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## UTILIZATION AND CREDIBILITY PATTERN OF ICT TOOLS AS PERCEIVED BY FARMERS OF CENTRAL UTTAR PRADESH

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**Abstract:** The study was conducted in Central Uttar Pradesh to know the utilization and credibility pattern of ICT tools by farmers. Kanpur Dehat, Unnao, Lucknow, Rae Bareli and Pratapgarh districts were selected purposively because these districts are nearer to Lucknow. A total of 175 farmers registered with selected 5 KVKs and using ICT tools were selected as respondents. Finding of the study reveal that majority of farmers had access to Mobile, Radio, TV, News Paper and Farm Magazine. Radio and TV were utilized for 1 to 2 hours per day by majority of the farmers while mobile, farm magazine newspaper and computer & internet were utilized for less than 1 hour per day. Radio, mobile and farm magazine were used in the evening by majority of the respondents. Mobile, farm magazine, newspaper and computer & internet were used for news and information by majority of the respondents while radio and TV were used for entertainment by maximum number of respondents. Mobile was reported to be the most utilised and got rank first in terms of utilization extent. TV was reported to be the most credible ICT tool followed by mobile phone.

**Keywords:** ICT, mobile, utilization, credibility pattern.

**Introduction:** Information and Communication Technologies (ICTs) has the potential to benefit millions of people in all corners of the world. Although the traditional channels of communication will remain important, the new ICTs had a great potential for disseminating information to the needy farmers. ICTs essentially facilitate the creation, management, storage, retrieval, and dissemination of any relevant data, knowledge, and information that may have been already been processed and adapted [1, 2, 3].

Agricultural Information Empower the farmers. In this regard ICTs can play a pivotal role of catalyser in the field of agricultural development too. ICT tools are very crucial in transfer of technologies for sustainable development of agriculture. It can save time and money both while disseminating farm messages effectively. The ICTs are like a basket of communication tools and channels which passes information to the audience through text, sound, picture and animation in relatively fast or less span of time. ICTs have tremendous power that could be harnessed by all the stake holders of

development for the benefit of mankind. The agriculture sector, specially farming community, need to be benefited through popularization and reach of ICTs in far flung rural areas.

Keeping in view the importance of ICTs in disseminating information among rural population, the present study titled "Utilization and Credibility pattern of ICT tools as perceived by Farmers of Central Uttar Pradesh" was conducted with the objective to know the perceived utilization and credibility of ICT Tools among the farmers of central Uttar Pradesh.

### Research Methodology

An Ex-Post Facto Research Design was used for the present investigation. The study was conducted in purposively selected state Uttar Pradesh (UP) as it is the largest state of India in terms of population and number of Krishi Vigyan Kendras (74 KVKs). Geographically Uttar Pradesh has been divided into five parts namely Eastern UP, Western UP, Central UP, Bundelkhand and Ruhelkhand region. The present study was conducted in Central UP. Out of 15 districts of central UP five districts viz. Kanpur Dehat, Unnao, Lucknow, Rae Bareli and

Pratapgarh were purposively selected for the present study as these districts are close to the capital of UP and different types of KVKs are present in these districts. Convenient of research worker for data collection was also a reason. Five KVKs were selected for the purpose of study. One KVK from each selected district was considered for this study. From the district Kanpur Dehat, KVK Daleep Nagar which is working under Chandra Shekhar Azad University of Agriculture and Technology, Kanpur was selected. KVK Hasanganj working under NGO from district Unnao was selected. KVK ICAR-IISR from district Lucknow was the third KVK selected for study. From district Raebareli KVK Dariapur which is working under Chandra

Shekhar Azad University of Agriculture and Technology, Kanpur was selected. Fifth KVK selected for the study was KVK Kalakankar under NGO from district Pratapgarh. During preliminary visit to selected 05 KVKs data related to number of registered farmers with KVK and how many of them have been using ICT tools was obtained. It was decided to select 5% farmers from each KVK who were using ICT tools. Thus a total of 175 farmers were selected as respondents using proportionate to the size random sampling technique. A brief account of registered farmers, farmers using ICT tools and selected farmers from 5 selected KVKs is given below.

Name of KVK	No. of registered farmers	No. of farmers using ICT tools	5% selected farmers
KVK Kanpur Dehat	2500	500	25
KVK Unnao	5000	500	25
KVK Lucknow	1000	500	25
KVK Rae Bareli	5000	1000	50
KVK Pratapgarh	5600	1000	50
Total	19100	3500	175

Data was collected with the help of specially constructed and pre-tested interview schedule keeping in mind the objectives and variables of the study. Collected data were

tabulated and analysed using simple statistical techniques like frequency, percentage, weighted mean score and rank.

## Results and Discussion

### Utilization of ICT Tools by Farmers

#### Availability of Different ICT Tools with Farmers

**Table-1: Availability of different ICT Tools with Farmers (N=175)**

S.No.	ICT Tools	Available	
		Frequency	Percentage
1.	Radio	135	77
2.	TV	110	63
3.	Mobile	155	88
4.	Farm Magazine	90	51
5.	News Paper	125	71
6.	Computer/ Laptop and Internet	80	46

Table 1 reveals that majority of farmers (88%) possess mobile phone. 77 per cent were having radio and 71 per cent were having the

availability of newspaper. Percentage of farmers holding TV, farm magazine and computer/laptop and internet were 63, 51 and 46, respectively.

#### Duration of utilization different ICT Tools by Farmers

**Table 2: Duration of utilization different ICT Tools by Farmers (N=175)**

Hours spent per day	Radio (N=135)	TV (N=110)	Mobile (N=155)	Farm Magazine (N=90)	Newspaper(N=125)	Computer/Laptop and Internet (N=80)
<1 hour/day	43 (32)	25 (23)	79 (51)	62 (48)	60 (48)	62 (77)
1-2 hour/day	69 (51)	47 (43)	59 (38)	15 (17)	36 (29)	11 (14)
>2 hour/day	23 (17)	38 (34)	17 (11)	13 (14)	29 (23)	07 (09)

*Note: Figures in parenthesis are percentage.*

Table 2 depicts the information regarding utilization of different ICT tools by farmers per day. Study reveals that 34 per cent of respondents utilize TV more than 2 hours per day. Table shows that still Radio and TV are major source of information utilized by farmers. 68 per cent of farmers listen to radio more than

one hour every day, while 77 per cent spent of farmers watch TV more than one hour per day. Table also shows the potential use of mobile phones. 49 per cent of farmers utilize mobile phone more than one hour every day. Farmers were also habitual in reading newspaper. They

(52%) spent more than one hour per day for reading newspaper.

### Segment of the Day Spent on Different ICT Tools Utilization by Farmers

**Table 3: Segment of the day spent on different ICT Tools Utilization by Farmers\* (N=175)**

S.N.	ICT Tools	Morning (6-12 Noon)	Afternoon (12-4 PM)	Evening (4-8 PM)	Night (After 8 PM)	Whenever required
1.	Radio (N=135)	27 (20)	15 (11)	93 (69)	31 (23)	23 (17)
2.	TV (N=110)	07 (06)	19 (17)	44 (40)	63 (57)	10 (09)
3.	Mobile (N=155)	26 (17)	14 (09)	115 (74)	09 (06)	36 (23)
4.	Farm Magazine (N=90)	41 (46)	26 (29)	64 (71)	09 (10)	13 (14)
5.	Newspaper (N=125)	64 (51)	25 (20)	36 (29)	15 (12)	43 (34)
6.	Computer / Laptop and Internet (N=80)	28 (35)	24 (30)	32 (40)	07 (09)	20 (25)

\*Multiple responses were allowed

**Note:** Figures in parenthesis are percentage.

Table 3 shows that majority of respondents spent more of their morning time on newspaper (51%), farm magazine (46%) and computer/laptop (35%). In the evening hours (4-8 pm), majority of the respondents (74%) utilize

mobile phones, while 71 per cent spent their time reading farm magazines and 69 per cent farmers listen to radio. During night segment, 57 per cent watched TV and 23 per cent listen to radio.

### Purpose of ICT Tools Utilization by Farmers

**Table 4: Purpose of ICT Tools Utilization by Farmers\* (N=175)**

S.N.	ICT Tools	News / Information		Entertainment		Education		Passing leisure time	
		F	%	F	%	F	%	F	%
1.	Radio (N=135)	45	23	65	48	20	15	05	04
2.	TV (N=110)	30	22	50	37	10	07	20	15
3.	Mobile (N=155)	65	42	45	29	30	19	15	10
4.	Farm Magazine (N=90)	55	61	-	-	25	28	10	11
5.	Newspaper (N=125)	75	60	20	16	25	20	05	04
6.	Computer / Laptop and Internet (N=80)	50	63	15	19	05	06	10	13

\*Multiple responses were allowed

It is observed from table 4 that computer/laptops, farm magazine and newspaper were used for information purpose by majority of farmers (63, 61 and 60 per cent, respectively).

For entertainment purpose radio (48%) and TV (37%) were used, while farm magazine were used more for education purpose.

### Extent of use of information sources by Farmers

**Table 5: Extent of use of information sources by Farmers (N=175)**

S.N.	ICT Tools	Extent of Use			Weighted Mean Score (WMS) and rank
		Always (Weight=2)	Sometimes (Weight=1)	Never (Weight=0)	
1.	Radio (175)	100	35	40	1.34 (II)
2.	TV (175)	80	30	65	1.08 (IV)
3.	Mobile (175)	140	15	20	1.68 (I)
4.	Farm Magazine (175)	60	30	85	0.85 (V)
5.	Newspaper (175)	90	35	50	1.22 (III)
6.	Computer / Laptop and Internet (175)	50	30	95	0.74 (vi)

'Extent' is the degree to which an information source is used by the respondents. It shows the frequency of utilization. Table 5 shows that mobile is the most frequently used ICT tool With Weighted Mean Score (WMS) of 1.68 it was ranked first by the farmers. Radio is

at the rank second with 1.34 WMS, while Newspaper is at number third with 1.22 WMS. TV (1.08), farm magazine (0.85) and Computer/Laptop & internet (0.74) were ranked fourth, fifth and sixth respectively.

### Credibility Patterns of ICT Tools

**Table: 6: Credibility pattern of Information Sources by Farmers**

S.N.	ICT Tools	Extent of Credibility			Weighted Mean Score (WMS) and rank
		Highly Credible (Weight=2)	Somewhat Credible (Weight=1)	Not at all Credible (Weight=0)	
1.	Radio (175)	120	25	30	1.51 (III)
2.	TV (175)	160	10	05	1.88 (I)
3.	Mobile (175)	145	30	00	1.82 (II)
4.	Farm Magazine (175)	85	55	35	1.28 (VI)
5.	Newspaper (175)	90	60	25	1.37 (V)
6.	Computer and Internet (175)	105	50	20	1.48 (IV)

Credibility is the trustworthiness of information source. Farmers reported TV as most credible source. They ranked it first with 1.88 WMS. Mobile was ranked second (1.78) and Radio was ranked third (1.51). Farmers gave least score to farm magazine and ranked it sixth.

#### Conclusion

This study has highlighted the existing situation of availability, utilization pattern and credibility pattern of ICT tools as perceived by the registered and ICT using farmers of Krishi Vigyan Kendras located in Central Uttar Pradesh. It can be concluded from the study that various ICT tools were available with the farmers. Radio and Television were used by the majority of the farmers for 1 to 2 hours per day. Other ICT tools were also used by the farmers. Evening was the most preferred time for the use of radio, television, mobile and farm magazine by the farmers whereas newspaper was used in morning hours by the respondents. Mobile, farm magazine, newspaper and internet were mostly used for news and information whereas radio and

television were used for entertainment. Regarding extent of use of ICT tools farmers reported that mobile was the most used ICT tool. Regarding credibility of ICT tools Television got I<sup>st</sup> rank followed by mobile (II<sup>nd</sup> rank). Thus, It can be say that various ICT tools are available and used by the farming community. KVKs may plan the information dissemination strategy through ICT tools.

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