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To study the role of ICT on adoption level of respondents on government agriculture policies

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Abstract

The study was conducted in Katni and Panna districts of Madhya Pradesh to analyze the role of ICT on adoption level of the respondent on government agricultural policies. Government agricultural policies are created in such a way which aims to enhance agricultural practices and put a positive effort to improve agricultural production. These policies can be for basic necessity which includes irrigation, research & technology, as well as assistance for farmers and markets. Ranks wise adoption ICTs tools for government agricultural policies based on their mean scores. the highest-rated statement emphasizing "Do you benefitted by any kind of agricultural policies?" (Rank I) following closely is "Do you ever get fund from MIF (micro irrigation fund) under NABARD?" (Rank II), "Do you adopt any technique of 'jal – sanchay' at your field?" (Rank III).

Keywords: ICT, adoption level, government agriculture policies

Introduction

In order for farmers to make decisions on crop rotation, the use of high yielding seeds, fertilizer application, pest management and marketing etc. Information and communication technology are essential. Indian farmers have historically used traditional techniques of production and sought agricultural guidance from their neighbors, relatives, fellow farmers, and input suppliers with the development of agriculture research and technology. A variety of access options have been available. It is evident in the substitution of local seed varieties with high yielding ones as well as in the use of power tillers, tractors, and other machinery in place of conventional tools and methods. The information technology has made learner WWW afflicted. This is because technological developments that brought developments in two ways. First, by enhancing human capabilities by helping people to participate actively in social, economic and political life in society at large. Second, by giving advantage to technological innovation as a means for human development due to economic progress and increased productivity**.**

India is currently the second largest internet user in the world after China according to Internet World Stats (2021). According to the research, India has surpassed the USA to become the second-largest Internet user in the world. According to the research, India has almost 560 million Internet users, a rise of 11,200% from 2000 to 2021.

According to the Telecom Regulatory Authority of India (TRAI-2022), there are 1169.46 total telephone subscribers (million) (wireless + wire line) of which 649.38 are urban and 520.08 are rural with 783.43 being broadband subscribers. There are 649.38 urban and 520.08 rural subscribers.

Govt. agricultural policies are created in such a way which aims to enhance agricultural practices and put a positive effort to improve agricultural production. These policies can be for basic necessity which includes irrigation, research & technology, as well as assistance for farmers and markets.

Materials and Methods

The study used descriptive research design to systematic study of data. Study was conducted in katni and panna districts of Madhya Pradesh out of which two – two blocks (each districts) selected for study. In Katni districts, Katni & Rithi has been selected and Panna district, Shahnagar & Pawai has been selected for study. From every block three villages selected randomly and from every village 30 respondents were selected so total 360 respondents were selected for study.

The data was collected through personal interview methods with the help of pre tested interview schedule and prepared questionnaire. To analyze the data appropriate statistical tools were used. Null Hypothesis was taken from the start of the study.

Based on the adoption scores obtained, farmers were then grouped into three categories as shown below using mean and standard deviation.

S. No.	Category	Score
1.	Low extent of adoption	Less than (Mean-SD)
2.	Medium extent of adoption	From (Mean – SD) to (Mean + SD)
3.	High extent of adoption	Above (Mean + SD)

Result and Discussion

Table 1: Distribution of respondents according to their overall adoption of ICT towards government agricultural policies

SI. No.	Category	Frequency	Percent
1.	Low (up to 10)	64	17.77
2.	Medium (10 to 18)	227	63.06
3.	High (above 18)	69	19.17
	Total	360	100.00

Mean= 13.83, SD= 3.71

The table 1.1evident that the maximum of respondents 63.06% had medium level of adoption of ICT followed by 19.17% high level of adoption and 17.77% of the respondents had low level of adoption of ICT towards government agricultural policies.

Therefore, it can be observed that the majority of respondents had medium to low level of adoption. One possible explanation could be that the majority of respondents had involved one organization and had a moderate level of knowledge.

Table 2: Distribution of respondents according to their adoption of ICT towards government agricultural policies

SI. No.	Questions	Adoption						Mean score	Rank
		Complete		Partial		No			
		f	%	f	%	f	%		
1.	Is ICT helpful for you to consider your problems?	83	23.11	175	48.56	102	28.33	0.94	VIII
2.	Is ICT better than print media?	8	2.22	78	21.67	274	76.11	0.26	XIII
3.	Is language of subject matter is recognizable for you?	9	2.55	93	25.78	258	71.67	0.30	XII
4.	Do you think ICT improves knowledge about farming practices?	132	36.67	184	51.11	44	12.22	1.24	IV
5.	Do you like ICT as information source?	112	31.11	188	52.22	60	16.67	1.14	V
6.	Do you benefitted by any kind of agricultural policies?	285	79.22	71	19.67	4	1.11	1.78	I
7.	Are agricultural policies favourable for farmers?	0	0.00	22	6.11	338	93.89	0.06	XVI
8.	Do you think mobile technology is good to obtain information about agriculture policies?	102	28.33	164	45.56	94	26.11	1.02	VII
9.	What do you think about accuracy of information that you gained through ICT?	0	0.00	5	1.44	355	98.56	0.02	XVIII
10.	Do you think ICT saves time & travel to gain knowledge about agriculture policies?	0	0.00	0	0.00	360	100.00	0.00	XX
11.	Do you ever took advice from KVKs or farmers call centre regarding any agriculture scheme or policy?	0	0.00	73	20.33	287	79.67	0.20	XV
12.	Do you think e – uparjan is best policy to sell your grain without going anywhere?	0	0.00	0	0.00	360	100.00	0.00	XX
13.	Is 7 days credit policy under e – uparjan is satisfactory?	0	0.00	0	0.00	360	100.00	0.00	XX
14.	Do you ever benefitted by PMNSY?	12	3.33	58	16.11	290	80.56	0.22	XIV
15.	Do you think common service centre (CSC) is helpful to farmers?	0	0.00	16	4.44	344	95.56	0.04	XVII
16.	Do you ever adopt rain water harvesting?	111	30.78	182	50.66	67	18.66	1.12	VI
17.	Do you think PMSNY works towards to provide economical support to farmers?	64	17.78	185	51.44	111	30.78	0.86	X
18.	Do you adopt any technique of 'jal – sanchay' at your field?	167	46.33	155	43.11	38	10.56	1.35	III
19.	Do you ever get fund from MIF (micro irrigation fund) under NABARD?	196	54.44	158	43.89	6	1.67	1.52	II
20.	Do you take help from ICT sources to resolve your problems related farm practices or any agriculture policy?	0	0.00	4	1.11	356	98.89	0.01	XIX
21.	Do you think your cultivation is improved by adopting PMKSY?	70	19.45	147	40.78	143	39.77	0.79	XI
22.	Ever you benefitted by any kind of subsidies associated with agricultural schemes.	68	18.89	185	51.44	107	29.67	0.89	IX

The table 4.3.2 present ranks wise adoption ICTs tools for government agricultural policies based on their mean scores. the highest-rated statement emphasizing "Do you benefitted by any kind of agricultural policies?" (Rank I) following closely is "Do you ever get fund from MIF (micro irrigation fund) under NABARD?" (Rank II), "Do you adopt any technique of 'jal – sanchay' at your field?" (Rank III) and "Do you think ICT improves knowledge about farming practices?" (Rank IV) "Do you like ICT as information source?" (Rank V), highlighting the positive impact of ICT on farming knowledge and its value as a preferred information source. "Do you ever adopt rain water harvesting?"(Rank VI) and "Do you think mobile technology is good to obtain information about agriculture policies?" (Rank VII). However, "What do you think about accuracy of information that you gained through ICT?" (Rank VIII), "Ever you benefitted by any kind of subsidies associated with agricultural schemes." (Rank IX), "Do you think PMSNY works towards to provide economical support to farmers?" (Rank X), "Do you think your cultivation is improved by adopting PMKSY?" (Rank XI), "Is language of subject matter is recognizable for you?" (Rank XII) and "Is ICT better than print media?" (Rank XIII). "Do you ever benefitted by PMNSY?" (Rank XIV), "Do you ever took advice from KVKs or farmers call centre regarding any agriculture scheme or policy?" (Rank XV), "Are agricultural policies favourable for farmers?" (Rank XVI), "Do you think common service centre (CSC) is helpful to farmers?" (Rank XVII), "What do you think about accuracy of information that you gained through ICT?" (Rank XVIII), "Do you take help from ICT sources to resolve your problems related farm practices or any agriculture policy?" (Rank XIX), "Do you think e – uparjan is best policy to sell your grain without going anywhere?", "Do you think ICT saves time & travel to gain knowledge about agriculture policies?" and "Is 7 days credit policy under e – uparjan is

satisfactory?" (Rank XX).

Conclusion

The study shows the ranks wise adoption ICTs tools for government agricultural policies based on their mean scores. the highest-rated statement emphasizing "Do you benefitted by any kind of agricultural policies?" (Rank I) following closely is "Do you ever get fund from MIF (micro irrigation fund) under NABARD?" (Rank II), "Do you adopt any technique of 'jal – sanchay' at your field?" (Rank III).

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