International Archive of Applied Sciences and Technology
Int. Arch. App. Sci. Technol; Vol 11 [3] September 2020 : 98-103
© 2020 Society of Education, India
[ISO9001: 2008 Certified Organization]
www.soeagra.com/iaast.html

IAAST
ONLINE ISSN 2277- 1565
PRINT ISSN 0976 - 4828

CODEN: IAASCA ORIGINAL ARTICLE

DOI: .10.15515/iaast.0976-4828.11.3.98103

An Analysis of Personal, Socio-economic and Psychological Characteristics of the Mobile Agro-Advisory Services Using farmers of Udupi District of Karnataka

Navin kumar[1], B. Dhananjaya[2], T.H.Ranjith[3] and S Dilip[4]
1. M.Sc.(Agri), Department of Agricultural Extension Education UAHS, Shivamogga
2. Programme Co-ordinator, KVK, Brahmavar, Udupi.
3. Technical Officer GKMS, ZAHRS, Brahmavar, Udupi.
4. M.Sc.(Agri), Department of Agricultural Extension, Kerala Agricultural University.
Email-navinkumar1323@gmail.com

ABSTRACT
The present study was conducted in Udupi district during 2016-17. Majority (48.33 %) of the respondents' belonged to young age group, As per the result, (35.00 %) farmers were educated upto P.U.C. level, Three fourth of the respondents (75.83 %) had nuclear type of family, With respect to the occupation of the farmers majority (48.33 %) were engaged in agriculture and animal husbandry, Majority (42.50 %) farmers possessed small land holding, Majority (40.83 %) of the respondents belonged to high annual income category, Majority (65.83 %) of the farmers had high level scientific orientation, Majority (54.17 %) of the farmers had high extension contact, Majority (48.33 %) of the farmers belonged to medium extension participation, Majority (67.50 %) of the farmers belonged to high mass media utilization category, Majority (64.17 %) of the farmers belonged to medium innovative proneness, Majority (67.50 %) of the farmers belonged to medium achievement motivation category, More than fifty per cent (62.50 %) of the farmers had high level risk orientation.
Key words: Socio-economic characteristics, Mobile, Agro advisory, SMS, Variables

Received 05.06.2019 Revised 28.06.2019 Accepted 10.08.2019

CITATION OF THIS ARTICLE
N Kumar, B. Dhananjaya, T.H.Ranjith and S Dilip. An Analysis of Personal, Socio-economic and Psychological Characteristics of the Mobile Agro-Advisory Services Using farmers of Udupi District of Karnataka. Int. Arch. App. Sci. Technol; Vol 11 [3] September 2020: 98-103

INTRODUCTION

In today's world,almost everybody owns a mobile phone. This huge reach, if harnessed in agricultural extension, can change the face of agriculture altogether in a developing country like India where we have nothing to lose by using it as amedium to disseminate agricultural information in multimodal form. Many initiatives have been taken in this regard to utilize mobile phones by private sector **(**Indian Farmers Fertilizer Cooperative Limited, Nokia, Airtel, TataConsultancy Services, *etc.*) and public sector (Ministry of Agriculture,Universities like Tamil Nadu Agricultural University**,** research institutions likeIndian Council of Agricultural Research, State Governments of Haryana and Kerala, Indian Meteorological Department and others) in agricultural advisory service for agronomic practices, weather forecasts and market price . With increased dependency, the mobile phone is becoming a common communication platform of the world, especially for agriculture.

MATERIAL AND METHODS

The study was conducted in Udupi District of Karnataka State during 2016-17.Udupi district is bound by Arabian sea in west and Western Ghats (world heritage site) in the east. Udupi district is surrounded by Uttara Kannada district in north, Dakshina Kannada district in southern direction. Shivamogga district borders on north east side and Chikkamagaluru district on east. Arabian sea is on west of Udupi district.In the present study, expost-facto research design was employed, because the phenomenon had already occurred and the researcher does not have any control over independent variables. The Udupi district comprises of three taluks*viz.,*Udupi, Karkala&Kundapur and from each taluk 40 farmers were selected as respondents for the study. Thus the sample size of the study comprises of 120 respondents.

RESULT AND DISCUSSION

Age

The data furnished in Table 1 indicates that majority (48.33 %) of the respondents belonged to young age group whereas, 39.17 per cent belonged to middle age and 12.50 per cent belonged to old age group. The probable reason for majority of the farmers were under young age might be that, most of the old age people are not able to use mobile phones. Another reason may be young age farmers are enthusiastic and have more use of mobile phones for getting information related to agriculture and allied activities. The present findings are in confirmative with Hardevinder*et al.* [6].

Table 1. Distribution of respondents based on their Age (n=120)

Category	Frequency	Percentage
Young	58	48.33
Middle	47	39.17
Old	15	12.50

Education

The data furnished in Table 2 indicates that 35.00 per cent farmers were educated upto P.U.C followed by 25.83 per cent were educated upto high school, 21.67 per cent, 14.17 per cent and 3.33 per cent were graduate and above, middle school and primary school respectively. This might be due the reason that, in the present scenario, almost everybody is found to be literate due to the awareness brought by the government on the importance of education. As udupi district farmers are highly educated, they can use the electronic gadgets and information available from various sources including KVKs and other concern departments.These findings are in contrast with the findings of Subhashingh *et al.* [11].

Table 2. Distribution of respondents based on their Education (n=120)

Category	Frequency	Percentage
Primary school	4	3.33
Middle school	17	14.17
High school	31	25.83
P.U.C	42	35.00
Graduate and above	26	21.67

Type of Family

The data furnished in Table 3 indicates that majority (75.83 %) of the respondents had nuclear family type, followed by 24.17 per cent farmers had joint type of family. The reason could be that, the present trend in the society is to have small families so that they could concentrate much better for the welfare of their own family. These findings are in line with the findings of Amitendu De *et al.* [2].

Table 3. Distribution of respondents based on their Type of family (n=120)

Category	Frequency	Percentage
Nuclear	91	75.83
Joint	29	24.17

Occupation

Table 4 indicates that majority (48.33 %) of the respondents were engaged in agriculture and animal husbandry, followed by 41.67 per cent were engaged in agriculture with horticulture, 7.5 per cent and 2.5 per cent farmers were engaged in agriculture with business and agriculture with labour respectively. The probable reason that, the Udupi district is said to be an integrated farming system district because majority of the famers follow agriculture and dairy or agriculture and horticulture or horticulture and dairy. Further, the farmers are growing commercial crops in that they are getting better income, that is why majority farmers are involved in agriculture and allied activities.

Table 4. Distribution of respondents based on their Occupation (n=120)

Category	Frequency	Percentage
Agriculture + Horticulture	50	41.67
Agriculture + Animal husbandry	58	48.33
Agriculture + Labour	3	2.5
Agriculture + Business	9	7.5

Land holding

It was observed from the Table 5 that, 42.50 per cent farmers possessed small land holding, followed by marginal (31.67 %) land holding, 20.00 per cent farmers had medium land holding and 5.83 per cent farmers belonged to large land holding category. Fragmentation of ancestral land from generation to generation might have lead to smaller land holdings. Other possible reason could be the existence of nuclear and small families where the ancestral land holdings were broken into smaller and smaller pieces thus majority of them are belonged to this category. Further, Udupi district is said to be the district of small and marginal farmers, more than eighty per cent are small and marginal farmers. The findings are also in line with the findings of Gulledgudda [5].

Table 5. Distribution of respondents based on their Land holding (n=120)

Category	Frequency	Percentage
Marginal	38	31.67
Small	51	42.50
Medium	24	20.00
Large	7	5.83

Annual income

The data furnished in Table 6 indicates that majority (40.83 %) of the respondents belongs to high annual income category whereas, 35.83 per cent belonged to medium annual income category and 23.33 per cent belongs to low annual income category. The probable reason might be that, the farmers are growing commercial crops along with agriculture and dairying so they are getting better income in agriculture and allied activities. An assured rainfall and irrigation facilities motivated the respondents to grow multiple crops in arecanut and coconut based cropping system as a result of which farmers had better income. The findings are in conformity with the findings of Suresh [12].

Table 6. Distribution of respondents based on their Annual income (n=120)

Category	Range	Frequency	Percentage
Low	<38613.78	28	23.33
Medium	38613.78-196886.22	43	35.83
High	>196886.22	49	40.83
Mean= 117750		SD= 79136.22	

Scientific orientation

The data furnished in Table 7 indicates that, majority (65.83 %) of the farmers had high level scientific orientation, followed by medium (21.67 %) and low (12.50 %) level of scientific orientation. The possible reason for the above trend might be due to majority of the respondents was literate and willing to take new ventures, if they convince. Hence, majority of the respondents had high scientific orientation. These findings are in agreement with the findings of Acharya [1].

Table 7. Distribution of respondents based on their scientific orientation (n=120)

Category	Range	Frequency	Percentage
Low	<15.71	15	12.50
Medium	15.71-21.49	26	21.67
High	>21.49	79	65.83
Mean= 18.60		SD= 2.89	

Extension contact

It was observed from Table 8 that, 54.17 per cent of the farmers had high extension contact while 28.33 per cent of the farmers had medium extension contact and 17.50 per cent of the farmers had low extension contact. The probable reason for this type of result might be due to, their eagerness in solving their cultivation problems with extension workers and also interest in extension activities to gather recent information. The other reason could be that the extension workers credibility to attract the farmers towards them. This is in confirmative with the findings Bhosle *et al.* [3].

Table 8. Distribution of respondents based on their Extension contact (n=120)

Category	Range	Frequency	Percentage
Low	<2.40	21	17.50
Medium	2.40-17.37	34	28.33
High	>17.37	65	54.17
Mean= 9.88		SD= 7.48	

Extension participation

With respect to extension participation of the farmers, result depicted in Table 9 clearly indicates that, 48.33 per cent of the farmers belonged to medium extension participation category, followed by high (32.50%) and low (19.17%). The probable reason for this might be that, in participating the extension activities to gather latest information and to learn about ICT tools from extension workers. This finding is in contrast with finding of Chandra Mauli [4].

Table 9. Distribution of respondents based on their Extension participation (n=120)

Category	Range	Frequency	Percentage
Low	<4.70	23	19.17
Medium	4.70-9.62	58	48.33
High	>9.62	39	32.50
Mean=7.16		SD=2.46	

Mass media participation

With respect to mass media utilization of the farmers, result depicted in Table 10 clearly indicates that, 67.50 per cent of the farmers belonged to high mass media utilization

category, followed by medium (21.67 %) and low (10.83 %). The reason for high level of mass media utilization of farmers may be due to high literacy rate it was revealed by this study and also more interest in current issues and new technology commonly in newspaper, farm magazines and electronic media. This is in confirmative with the findings of Moulasab [9].

Table 10. Distribution of respondents based on their Mass media participation (n=120)

Category	Range	Frequency	Percentage
Low	<5.65	13	10.83
Medium	5.65-11.00	26	21.67
High	>11.00	81	67.50
Mean= 8.33		SD= 2.68	

Innovativeness

The results indicated from Table 11 that, majority (64.17 %) of the farmers belongs to medium innovative proneness category, whereas 19.17 per cent and 16.67 per cent of them belongs to high and low innovative proneness category respectively. The farmers are receptive to any of the technological breakthrough in terms of crop production for higher returns. In addition, the level of education of the respondents helped them to understand and try new technologies which are disseminated to them. This finding is confirmative with the findings of Nimbalkar and Pawar [10].

Table 11. Distribution of respondents based on their Innovativeness (n=120)

Category	Range	Frequency	Percentage
Low	<22.95	20	16.67
Medium	22.95-28.14	77	64.17
High	>28.14	23	19.17
Mean= 25.54		SD= 2.60	

Achievement motivation

It could be seen from the Table 12 that, 67.50 per cent of the farmers belonged to medium achievement motivation category whereas, 20.83 per cent and 11.67 per cent of them belonged to high and low achievement motivation categories respectively. The reason is that achievement motivation is basic character which motivates and helps an individual to do anything. It is a psychologically internalized condition which drives an individual to aspire for higher level of earning and living. The reason for medium level of achievement motivation may be due to religious customs in the village and values and beliefs which does not allow the farmers to come forward. This finding is confirmative with the findings of Kiran [7].

Table 12. Distribution of respondents based on their Achievement motivation (n=120)

Category	Range	Frequency	Percentage
Low	<21.63	14	11.67
Medium	21.63-26.70	81	67.50
High	>26.70	25	20.83
Mean= 24.17		SD= 2.53	

Risk orientation

The data furnished in Table 13 indicates that, majority (62.50 %) of the farmers had high level risk orientation, followed by medium (23.33 %) and low (14.17 %) level of risk orientation. Thepossible reason for the above trend might be due to the fact that, the farmers know that ifthey take more risk to access information from different ICT tools for recent information regarding production point to marketing, farming may become profitable

because of information obtained through ICT tools regarding what to grow, how to grow and where to sell the produce. This finding is in contrast with the findings of Madhushekar [8].

Table 13. Distribution of respondents based on their Risk orientation (n=120)

Category	Range	Frequency	Percentage
Low	<18.73	17	14.17
Medium	18.73-23.76	28	23.33
High	>23.76	75	62.50
Mean= 21.24		SD= 2.51	

REFERENCES

1. Acharya, P., (2005), A critical study on extent of knowledge and adoption of jute farmers of WestBengal.*M. Sc. (Agri.) Thesis*, Acharya N G Ranga Agric. Univ., Hyderabad, India.
2. Amitendu, D. E., Goswami, A. And Mazumder, D., (2014), Demographic profile and distribution of livestock farmers according to knowledge and awareness level in Institute village linkage programme. *Int. J. Curr. Microbiol. App. Sci.*, **3**(7): 378-384.
3. Bhosle, P. B., Jondhale, S. G. And Patil, C. B., (2000), Effectiveness of farm broadcast as perceived by listeners. *Maharashtra J. Extn.Edn.*,**19**(1): 28-32.
4. Chandra Mouli., 2005, A study on entrepreneurial behavior of farmers in Raichur district of Karnataka. *M. Sc. (Agri.) Thesis,* Uni. Agril. Sci., Dharwad (India).
5. Guledgudda, S. S., (2005), Production and export performance of cashew –An economic analysis. *Ph. D. Thesis*, Univ. Agril.Sci., Dharwad.
6. Hardevinder, S., Gurdeep, S. And Jagadish, G., 2012, Analysis of kisan mobile advisory service in South Western Punjab.*J. KrishiVigyan.*, **4**(1): 1-4.
7. Kiran, T. R., (2007), Perception of organizational climate by scientists of university agriculture sciences Dharwad. *M. Sc. (Agri.) Thesis,* Univ. Agric. Sci., Dharwad.
8. Madhushekhar, B. R., (2009), A study on marketing behaviour of chilli growers in Guntur district of Andhra Pradesh. *M. Sc. (Agri.) Thesis*, Acharya N G Ranga Agric. Univ., Hyderabad, India.
9. Moulasab, I., (2004), A study on knowledge and adoption of improved cultivation practices by mango growers of North Karnataka, *M. Sc. (Agri.) Thesis,* Univ. Agril. Sci., Dharwad.
10. Nimbalkar, S. D. And Pawar, R. S., (1900), Perception of televiewers towards farm programme. *Maharashtra J. Extn.Edn.*,**9**(1):157-160.
11. Subhashsingh, P., Bharat, M. And Rai, D. P., (2010), Sustainable models of information technology for agriculture and rural development.*Indian Res. J. Ext. Edu.*,**10**(1): 20-23.
12. Suresh, (2004), Entrepreneurial behaviour of milk producers in Chittoor district of Andhra Pradesh – A critical study.*M. V. Sc. Thesis,* Acharya N. G. Ranga Agric. Univ., Hyderabad.