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Original Article

Use of Mobile Phone in Indian Agriculture

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Abstract

The mobile phone can help farmers in making right decision at right time sustainable growth agriculture activities and also help in gathering, analyzing and disseminating information in agricultural sector is enhancing farming productivity. This study has provided a first look at potential of information in affecting the agriculture sector as a whole. The study has reported farmers able to get information through mobile phone, use among the farming community. It is helpful adoption of new farming practices and action taken on received information may be able to enhance effectiveness, efficiency, reach among farmers and reduced risk through get information on weather trends information, pest and diseases management, marketing information help farmer market to corrects decisions over all farming activities.

Keywords*:* Former; Mobile Phone; Agriculture Role.

Introduction

Use of mobile phones for economic activity and enhancement of livelihood skills was substantially higher in U.P. The applications of mobile value added services (MVAS) in U.P. were also high. However, the use of mobile phones for social networking and entertainment purposes was quite similar. Use of mobile phones in agriculture and allied industries: Farmers involved in farming activities collected information at various stages of the agricultural cycle, and for vegetable and dairy farming purposes, through their mobile phones. A large number of farmers in India are marginal and small landholders. They mostly sell their produce to middlemen, who buy the produce from the villages. Very few of them directly go to the mandi.

Research Methodology

To complete the above objectives the research Methodology employed and the study was conducted in Kanpur District with two blocks during year 2014-15, 60-60 respondents were selected from each block total 120 respondents were selected from each area through random 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, χ^2 per cent, weighted mean, rank and correlation coefficient were used.

Results

Distribution of respondents according to educational qualification, maximum 24.2 per cent of male respondents were belonged in high school level, whereas, 10.8 per cent of female respondents were educate din up to primary level, 14.2 per cent of male

respondents were educated in Intermediate level, followed by 8.3 per cent of male respondents were educated in both illiterate and up to primary level and 10.0 per cent of female respondents were educated in both up to secondary and high school level, 7.5 per cent of male respondents were educated graduate and above level of qualification and only 2.5 per cent of female respondents were illiterate. Only 4.2 per cent of male respondents were educated up to secondary level of qualification. The distribution of respondents according to education both combined respondents, maximum cumulative value of education high school level 34.2 per cent and 19.2 per cent of respondents educated up to primary level, whereas, 14.2 per cent of respondents educated intermediate level. 14.2 per cent of respondents educated up to secondary level followed by 10.8 per cent of respondents who have no education (illiterate) level. Only 7.5 per cent of respondents were found to be graduate and above education level.

Table 1: Distribution of respondents according to education N=120

Educational qualification	Male		Female		Total	
	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
Illiterate	10	8.3	3	2.5	13	10.8
Up to Primary	10	8.3	13	10.8	23	19.2
Up to Secondary	5	4.2	12	10.0	17	14.2
High School	29	24.2	12	10.0	41	34.2
Intermediate	17	14.2	-	-	17	14.2
Graduate & above	9	7.5	-	-	9	7.5
Total	80	66.7	40	33.3	120	100.0
χ^2			19.788**		P < 0.01	

Table 2 Distribution of respondents according to caste N=120

Caste	Male		Female		Total	
	Frequency	Per cent	Frequency	Per cent	Frequency	Per cent
General	14	11.7	-	-	14	11.7
OBC	41	34.2	29	24.2	70	58.3
SC/ST	25	20.8	11	9.2	36	30.0
Total	80	66.7	40	33.3	120	100.0
χ^2			0.1786		P > 0.05	

Table 3 Distribution of respondents according to kind of information N=120

Kind of information	Frequency	Per cent
Crop farming	102	85.0
Livestock/animal husbandry	85	70.8
Mixed farming	64	53.3
Fishery	24	20.0
Apiculture	8	6.7
Agro-forestry/Horticulture	30	25.0

Table 4 Distribution of respondents according to type of agriculture information in mobile phone N=120

Type of information in mobile	Frequency	Per cent
Pest management	87	72.5
Use of fertilizer/soil improvement	118	98.3
Market price	110	91.7
Weather forecast	55	45.8
Financial management	10	8.3
Sowing time	119	99.2
Harvesting time	81	67.5
Post harvesting	75	62.5
Marketing	89	74.2

Distribution of respondents according to caste. It was found that most of 34.2 per cent of male and 24.2 per cent of female respondents were belonged to OBC group of caste. The respondents belonging to SC/ST group of caste category were about 20.8 per cent of male and 9.2 per cent of female respondents, while general category belonging about 11.7 per cent of only male respondents in study area. The distribution of respondents according to caste of both combined respondents, maximum cumulative value, 58.3 per cent of respondents were belonged to OBC group 30.0 per cent of respondents were belonged to

SC/ST group of caste, while 11.7 per cent of respondents belong to general caste category. The observed value of χ^2 was found to be non significant at 5.0 per cent level of significance. Caste is an important factor in rural as well as urban area to developing the men and women condition.

Distribution of respondents according to kind of information selected by mobile phone, maximum 85.0 per cent of respondents were received crop farming information by mobile phone, whereas, 70.8 per cent of respondents were received livestock/animal husbandry related information, 53.3 per cent of respondents were selected mixed farming by mobile phone, 20.0 per cent of respondents were selected fishery related information, 6.7 per cent of respondents were choose for apiculture related information. Only 25.0 per cent of respondents were received agro-forestry/horticulture related information on mobile phone.

Distribution of respondents according to type of information in mobile phone, maximum 99.2 per cent of respondents were received sowing time related information on mobile phone, whereas, 98.3 per cent of respondents were selected use of fertilizer/soil improvement related information, 91.7 per cent of respondents were received market price information, 74.2 per cent of respondents were received marketing related information, 72.5 per cent of respondents were selected pest management related information, 67.5 per cent of respondents were received harvesting-time information, 62.5 per cent of respondents were received post-harvesting information, 45.8 per cent of respondents were selected weather forecast type of information. Only 8.3 per cent of respondents were received financial management information. Thus, it can be concluded that respondents were acquire to pest management information. Similar finding was reported by Ansari and Pandey (2013) who also found the respondents prefer disease and pest management information.

Conclusion

In today's mobile phone is very common social network is one of the most efficient ways to communicate with others those are very near and dear of ours and not reaching or meets every day. "In agriculture, like in many other sectors, information is becoming a major input, knowledge and information plays an important role for farmers to gives opportunities that could improve their agricultural productivity. Information communication Technologies (ICTs) are be the best hope in India to accelerate their agricultural development process. India's telecommunication network is the second largest in the world based on the total number of telephone users. Mobile phones are one of the most important tools of ICTs, in which farmers get, exchange, and or manipulate agricultural information; they help farmers to get timely and up-to-date information from different sources ICTs initiatives. Mobile phones are important to agro-based entrepreneurs as an infrastructural device for enhancing efficiency and effectiveness of agricultural sector.

Recommendations and Suggestions

- Knowledge about bigger or smaller farm machineries such as tractors, truck, harvester, thresher, other cutting and piercing implements.
- Farmers need to be educated about how to operate different equipments for their improving with efficiently productivity to accessing the economical/financial growth.
- Farmers need to be educated time to time about changing technology, equipments etc.

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