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SHORT COMMUNICATION

Choice of Farmer WhatsApp Groups for Exchange the Agricultural Information

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ABSTRACT

Information and communication technology (ICT) tools are effective in timely delivery of appropriate and actionable information to farmers at lower costs than traditional extension media.

To study the Factors influencing the choice of WhatsApp groups among farmers for exchange of farming information

For this research, one of the widespread social media WhatsApp is selected. 60 farmers were randomly selected from four WhatsApp groups form the respondents of this study. The data was collected by interview method. The collected data were analysed using descriptive statistics. The results revealed that farmers using WhatsApp differ from general outlook of farmers in terms of higher land holding, better education and social hierarchy.

The farmers' selective socio-personal characters, farming situations and usage pattern of mobile, internet and WhatsApp had significant association with the choice of group. Thus, the engagement of farming community through WhatsApp can improve the quality of transfer of agricultural information.Understanding these factors influencing the choice of WhatsApp groups by farmers helps to design necessary policies /strategies in utilizing WhatsApp for exchange of agricultural information.

Information and Communication Technology (ICTs) tools are relatively easier to use and helps to change the perception of the farmers (Dhaka and Chayal,2010 and Sharma *et al*., 2014), can helps to improve farming practices (Jha *et al*., 2021 and Pradhan *et.al*., 2018) and circumvent numerous phases and events in agricultural development (Rajneesh and Sisodia, 2020). Added, social media usage among farmers are increase substantially in near future (Akshay *et al*., 2023 and Thakur *et.al.,* 2017). Education also improves extent of utilization of ICT tools (Prasad and Pradhan, 2019 and Bhavana, 2023). Social media is egalitarian in nature with increased internet accessibility. Among the social media, WhatsApp is gaining momentum across all demographics of population because of its simplicity and increased accessible and possession of mobile phone (Malik *et al*., 2021) and most of the farmers depend on their fellow farmers in obtaining farm related information (Jyothi and Kumar 2016). In this backdrop, an attempt was made to understandsocio-economic characteristics of farmers and the factors associated with choice of WhatsApp group.

Four WhatsApp groups (two groups were promoted by formal institution and another two were promoted by amateur) were purposively selected in Tamil Nadu state. From each group, 15 active members were randomly selected thus a total of 60 farmers form

the respondent of this study. Field data was collected by using pre tested semi structured interview schedule. The collected data were analysed using descriptive statistics and association between nature of group with profile were tested using Chi-square (x^2) test and Mann-Whitney U test.

General profile of the members and its association between choice of WhatsApp group : 65 per cent of the farmers were in middle and old age group (Table 1). This is in contrast with Motiang and Webb (2015) and Rehman *et al.* (2013). 81.70 per cent of them belonged to backward community, 95 per cent of them were of male. The same reported by Balkrishna and Deshmukh (2017). 46.70 per cent of the farmer had school education and the rest had graduate education. This study is in identical with Kafura *et al*., 2016, Rehman *et al.,*2013 and Elias *et al*.2013. Majority (88.30 %) of the respondents were married and this agrees with Thakur and Chander (2018). 46.6 per cent of the respondents had small and marginal land holding, followed by 45 per cent had semi medium and medium and 6.70 per cent had large holdings and 1.70 per cent of landless category. This finding is in concurrence with Mittal and Mehar (2016). Majority (85%) of them possessed livestock. 68.30 per cent of them had agriculture as their primary occupation and 43.30 per cent of them had livestock as their secondary occupation. 70 per cent of them undertaking specialized farming. 51.70 per cent of them were using only WhatsApp and 48.30 per cent were using WhatsApp along with you tube and face book. Variables education, occupation and specialised farming had highly significant role; age and livestock possession had significant role and Gender, community, marital status, and land holding

Table 1. Socio-economic profile of farmers and its association with choice of WhatsApp group (N= 30+30 = 60)

Profile	No. (%)	Nature of group	
		Organizational	Amateur
Age			
Young	11 (18.30)	8 (26.70)	3 (10.00)
Middle	28(46.70)	9 (30.00)	19 (63.30)
Old	21 (35.00)	13 (43.30)	8 (26.70)
χ^2 *value*		7.04*	
Community			
Forward	3 (5.00)	0 (0.00)	3 (10.00)
Backward	49 (81.70)	27 (90.0)	22 (73.40)
Most backward	6 (10.00)	2 (6.70)	4(13.30)
SC/ST	2 (3.30)	1(3.30)	1(3.30)
χ^2 *value*		0.24	
Gender			
Male	57 (95.00)	30 (100.00)	27 (90.00)
Female	3 (5.00)	0 (0.00)	03 (10.00)
χ^2 *value*		0.12	
Education			
Up to school education	28 (46.70)	20 (66.70)	8 (26.60)
Undergraduate	19 (31.70)	8 (26.60)	11 (36.70)
Postgraduate	13 (21.70)	2 (2.70)	11 (36.70)
χ^2 *value*		11.85**	
Marital status			
Married	7 (11.70)	2 (6.70)	5 (17.70)
Unmarried	53 (88.30)	28 (93.30)	25 (83.30)
χ^2 *value*		1.46	
Landholding pattern			
Landless	1 (1.70)	0 (0.00)	1(3.30)
Marginal (> 2.5 acres)	11 (18.30)	5 (16.70)	6 (20.00)
Small (2.5 to 5.0 acres)	17 (28.30)	10 (33.30)	7 (23.30)
Semi-medium (5-10 acres)	18 (30.00)	9 (30.00)	9 (30.00)
Medium (10-25 acres)	9 (15.00)	6 (20.00)	3 (10.00)
Large (>25 acres)	4 (6.70)	0 (0.00)	4 (13.40)
χ^2 *value*		6.62	
Livestock possession			
Yes	51 (85.00)	29 (26.70)	22 (73.40)
No	9 (15.00)	1(3.30)	8 (26.60)
χ^2 *value*		6.40*	
Primary occupation			
Agriculture	41 (68.30)	26 (86.80)	15 (50.00)
Livestock	1(1.70)	1(3.30)	0 (0.00)
Salaried	11(18.30)	1(3.30)	10 (33.30)
Self-employment	7(11.70)	2 (6.60)	5 (16.70)
χ^2 *value*		12.60**	
Secondary occupation			
No secondary occupation	6 (10.00)	2 (6.60)	4 (13.30)
Agriculture	19 (31.70)	4 (13.40)	15 (50.00)
Livestock	26 (43.30)	22(73.40)	4 (13.40)
Salaried	2 (3.30)	0 (0.00)	2 (6.60)
Self-employment	7 (11.70)	2 (6.60)	5 (16.70)
χ^2 *value*		22.78**	
Specialized farming			
Undertaking	42 (70.00)	14 (46.70)	28 (93.40)
Not undertaking	18 (30.00)	16 (53.30)	2 (6.60)
χ^2 *value*		15.56**	
Social media usage			
Only whatsApp	31 (51.70)	14 (46.70)	17 (56.70)
WhatsApp +Others	29 (48.30)	16 (53.30)	13 (43.30)
χ^2 *value*		0.61	

** Significant at 1 per cent level,
*Significant at 5 per cent level# Significant at 10 per cent level

Table 2. Selected profile of farmers and its association with choice of WhatsApp group (N= 30+30 = 60)

Variables	Minimum	Maximum	Mean	Std. Deviation	Mann Whitney "U" test (df=2)
Land size (in acres)	0.00	33.00	8.33	7.84	419.00
Farming experience (in years)	1.00	50.00	14.89	11.78	254.50**
Family size (in numbers)	2.00	7.00	4.25	1.20	428.00
Smart phone usage (in years)	0.30	15.00	5.10	3.04	250.50**
Internet usage (in years)	0.30	15.00	4.98	3.05	257.00**

** Significant at 1 per cent level, *Significant at 5 per cent level# Significant at 10 per cent level

does not have any role in choice of WhatsApp group (organizational vs amateur).

From Table 2, the farmers in WhatsApp group had an average land holding of 8.33 acres (Thirunavukkarasu *et al.,* 2019). 14.89 years of farming experience (Kavithaa *et al*., 2014) with the family size of 4.25 members (Thakurand Chander, 2018). The average smart phone usage period by the respondent is of 5.10 years and internet usage period of 3.05 (Hoffman, 2009). It is evident that farming experience, smart phone usage and internet usage played a highly significant role in choice of WhatsApp group. Thus, the members in organizational groups differ with amateur groups in terms of education, occupation, specialised farming status, age, livestock possession farming experience, smart phone usage and internet usage.

Across globe daily active users in WhatsApp messenger is expanding and act as popular communication portal for social networking. It helps in promoting farmer-to-farmer information exchange and act as an interpersonal channel, which allows immediate feedback The members in this social media easily catch-up the technological changes and they juggle too many ideas in farming. The farmers using WhatsApp are differing with other fellow farmers in their socio-economic profile. Participants with high farming experience, better education with specialized farming had association with nature of group. Thus, it helps in designing necessary policies /strategies in utilizing farmers' interpersonal communication through WhatsApp for exchange of agricultural information, adoption and improving livelihood of farmers.

CONCLUSION

The farmers using WhatsApp differ from general outlook of farmers in terms of higher land holding; education; belonged to higher social hierarchy with non-farming as either primary / secondary occupation. The participants farming experience; age; education; occupation; specialization in farming along with smart phone, internet and WhatsApp usage period had association with nature of group. Thus, engaging farming community through WhatsApp as a communication tool by extension organisations, Non-profit organisations and amateurs can improve the quality of agricultural information transferred (timeliness and accuracy).

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