

ROLE OF ANDROID PHONE IN SMART AGRICULTURE

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ABSTRACT: The present study entitled “Role of android phone in smart agriculture” was carried in two blocks of Kanpur district to access the role of android phone in smart agriculture. Thus selected total number of 120 respondents in which 60 respondents for the study purpose were selected from each block of Kanpur district. Out of total respondents maximum 41.6 per cent of respondents were belong to the 40 to 50 years of age, maximum 66.6 per cent of respondents were educated up to Graduate and above level, maximum General group ranging about 55.8 per cent, 91.6 per cent of respondents were-married, maximum 89.1 per cent of farmers belonged to Hindu religion, maximum 55.8 per cent of respondents belonged to Nuclear family, 42.5 per cent respondents belonged to up to 5 members. maximum 93.3 per cent of respondents were lived to pakka house, maximum 52.5 per cent of respondents belonged to those families whose family income was between Rs. 50000-75000; 66.6 per cent respondents were doing Agriculture, maximum 58.3per cent of respondents were holding large land,, maximum 78.3 per cent of respondents were having the no members of any organization, maximum 97.5 per cent of respondents have television, maximum 57.5 per cent of respondents have tube well,, maximum 75.5 per cent of respondents were informed by Kisan mela, maximum 80.8 per cent of respondents were received disease and pest control related information on android phone, maximum 65.8 per cent of respondent were taking help by android phone, maximum 72.5 per cent of respondents were received crop forming information by android phone,, maximum 74.1 per cent of respondents were used WhatsApp for agriculture related information, maximum, 80.8 per cent of respondents were taking help in by others farmers, maximum 99.2 per cent of respondents were received sowing time related information, maximum 42.5 per cent of good overall facilities respondents have received information in weekly basis, maximum 36.0 per cent good overall facilities respondents have spent 5 minute and 30 minute on android phone. It was conclude that more beneficial of android phone for farmers in getting agricultural information on weather trends, best practices in fanning (agriculture). timely access to market information which helps farmers make correct decisions about what crop to plants and sell their products and buy inputs, which helps farmers to sustained growth of agricultural activities through android phone.

Keywords: Android Phone, Agriculture App, Marketing, Role, Smart Agriculture.

INTRODUCTION:

India is developing country where is the main occupation is agriculture because 70 per cent of the population dependent on the agriculture “no one can survive without agriculture in this world” because it is medium of food productivity and reduction of starvation. India has accomplishing as impressive progress in agriculture during the last five decades. At present there are numerous challenges to be addressed on priority basis for making India a developed

nation through progress in modern agriculture. In the agriculture sector, mobile phone as the predominant technology amongst farmer in India. Measuring an increased speed of price exchange was dominated by traders that lack literacy and rely heavily on visual inspection. Farmers used android phones to access information, traditional means of collecting and exchanging information had not changed (such as travelling to the market) but use of phones speeded up pre-exchanged process. For android phone users, this led to the trading of larger volumes, better prices and slightly larger margins-but only marginal increase in transaction costs (due to an increase in the net cost due to the cost of android phone ownership and use).

RESEARCH METHODOLOGY :

To complete the above objectives the research Methodology employed and the study was conducted in Kanpur District with two blocks during year 2016-17, 60-60 respondents were selected from each block total 120 respondents were selected from each area through purposively Sampling method. In the research dependent and independent variables are divided. So dependent and independent variables namely age, religion, caste, marital status, occupation, type of house, size of family, size of land holding and social participation etc. were used the collected data were subjected to statistical analysis for which statistical tools.

RESULTS :

Table 1 : Distribution of farmers according to age group.

N=120

Age	Frequency	Per cent
Up to 30 years	20	16.6
30-40 years	46	38.4
40-50 years	50	41.6
50 years & above	4	3.4
Total	120	100.0

1.6 per cent of respondents were belong to the 40 to 50 years of age group followed by 38.4 per cent of respondents were belong to 30 to 40 years. 16.6 per cent of farmers belonged to the up to 30 years age group. Whereas, 3.4 per cent of respondents belonged to 50 years and above of age group in the study area of Kalyanpur and Chaubeypur.

Table 2 : Distribution of farmers according to education.

N=120

Education	Frequency	Per cent
High school	5	4.2
Intermediate	35	29.2
Graduate & above	80	66.6
Total	120	100.0

66.6 per cent of respondents were educated up to Graduate and above level, followed by 4.2 per cent of respondents were educated up to High school while 29.2 per cent respondents were educated intermediate level. Education plays an important role to farmer develops their economic and social status and also improved the overall status of smart farmers.

Table 3 : Distribution of farmers according to occupation

N=120

Occupation	Frequency	Per cent
Agriculture	80	66.6
Service	9	7.5
Agriculture labour	3	2.5
Agro based enterprises	6	5.0
Business	13	10.8
Others	6	5.0
Total	120	100.0

66.6 per cent respondents were doing agriculture, 10.8 per cent respondents were business, 7.5 per cent rural women were engaged in service and 2.5 per cent respondents were involved in agriculture labour whereas similarly 5.0 per cent respondents were in agro based enterprises. 5.0 per cent of farmers engaged in other occupation.

Table 4 : Distribution of the respondents according to types of information android phone.

Type of agriculture information	Frequency	Per cent
Pest management	50	41.6
Use of fertilizer/soil management	118	98.3
Market price	50	41.6
Weather forecast	72	60.0
Financial management	20	16.6
Showing time	119	99.2
Harvesting time	67	55.8
Post harvesting	77	64.1
Marketing	30	25.0

99.2 per cent of respondents were received sowing time related information.98.3 per cent of respondents were selected use of fertilizer/soil improvement related information, whereas, 64.1 per cent of respondents were received post harvesting related information. 60 per cent of respondents were received weather related information. 55.8 per cent of respondents were

received harvesting time. 41.6 per cent of respondents received pest management and market price related information. 25.0 per cent of respondents were received marketing information, 16.6 per cent of respondent were received financial management.

Table 5: Distribution of farmers using agriculture apps.

S. No.	Agriculture apps used	Symbol	Yes	No	Mean Score	Rank
1.	IFFECO Kisan Agri. Aap	A	70.0	30.0	1.70	I
2.	Agri. aap	B	37.5	62.5	1.38	IV
3.	Agro indiaaap	C	37.5	62.5	1.38	IV
4.	RML Krishimitra	D	35.0	65.0	1.35	V
5.	e-Farmer aap	E	29.2	70.8	1.29	VI
6.	Organic farming	F	47.5	52.5	1.48	II
7.	Vegetable Farming	G	41.7	58.3	1.42	III

70 per cent of farmers were using agriculture aaps like IFFECO Kisan agri. Aap with mean score 1.7 rank I followed by 47.5 per cent of farmers using organic farming in the study area with mean score 1.48 and rank II, whereas, 41.7 per cent of respondents were using vegetable farming with mean score 1.42 and rank III, 37.5 per cent of farmers were using Agri. aap and Agro aap both aaps are same mean score 1.38 and same rank IV, 35 per cent of respondents were using RML Krishimitra with mean score 1.35 and rank V, only 29.2 per cent of respondents were using e-farmer aap with mean score 1.29 and rank VI.

CONCLUSION :

In today android phone is very common social networks is one of the most efficient ways to communicate with others those are very near and dear of ours and not reaching or meets ever day, in agriculture, like in many others sectors, information is becoming a major input, knowledge and information plays an important role for farmers to give opportunities that could improve their agriculture productivity. The android phone is stimulating a revaluation in rural connectivity for small holder farmers and other small- scale rural producers in developing countries, providing new ways to access price and market information, and coordinate input or output resources including transport and logistics, finance and production techniques. According to the results gather from farmers, android phone helps to enhance knowledge on current issues of agriculture based development, helps in learning performance. Farmers use WhatsApp and Facebook mode by android phone to communicate with others farmers and extension workers. Users (farmers) received crop farming and showing time related agriculture information through android phone, most of people like to receive weekly agriculture information. Farmers have to use the android phone for knowing about market information. According to the collected data most of the farmers were using the android phone to know contact multiple markets and compare before marketing or bartering. So, the android phone is

most essential part of every one's life as well as farmers, enhance their productivity with minimum inputs and bring positive change rural areas of those farmers whose only the source of income is totally dependent upon the agricultural based.

RECOMMENDATION AND SUGGESTION :

- Information should be in the local language and easy to understand. Most of the farmers we interviewed were prepared to pay for information services as long as they would get the information they wanted in a timely and reliable manner.
- Knowledge about various agriculture aaps like agriaap, agro indiaaap, organic farming and others aaps.
- Knowledge about various chemical and their usage like insecticides, pesticides, fertilizers, etc.
- Government also implements various plans for betterment of farmers, extension services help workers to know and understand about the plans.

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