Original Research Article

Usefulness of Mobile Phone based Agro-advisories in Manipur

Abstract

Mobile phones are the devices that can help to improve the livelihoods of rural people by getting much needed timely information to their fingertips at potentially low cost. Manipur is one of the North-Eastern states of India, covering an area of 22,327 sq km which nearly accounts for 0.7 per cent of the total land surface of India. The study was conducted in Bishnupur, Thoubal, Kakching, Imphal East and Imphal West districts of Manipur with 110 nos. of randomly selected respondents. It was observed that majority of the respondents (70.91 %) perceived that mobile based agro-advisories are early in terms of timeliness of the messages and 73.64 per cent of the respondents mentioned that the messages are highly relevant. In terms of understanding of massage, 98.18 per cent of respondents responded that massages are easy to understand, less technical (58.18 %) and adequate (83.64 %) in terms of message treatment and content adequacy respectively. Mobile phone based agro-advisories is more useful (83.64%) in weather forecasting followed by plant protection measures (82.73%), improving the knowledge in agriculture and allied sector (80.91 %) and fish health management (80.00 %). Majority of the respondents (68.18 %) had positive perception towards mobile based agro- advisories followed by 4.55 per cent had negative perception towards the advisories.

Key Words: *Mobile phone, Agro-advisory, Usefulness*

Introduction

Agriculture in the state could benefit tremendously with the application of ICTs (Information and Communication Technologies) especially in bringing changes to socio-economic conditions of the poor in the backward areas. Therefore, different initiatives in IT sector were launched in the state to provide the agro-advisory to farmers (Singh *et. al.,* 2019). The most widespread ICTs in developing countries today are the mobile phone. Mobile phones are the devices that can create, store, access and share information anytime, anywhere. But, they are more than that, when teamed with extension and advisory services, they can help improve the livelihoods of rural people by getting much needed timely information to their fingertips at potentially low cost (Reddy *et. al.*, 2017). Among the initiatives, a mobile based agro-advisory system was launched under the project of “Mobile based agro- advisory system” by the Central Agricultural University, Imphal, Manipur in the state of Manipur. It is a mobile based pull and

push system where agriculture and allied sector related information can be pulled/pushed by the farmers using their mobile phones.

Manipur is one of the North-Eastern states of India, covering an area of 22,327 sq km which nearly accounts for 0.7 per cent of the total land surface of India. The state is unique in producing varieties of paddy. Agriculture being the backbone of the state economy and paddy is the dominant crop grown by farmers in Manipur. Imphal West district is classified under high productivity of paddy in the state of Manipur (Thangjam, 2020). Area under paddy cultivation in the state is 225.77 thousand ha with a production of 602.21 thousand MT (Anonymous, 2020-21). Keeping this in view, the study was undertaken to find out the usefulness of mobile phone based agro-advisories in Manipur

Methodology:

The study was conducted in Bishnupur, Thoubal, Kakching, Imphal East and Imphal West districts of Manipur with 110 nos. of randomly selected project beneficiairies. The perception of the respondents towards mobile phone based agro-advisories in terms of timeliness of the messages, relevance, understanding of message, message treatment and content adequacy were studied and measured in terms of frequency and percentage. Usefulness of mobile phone based agro-advisories by the respondents were measured in terms of level of usefulness, *viz.*, most useful, useful and not useful category; frequency and percentage were calculated for each category. Overall parameters of mobile phone based agro-advisories by the respondents were also calculated. A wellstructured interview schedule was used to collect the data according to the objectives of the study. Statistical tools like mean, frequency and percentages were used for analysis of data.

Results and Discussion:

The perception of respondents towards mobile based agro-advisories is presented in Table 1. Data presented in Table 1 reveals that majority of the respondents (70.91 %) perceived that mobile based agro-advisories are early in terms of timeliness of the messages and 73.64 per cent of the respondents responded that the messages are highly relevant. The Table 1 also reveals that in terms of understanding of massage 98.18 per cent of respondents observed that massages are easy to understand, message is less technical (58.18 %) and adequate (83.64 %) in terms of message treatment and content adequacy respectively.

Table.1 Perception of the respondents towards Mobile Phone based Agro-advisories

N=110

Parameter	Category	Frequency	Percentage
a. **Timeliness of the messages**			
	Coinciding with the farm activity	8	7.27
	Early	78	70.91
	Late	24	21.82
b. Relevance			
	Highly relevant	81	73.64
	Somewhat relevant	25	22.73
	Irrelevant	4	3.64
c. Understanding of message			
	Easy to understand	108	98.18
	Difficult to understand	2	1.82
	Not understand	0	0
d. Message treatment			
	Less technical	64	58.18
	Moderately technical	41	37.27
	Highly technical	5	4.55
e. Content adequacy			
	Adequate	92	83.64
	Needs more details	12	10.91
	Not at all adequate	6	5.45

The usefulness of mobile phone based agro-advisories is presented in Table 2. Data presented in Table 2 reveals that mobile phone based agro-advisories is more useful (83.64 %) in weather forecasting followed by plant protection measures (82.73%), improving the knowledge in agriculture and allied sector (80.91 %) and fish health management (80.00 %). The Table 2 also reveals that majority of the respondents (65.45 %) observed that messages are useful for animal breeding management followed by information about new technologies, selection of crop & variety and sale of produce with 60.91 per cent, 58.18 per cent and 56.36 per cent respectively. Highest percentage of respondents (20.91%) mentioned that agro-advisories related to information about new technologies is not useful followed by fish production techniques (19.09 %), animal health management (15.45 %) and fish pond preparation (13.64 %).

Table 2: Usefulness of Mobile Phone based Agro-advisories by the respondents

(N=110)

Sl. No.	Particulars	Level of Usefulness		
		Most Useful	Useful	Not Useful

		F	%	F	%	F	%
1.	Improving the knowledge in agriculture and allied sector	89	80.91	19	17.27	2	1.82
2.	Information about new technologies	20	18.18	67	60.91	23	20.91
3.	Selection of crop and variety	36	32.73	64	58.18	10	9.09
4.	Use of fertilizer and other micronutrients	69	62.73	34	30.91	7	6.36
5.	Seed purchase and seed bed preparation	41	37.27	56	50.91	13	11.82
6.	Land preparation and planting/sowing	64	58.18	43	39.09	3	2.73
7.	Nutrient management	48	43.64	58	52.73	4	3.64
8.	Seed treatment	71	64.55	37	33.64	2	1.82
9.	Weed management	39	35.45	61	55.45	10	9.09
10.	Plant protection measures	91	82.73	17	15.45	2	1.82
11.	Harvesting/picking and storing	50	45.45	54	49.09	6	5.45
12.	Sale of produce	28	25.45	62	56.36	20	18.18
13.	Animal health management	35	31.82	58	52.74	17	15.45
14.	Animal feeding management	44	40.00	56	50.91	10	9.09
15.	Animal shelter management	59	53.64	36	32.73	15	13.64
16.	Animal breeding management	29	26.36	72	65.45	9	8.18
17.	Fish health management	88	80.00	18	16.36	4	3.64
18.	Water management in fish pond	67	60.91	55	50.00	2	1.82
19.	Fish pond preparation	44	40.00	51	46.36	15	13.64
20.	Fish production techniques	39	35.45	50	45.45	21	19.09
21.	Market information	37	33.64	59	53.64	14	12.73
22.	Weather forecasting	92	83.64	12	10.91	6	5.45

F= Frequency, %= Percentage

The overall parameter of mobile based agro- advisories by the respondents is presented in Table 3. Data presented in Table 3 reveals that majority of the respondents (68.18 %) has positive perception towards mobile based agro- advisories followed by 4.55 per cent has negative perception towards the advisories. The Table 3 also reveals that 52.73 per cent of respondents has moderate usefulness of the messages, 55.45 per cent has highly satisfied with the messages whereas 50.00 per cent of the respondents showed it as very much problem solving and 71.82 per cent of as very much need based.

Table 3: Overall parameter of Mobile Phone based Agro-advisories by the respondents (N=110)

Parameter	Category	Frequency	Percentage

Perception			
	Positive	75	68.18
	Neutral	30	27.27
	Negative	5	4.55
Usefulness			
	Most useful	43	39.09
	Moderate useful	58	52.73
	Less useful	9	8.18
Performance			
	Highly satisfied	61	55.45
	Moderately satisfied	47	42.73
	Not satisfied	2	1.82
Problem solving			
	Very much	55	50.00
	Moderate	51	46.36
	Not at all	4	3.64
Need based			
	Very much	79	71.82
	Moderate	23	20.91
	Not at all	8	7.27

Conclusion:

It may be concluded that use of mobile phone networks for dissemination of agricultural knowledge as one of the powerful means of increasing access to quality information to farmers who may not be reached by the extension programmes. To provide the agro-advisory in sustainable manner, the convergence of such type of programmes with state line departments, KVVKs is highly recommended so that it will help to uplift the livelihood of rural mass. With the increased availability, access and ownership of mobile phones in India, mobile based agro-advisories would play a significant role in reducing the information gap and information asymmetry between the farmers.

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