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Communication and psychological behavior of the sugarcane growers in Chitrakoot district (U.P.)

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Abstract
This study was conducted in Mau block of Chitrakoot district (U.P.) by conducting personal interview with 100 respondents which were selected through random sampling technique from 5 sample villages on the basis of majority of sugarcane grower. The majority of the respondents 41% institutional membership, 71% overall material possession (41-84 equipment), gram pradhan I ranked formal sources, family member I ranked informal sources, mobiles I ranked mass media, 54% medium (20-23) economic motivation, 54% medium (23-27) scientific orientation, 63% medium (21-25) risk orientation, 33.66% fully knowledge and 26.35% partially knowledge of respondents about IPM practices in sugarcane crop, 28.29% high, 29.66% medium and 40.54% low adoption of respondents about IPM practices in sugarcane crop.

Keywords: socio-economic profile, knowledge and adoption, awareness, etc

Introduction

Sugarcane is an oldest crop known to man, a major crop of tropical and sub-tropical regions worldwide. Sugarcane is a glycophyte, sucrose storing member of tall growing perennial monocotyledonous grass. Across the world 70% sugar is manufactured from sugarcane. India is the second largest country in sugarcane production in the world (Fig.1). Sugarcane is a major source of raw material for sugar industries and other allied group of byproduct industries. The economic importance of the crop is much more that signified by its share in gross cropped area. The world economy is currently dominated by technologies which rely on fossil energy and this will remain the case for much of the 21st century.

Recognition of sugarcane as an important energy crop was recently heightened by the advent of large-scale sugarcane-based ethanol production from molasses and directly from cellulose. Sugarcane is one the most efficient crops in the world in converting solar energy into chemical energy. Sugar cane is the most efficient biofuel feedstock in commercial use today and sugar cane ethanol will contribute to reduce greenhouse gas up to 90% compared to conventional fuels.

Sugarcane plays a major role in the economy of sugarcane growing areas and, hence, improving sugarcane production will greatly help in economic prosperity of the farmers and other stakeholders associated with sugarcane cultivation. There has been tremendous awareness in the area of developing "Sugar Complexes" focusing on economic and sustainable utilization of sugar industry by-products. In India, many sugar units have transformed themselves into *Sugar-Agro industrial Complexes*, producing a variety of chemicals and utility products from sugarcane. Sucrose content is the highly desirable trait in sugarcane as the worldwide demand for cost-effective bio-fuels is increasing. Sugarcane's high efficiency in fixing CO2 into carbohydrates for conversion into biofuel has awakened the world's interest in the crop.

Sugarcane is a long duration crop and faces various abiotic stresses like shortage of water, high temperature during summer, low temperature during winter, flooding during rainy season, nutritional stress, salinity, alkalinity and biotic stresses like fungal diseases as red rot, smut, wilt, rust, pokka boeng, grassy shoot disease by phytoplasma, bacterial, viral diseases like sugarcane mosaic virus, yellow leaf syndrome, sugarcane streak mosaic, pests like sugarcane borer, white fly, white wooly aphid, insects like sugarcane borer, scales, white fly, white wooly aphid, mille bugs and white grub etc.

The Indian sugar industry is second largest industry in the country, generates surplus exportable power through cogeneration thereby playing a major catalytic role in the socioeconomic transformation of rural population.

Methodology

The study was conducted in purposively selected Chitrakoot district of Uttar Pradesh. There are 5 community development blocks in this district out of that is one block Mau was selected purposively. The 5 villages were selected purposively, and then the list of total farmers was prepared for each selected villages. Thereafter 100 farmers were selected as respondents though random sampling techniques with respect to the categories of the farmers for each selected village. Data were collected with the help of semi-structured interview schedule specially developed on standard scales with some modifications in the light of objectives and analyzed with suitable statistical methods respectively.

Result

1. Communication media possession

The Table-1. Indicated that the majority of respondents (94%) were observes possessing Mobile phone with them. The rest of respondents who had other communication media were in descending order as Radio (85%), T.V. (61%), Newspaper (44%), D.T.H. (36%), Agriculture Books (33%), V.C.D. player (22%), General Magazines (17%), Agril. Journals/ Magazines (12%), Internet (10%), Laptop and Desk top (1%), Tape-recorder (5%), respectively. Thus, it can be inferred that mobile phone and Radio were main sources for getting information's and recreation purposes.

Table 1: Distribution of the respondents on the basis of communication media possession: N=100

S. No.	Communication media	Respondents	
		Number	Percentage
1.	Radio	85	85.00
2.	T.V.	61	61.00
3.	Tape-recorder	5	05.00
4.	Mobile phone	94	94.00
5.	Agril. Journals/ Magazines	12	12.00
6.	D.T.H.	36	36.00
7.	General Magazines	17	17.00
8.	Agriculture Books	33	33.00
9.	News paper	44	44.00
10.	Internet	10	10.00
11.	VCD player	22	22.00
12.	Desk top	6	06.00
13.	Laptop	6	06.00

Note: More than one items have been shown by respondents, hence the total percentage of all items would be more than 100.

2. Institutional membership

The Table-2 indicates that the overwhelming majority *i.e.* 52% of the respondents did not have any institutional membership, followed by 48% respondents participation in one institutional membership respectively. It means that the respondents did not have more interest in participating in the institutional membership.

Table 2: Distribution of the respondents on the basis of institutional membership. N=100

S. No.	Participation	Respondents	
		Number	Percentage
1.	Not have any institutional membership	52	52.00
2.	Participation in one institutional membership	48	48.00
	Total	100	100.00

3. Extension contact

The Table-3 shows the extent of contact of respondents with different information sources as used by them for general information as well as about various crops cultivation. The information sources was categorized into three categories namely, formal sources, informal sources and mass media exposure to find out the extent of contact of respondents. In case of formal sources namely, Gram pradhan, Kisan Sahayak, V.D.O, seed/fertilizer store, A.D.O, B.D.O, Co-operative societies, mandi samiti and Agriculture University got rank orders as I, II, III, IV, V, VI, VII, VIII and IX respectively.

So far as informal sources like family members, neighbor, friends, local leaders, progressive farmers and relatives got rank orders as I, II, III, IV, V and VI respectively.

So far as mass media sources like were found in descending *i.e*. Mobile, Radio, Television, Newspaper, film shows, agriculture books, exhibition, Farmers fair, News bulletins, Farm magazines, internet, Posters, Field day, demonstration, Folder and circular letters got rank orders as I, II, III, IV, V, VI, VII, VIII, IX (A), IX (B), X, XI, XII, XIII (A) and XIII (B), respectively.

The overall mean scores of Extension contact were found 2.33.

Table 3: Distribution of respondents on the basis of Extension contact with different information sources N=100

S. No.	Source of information	Respondents	
		Mean Score value	Ranks
A.	**Formal source**		
1.	B.D.O.	0.27	VI
2.	A.D.Os.	0.35	V
3.	V.D.Os.	1.26	III
4.	Kisanshayak	3.83	II
5.	Gram pradhan	4.44	I
6.	Co-operative society	0.17	VII
7.	Agril college/ University	0.04	IX
8.	Mandisamitti	0.07	VIII
9.	Seed &Ferti. Store	0.56	IV

10.	Agril. Scientist	0.0	NIL
B.	**Informal Source**		
1.	Family Members	6.60	I
2.	Neighbors	5.90	II
3.	Friends	5.40	III
4.	Relatives	3.04	VI
5.	Local Leaders	3.14	IV
6.	Progressive Farmers	3.09	V
C.	**Mass media source**		
1.	Radio	5.31	II
2.	T.V.	3.21	III
3.	News paper	3.08	IV
4.	Agril. Books	1.50	VI
5.	News bulletin	0.51	IX A
6.	Field day	0.02	XII
7.	Farm magazines.	0.51	IX B
8.	Circular letters	0.00	NIL
9.	Poster	0.04	XI
10.	Mobiles	5.54	I
11.	Farmer fairs	0.59	VIII
12.	Demonstration	0.01	XIII A
13.	Folders	0.01	XIII B
14.	Film shows	2.75	V
15.	Exhibition	0.79	VII
16.	Internet	0.20	X
17.	OFT(On Farm Trail)	0.00	NIL
	Overall Average	2.37	

4. Economic motivation

The Table-4 shows that the majority 51% of the respondents had medium level of economic motivation followed by low 27% and high 22% level economic motivation, respectively. On the basis of data, it can be said that there was no much difference found in economics motivation among respondents. The mean of score for economic motivation was observed to be 21.19 with a range of minimum 16 and maximum 25.

Table 4: Distribution of the respondents according to economic motivation: N=100

S. No.	Categories (score value)	Respondents	
		Number	Percentage
1.	Low (up to 19)	27	27.0
2.	Medium (20-23)	51	51.00
3.	High (24and above)	22	22.00
	Total	100	100.00

Mean=21.19, S.D. =2.635, Min. =16, Max. =25

5. Scientific orientation

It is apparent from the Table-5 that the maximum number of respondents 44% was found having medium level of scientific orientation while 37% and 19% respondents were found in the categories of high and low levels of scientific orientation, respectively.

The average mean of scores for scientific orientation was observed 24.61. Hence it can be concluded that most of the respondents were found possessing medium level of orientation towards scientific knowledge.

Table 5: Distribution of the respondents on the basis of scientific orientation: N=100

S. No.	Categories (score value)	Respondents	
		Number	**Percentage**
1.	Low (up to 22)	19	19.00
2.	Medium (23-27)	44	44.00
3.	High (28 and above)	37	37.00
	Total	100	100.00

Mean=24.61, S.D. =2.89, Min. =18, Max. =30

6. Risk orientation

It is apparent from the Table-6 that the maximum numbers of respondents 66% was found having medium level of Risk orientation while 21% and 13% respondents were found in the categories of low and high levels of Risk orientation, respectively.

The average mean of scores for Risk orientation observed to be 22.72. Hence it can be concluded that the respondents have medium level of bearing risk relating to improved farming system.

Table 6: Distribution of the respondents on the basis of Risk orientation. N=100

S. No.	Categories (score value)	Respondents	
		Number	Percentage
1.	Low (up to 20)	21	21.00
2.	Medium (21-25)	66	66.00
3.	High (26 and above)	13	13.00
	Total	100	100.00

Mean=22.72, S.D. =3.03, Min. =18, Max. =30

Conclusion

On the basis of the findings, it may be concluded that-

1. The majority of respondents (94%) were observes possessing Mobile phone with them and Radio (85%). Thus, it can be inferred that mobile phone and Radio were main sources for getting information's and

recreation purposes.

2. A majority *i.e. 5*2% of the respondents did not take participation in any organization followed by 48% respondents participates in one organization respectively.
3. The majority of respondents Gram pradhan and Kisanshayak are most formal Source of information, Family Members, Neighbors and Friends are most informal Source of information and mobiles and radios are most mass media Source of information.
4. Majority of respondents (51%) were in medium level of economic motivation followed by high and low levels, respectively.
5. Majority of respondents (44%) were in medium level of scientific orientation followed by high and low levels, respectively.
6. Majority of respondents (66%) were in medium level of Risk orientation followed by low and high levels, respectively.

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