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Opinion of the Farmers Regarding mobile based Agro-advisory Service

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ABSTRACT

Mobile based agro-advisories have been deployed by many organisations. the present study conducted in Jalandhar district of Punjab. It revealed that mobile assisted extension services led to higher degree of satisfaction about information among the farmers.

Keywards : Mobile Based Agro-advisory

INTRODUCTION

India is an agriculture based country, where most of the population had agriculture as their source of income. Thus for the development of the country, it is important that the agriculture sector needs to be developed. For this, the farmers need proper information at proper time but it can be possible only through the extension system. But if we see the present status of extension agents in India, the ratio of extension agents and workers was found to be 1:1000 (Kaur *et. al,* 2014). So to overcome this gap, the world of technology offered us a term that everyone is familiar with – Information Communication Technology (ICT).

ICT is an umbrella term that includes computer hardware and software, digital broadcast and telecommunication technologies as well as digital information repositories online or offline (Arendt, 2007). It includes contemporary social networking aspects, read/write interfaces on the web besides file sharing systems online. It represents a broad and continually evolving range of elements that further includes the television (TV), radio, mobile phones and, policies and laws that govern the widespread use of these media and devices. The term is often used here in its plural sense (ICTs) to mean a range of technologies instead of a single technology. The efficiency of technology generated and disseminated depends on effective communication which is the key process in information dissemination (Oladele, 1999). This technology had reduced constraints of face to face communication.

Mobile phone is an important tool of ICT. Mobile phones have reduced the communication cost, source of reliable information quickly and cheaply on different topics. In case of agriculture, mobiles have provided economic benefit to the farmer by providing access to the market prices as it had removed intermediates from the farmer to the market. By providing information through the mobile phone the extension agents can easily and quickly disseminate the information to the farmers and can reach the unreached. The farming community requires various types of information for their day to day activities. But they lack proper information, infrastructure and services. The farming community is not getting the right information on right time, leading to slow development of farming community. Quick and easy access to information is vital for the development of farmers. So, to help the farming community, agro-advisory is provided by various KVKs under KMAS where farmers are advised regarding preventive measures, disease attack, inspect-pest attack, market price, weather etc. By this information, the farmers were able to avail much information at their door step i.e., through agro-advisory and can easily get better advice and can get better profits.

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METHODOLOGY

The ex-post facto research design was used in the study. The study was conducted in Jalandhar district of Punjab. KVK Jalandhar was selected from all the KVKs of Punjab purposively, as the maximum number of mobile based agro-advisory service receivers exist in this district. List of beneficiaries who were getting these services was obtained from the organization. Out of a list of 2764 members getting the agro-advisory, 100 were selected randomly. The data was collected through personal interview method through structured interview schedule. Statistical tools like frequency and percentage were used to interpret the data in a meaningful way.

RESULTS AND DISCUSSION

Socio personal characteristics of the respondents using mobile based agro advisory services.

The data in Table 1 represent that 45 per cent of the respondents belonged to middle age category *i.e.* 35-48. The results are in line with the findings of Lanjewar and Rathore (2007) They gained education up to matriculation and senior secondary with equal share of 32 per cent while only few (3%) had gained education up to postgraduation. The findings are in line with Joshi (2010) as where most of the respondent gained education up to matriculation The operational land holding of 39 per cent of the respondents was small (2.5-5.0) and only 9 per cent had operational land holding of more than 25 acres. Majority were having agriculture as their main occupation. Similar findings were reported by Singh *et. al.* (2014).

Table 1: Distribution of respondents according to their socio-personal characteristics

n=100

Socio-personal characteristics	Categories	Frequency	Percentage
Age	Young (21-34)	25	25.00
	Middle (35-48)	45	45.00
	Old (49-62)	30	30.00
Education	Illiterate	5	05.00
	Primary	11	11.00
	Middle	6	06.00
	Matric	32	32.00
	Senior Secondary	32	32.00
	Graduation	11	11.00
	Post graduation	3	03.00
Operational Land holding (acres)	Marginal (<2.5)	-	-
	Small (2.5-5.0)	39	39.00
	Semi-medium(5-10)	36	36.00
	Medium (10-25)	16	16.00
	Large (>25)	9	09.00
Main occupation	Agriculture	94	94.00
	Agriculture +Service	4	04.00
	Agriculture +Business	2	02.00

Opinion of the respondents regarding agro-advisory service

Table 2: Distribution of respondents of KVK service providers according to their satisfaction regarding agriculture based information

n=100

Categories Informational Aspects	Highly satisfied		Somewhat satisfied		Not satisfied	
	f	%	f	%	f	%
Spacing (Plant to Plant) and (Row to Row)	71	71.00	16	16.00	13	13.00
Sowing time	73	73.00	17	17.00	10	10.00
Deficiency symptoms	68	68.00	13	13.00	19	19.00
Pest attack	44	44.00	37	37.00	19	19.00
Disease symptoms	59	59.00	26	26.00	15	15.00
Harvesting time	86	86.00	9	09.00	5	5.00
Preventive measure	30	30.00	46	46.00	24	24.00
Recommended varieties	90	90.00	6	6.00	4	04.00
New technology	82	82.00	12	12.00	6	06.00
Plantation of fruit trees	66	66.00	28	28.00	6	06.00

Data furnished in Table 2 portrays that majority of the respondents (90%, 86% and 82%) were highly satisfied with the information regarding recommended varieties, harvesting time and new technology respectively. Near about three fourth of the respondents (71% and 73%) were highly satisfied with the information regarding spacing and sowing time respectivley. Sixty eight per cent of the respondents were highly satisfied with the information regarding deficiency symptoms whereas nineteen per cent of the respondents were not satisfied with the information regarding deficiency symptoms. From the information regarding plantation of fruit trees, 66.00 per cent of the respondents were highly satisfied while 28.00 per cent were somewhat satisfied. Fifty nine per cent of the respondents were highly satisfied with the information regarding disease symptoms followed by twenty-six per cent who were somewhat satisfied with the information. Forty-four per cent of the respondents were highly satisfied with the information regarding pest attack and thirty-seven per cent were somewhat satisfied. Fourty-six per cent of the respondents were somewhat satisfied with the information regarding preventive measure as they responded that old pesticide, insecticides and fungicides were recommended which had lost their effect and wanted that a scientist should test the new pesticide, insecticides and fungicides and the results should be included in the information so that effective control on pests can be attained. Findings were in line with Ganesan *et. al.,* (2013) and Fafchampsy, M and Mintenz, B (2011).

Table 3: Distribution of respondents of KVK service provider according to overall satisfaction regarding agriculture based information

n=100

Categories	Frequency	Percentage
Low (19-22)	11	11.00
Medium(23-26)	54	54.00
High (27-30)	35	35.00

The data in Table 3 depicts that the overall satisfaction of more than half of the respondents (54%) from the information regarding agricultural aspects was medium followed by 35.00 per cent of the respondents with high satisfaction while only 14.00 per cent fell in the category of low satisfaction.

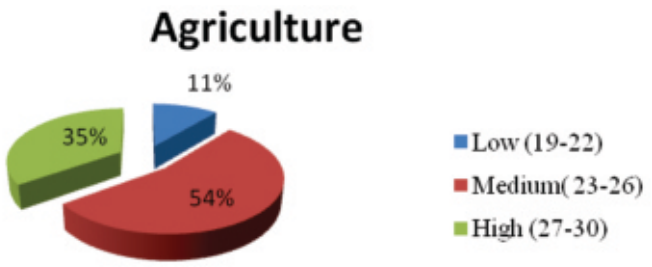

Fig 1: Graphical representation of overall satisfaction regarding agriculture based information

Table 4: Distribution of respondents of KVK service provider according to their satisfaction regarding weather based information

n=100

Categories Aspects	Highly satisfied		Somewhat satisfied		Not satisfied	
	f	%	f	%	f	%
Rainfall	73	73.00	19	19.00	8	08.00
Temperature	73	73.00	17	17.00	10	10.00

Weather plays an important role in agricultural production. It has a profound influence on the growth, development and yields of a crop, incidence of pests and diseases, water needs and fertilizer requirements (in terms of differences in nutrient mobilization due to water stresses), timeliness and effectiveness of cultural operations on crops. The data in Table 4 depicts that near about three fourth (73%) of the respondents were highly satisfied with the information regarding rainfall and temperature. Few of the respondents i.e., 8 per cent and 10 per cent were not satisfied with the information regarding temperature. The source of weather information was Indian Meteorological Department, New Delhi. The findings are in line with Oyekale (2015) as the majority of farmers were satisfied with the information regarding weather

Table 5: Distribution of respondents of KVK service provider according to their overall satisfaction regarding weather based information

n=100

Categories	Frequency	Percentage
Low (2-3)	5	05.00
Medium(4-5)	39	39.00
High (6-7)	56	56.00

The data in Table 5 revealed that 56.00 per cent of the respondents were having high overall satisfaction regarding weather based information, followed by 39.00 per cent having medium and very few (5%) having low satisfaction.

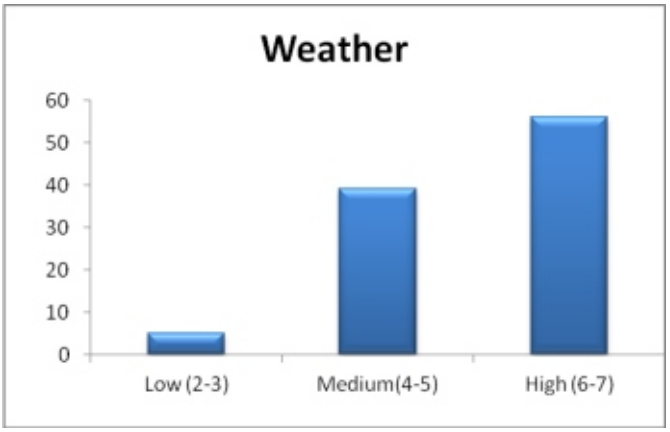

Fig 2: Graphical representation of overall satisfaction regarding weather based information

Table 6: Distribution of respondents of KVK service provider according to their satisfaction regarding other extension activities' information

n=100

Categories	Highly satisfied		Somewhat satisfied		Not satisfied	
Aspects	f	%	f	%	f	%
Demonstration	74	74.00	18	18.00	8	08.00
Lectures cum discussion	84	84.00	11	11.00	5	05.00
Seminar	72	72.00	19	19.00	9	09.00
Courses for conservation energy	82	82.00	12	12.00	6	06.00
Creating awareness via slogans	82	82.00	12	12.00	6	06.00
FLDs	71	71.00	19	19.00	10	10.00
Kisan Melas	70	70.00	18	18.00	12	12.00
Market prices	80	80.00	11	11.00	9	09.00

A perusal of Table 6 revealed that majority of the respondents (84%, 82% and 82%) were highly satisfied with the information whereas 11 per cent, equal percentage of respondents that is 12 per cent were somewhat satisfied with the information regarding lecture

cum discussion, courses for conservation of energy and creating awareness through slogans respectively. Most (80%) of the respondents were highly satisfied and 11 per cent were somewhat satisfied with the information regarding market prices. Near about three fourth (74%) were highly satisfied and 8 per cent were not satisfied with the information regarding demonstration. Regarding the information of seminar 72 per cent were highly satisfied and 19 per cent were somewhat satisfied. Seventy one and 70 per cent of the respondents were highly satisfied while 19 per cent and 18 per cent were somewhat satisfied with the information regarding front line demonstration and Kisan Melas respectively.

Table 7: Distribution of respondents of KVK service provider according to their overall satisfaction regarding other extension activities based information

Categories	Frequency	Percentage
Low (17-19)	17	17.00
Medium (20-22)	51	51.00
High (23-25)	32	32.00

The data presented in Table 7 depicts that 17.00 per cent of the respondents had low level of overall satisfaction, half of the respondents (51%) had medium level of overall satisfaction and 32.00 per cent had high level of overall satisfaction.

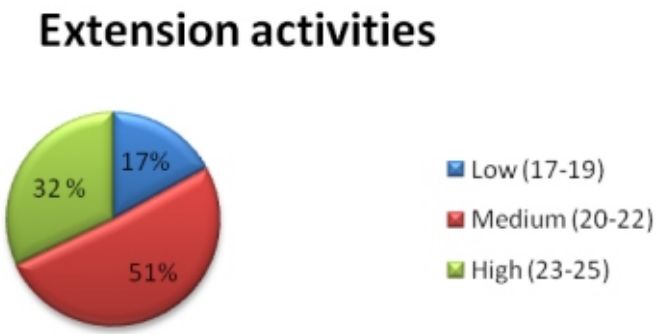

Fig 3: Graphical representation of overall satisfaction regarding extension activities based information

CONCLUSION

The experience of using this 'mobile phone technology assisted extension services' made farmers feel more at ease with new technology and adapting to new things for life. In this study, the farmer is getting information and had satisfaction but the farmers needed to provide more information on the other aspects of agriculture majorly on animal husbandry, farm management and government schemes to their level of satisfaction. A need based system should be developed with the feedback from the farmers. So, technology is being transferred at its pace but there may be need of more efforts of the service providers to raise the satisfaction level.

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