strengthen the internet connectivity (rank X), Providing of internet facilities (rank XI), Establishment of large markets (rank XII), Provide infrastructure facilities (rank XIII),Provide educational facilities near village (XIV) and Provide remunerative prices to their produce (XV).

### 3. CONCLUSION

In the present study it was found that farmers faced many constraints such as high cost of ICT gadgets and high cost of servicing charges of ICT gadgets. To prevail over these constraints government should provide subsidies on ICT tools and also reduce the costs of gadgets. Strengthening and motivating farmers to use the technologies such as smart phones, internet, apps, computer etc. will increase their usage level. Based on suggestions given by farmers, extension personnels should provide trainings on usage of ICT tools to the farmers.

### REFERENCES

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draw inference from your findings  
cite literature to support or contradict your findings

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