Original Research Article

Social Media Usage By Commercial Vegetable Growers Of Odisha.

Abstract

The reason for which the study was made to understand the socioeconomic profile of the vegetable growers in the districts of Khordha and Puri in the state of Odisha. For this survey, 90 respondents in total were chosen at random. Pre-structured interview schedules were used to gather ~~the~~ data, and relevant statistical analysis was carried out to determine the respondents' socio-economic profile. The majority of vegetable growers, or 56.67% of the population, were found to be middle-aged; 60% of farmers had families of fewer than five people; 51.11 percent of farmers belonged to the general caste; and 36.67% had completed middle school. It was also discovered that the majority (55.56%) of the respondents were marginal farmers with less than 2.5 acres of land, the majority (40.00%) had yearly incomes ranging from (50,000 to 100,000) thousand and 32.22 percent were members of only two organizsations. In terms of extension contacts, it was shown that agricultural input merchants were the most prevalent among vegetable growers, with the majority ~~of them~~ (63.33%) having a medium level of extension contacts. 90% of farmers were classified as having a medium level of social media access.

Keywords: Socio economic profile, pre structured interview schedule, Vegetable growers, statistical analysis, social media.

Introduction

Agriculture as the primary sector of the Indian economy which is providing livelihood to more than 50 per cent of the population, is dependent on public extension system to transfer lab technologies to the land system. The public extension system had helped India to make it food scarcity to food self-sufficiency country. With the modernizsation and globalizsation era in the development process, the extension system needs revolutionized change to facilitate right information on latest technologies to extension agents, farmers and all the stakeholders at the right time. But in the present scenario, the public extension system is adversely affected by insufficient human resources, limitation of infrastructure and lack of capacity building which have created hindrance in providing location specific and need-~~-~~based technologies to ~~the~~ farmers. In India, there is a single extension agent accessible for each of the 2879 farmers, making the situation harsh (Mukherjee and Maity, 2015) [1]. The lack of timely information has created gap in the knowledge level of ~~the~~ farmers in applying modern technologies to~~in~~ their land for better production and better income. This void can be filled in some way by the application of information and communication technology (ICT) in broadcasting of timely information to policy makers, extension agents, and farmers. Farmers and experts require updated and relevant information for sustainable agricultural output, which is a critical issue for the country. These days, information and communication technology facilities have a significant impact on how information is sourced and delivered [2]. Newspapers, television, and magazines have long dominated industrial media for agricultural information sharing. However, in recent years, all Indian demographics have seen increases in technological

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knowledge, computer literacy, and smart phone and internet usage. More than 100 information and communication technology (ICT)-based initiatives, including as e-Choupal, e-aqua, Digital Green, and others, have been developed in India for agricultural and rural development. Many of them have received national and worldwide recognition for their innovative rural development approaches [3].

The twenty-first century has brought about significant developments for rural advisory services (RAS), including the need for cooperation amongst numerous stakeholders (government, business, and nonprofit) and the ability to operate as a group. It is the goal of these services to become more engaged and less "top-down." Social media can aid in RAS outreach to more productive farmers by increasing mobile phone subscriptions and lowering data tariffs. Because of the high amount of social media user engagement, it is likewise among the most participative mediums of extension. This enables faster, simpler, and more affordable data, information, and knowledge sharing while also enabling collaboration and demand-based rural advisory~~ing~~ systems. Farmers are always in need of knowledge on new seed, insect attacks, rainfall and weather patterns, machinery, plant protection, and costs [4]. This aids in crop selection, resource efficiency, and yield and income maximisation. Because of these opportunities, social media is a very useful and relevant medium for extension staff to interact with peers and clients.

One major weakness in extension services that has long been recognised is the lack of connection with farmers. Social media offers many ways to solve this problem. Social media use is clearly hampered by ~~P~~personal (lack of enthusiasm for social networking, gloomy outlook) or organi~~z~~sational constraints, infrastructure (target clients' or extension staff's lack of internet connectivity), and policy shortcomings (organi~~s~~zational regulations that limit the use of social media for work-related purposes) ~~shortcomings~~ [5]. Social media's ability to succeed hinges on how committed community members and extension workers are to utili~~s~~zing social media for promotion. This is because there are many obstacles to overcome, including the limited access to ICTs and internet resources in rural locations, appropriateness for only educated and on the internet clients, some farmers and extension workers are not aware of social media or are not ready to adopt it, a violation of personal privacy, material Piracy as well as unrelated information (Saravan 2015) [6]. Rural dwellers are using social media more and more in spite of these problems.

MATERIALS AND METHODS

The current research was conducted in the state of Odisha. Odisha was purposefully chosen for a variety of reasons. As an agrarian economy, Odisha employs around 73 per cent of its population in farming who contribute around 30 per cent to the Net State Domestic Product. Several stages of sampling was followed for the present study. Khordha and Puri districts were selected and from each, two blocks were selected that is Jatni and Khordha from Khordha district and Nimapara and Pipili from Puri district. Total 9 Gram Panchayats were selected randomly for the study. Two-gram Panchayat from Jatni, Khordha and Pipili and three-gram panchayats form Nimapara were selected randomly. The selected Gram Panchayats were- Harirajpur and Panchupali from Jatni block; Kurudhamal and Gada Haladia from Khordha block; Orakal and Pubasasana from Pipili block; Tulasipur, Gada Amareswara Prasad and Dhanua from Nimapara block. For the study, an ex post facto research design was used. To

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assess the data and reach logical conclusions, statistical techniques including frequency, percentage, standard deviation, mean, and correlation matrix were employed.

RESULTS AND DISCUSSION

1. **Age (X_1)**

Table 1. Respondent distribution according to age (n = 90)

S. No.	Category	Frequency	Percentage
1.	Young (up to 30)	6	6.67
2.	Middle Aged (31 to 50)	51	56.67
3.	Old (Above 50)	33	36.66

The table's results showed that 56.67% (51 numbers) of the member respondents fell into the middle-aged category, followed by 36.66% (33 numbers) of the old-aged category and 6.67% (6 numbers) of the young-aged category.

2. **Family Size (X_2):**

Table 2. Respondent distribution according to family size (n = 90)

Sl.	Category	Frequency	Percentage
1.	Small (up to 5)	54	60.00
2.	Medium (6-10)	26	28.89
3.	Big (Above 10)	10	11.11

According to the above table, the majority of respondents, or 60.00% (54 numbers), belonged to small families with up to four people. These were followed by medium families, which have between five and eight members, with 28.89% (26 numbers), and large families, which have ten or more members. The number of small families increased along with the number of recipients who had nuclear families.

3. **Caste (X_3):**

Table 3. Respondent distribution according to caste (n = 90)

Sl.	Category	Frequency	Percentage
1.	SC	10	11.11
2.	ST	6	6.67
3.	OBC	28	31.11
4.	General	46	51.11

The majority of responders, as seen in the above table, i.e., 51.11 per cent (46 numbers) belonged to General category followed by 31.11 per cent (28 numbers) from OBC category, 11.11 per cent & 6.67 per cent (10 & 6 numbers) from SC and ST category respectively. This showed minor societies use fewer social media in vegetable production.

4. **Education (X_4):**

Table 4. Respondents' distribution according to level of education (n = 90)

Sl. No.	Category	Frequency	Percentage

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1	College and above	12	13.33
2	High School	29	32.23
3	Middle School	33	36.67
4	Primary School	12	13.33
5	Can read only	4	4.44

It was found that 36.67 per cent respondents were in middle school, 32.23 per cent were in high school followed by college and above (13.33%), primary school (13.33%). Majority of the respondents were found to be educated.

5. Size of Landholding (X_5):

Table 5. Respondents' distribution according to the amount of land they own (n = 90)

Sl.	Category	Frequency	Percentage
1.	Large farmers(>5acres)	10	11.11
2.	Small farmer (2.51acres–5acres)	30	33.33
3.	Marginal farmer(<2.5acres)	50	55.56

It was discovered from the above table that 55.56 percent of the respondents were marginal farmer having land holding less than 2.5 acres followed by small farmers (33.33%) having 2.51 to 5 acres land and 11.11 per cent of the respondents were large farmers. Most of the vegetable growers who are accessing to social media were small and marginal farmers.

6. Average Annual Income (X_6):

Table 6. Distribution of respondents based on their annual income (n = 90)

Sl. No.	Category	Frequency	Percentage (%)
1.	Up to 50,000	16	17.78
2.	50,000-100,000	36	40.00
3.	1,00,000-3,00,000	30	33.33
4.	3,00,000-5,00,000	8	8.89

The result obtained from the above table revealed that majority of the respondents i.e., 40.00 per cent (30 numbers) were having annual income between Rs. 50000 to Rs.100000. 33.33 per cent (36 numbers) had annual income between Rs. 1,00,000 - 3,00,000 while 17.78 per cent (16 numbers) had income level below Rs.50,000. Only 8.89 per cent (8 number) respondents were having annual income above 3,00,000.

7. Social participation (X_7)

Table 7. Respondent distribution based on social participation (n = 90)

Sl. No.	Category	Frequency	Percentage (%)
1.	No Membership in any organisation	21	23.33
2.	Membership in only one organisation	24	26.67
3.	Membership in only two organisations	29	32.22
4.	Membership in > two organisation	16	17.78

According to the data in the above table, 32.33% of respondents were members of two organisations, whilst 26.67% of respondents were members of just one. Of the respondents,

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17.78 percent had memberships in more than two organisations, whereas 23.33 percent did not have any affiliations. The social participation of the vegetable producers who used social media was quite good.

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8. Cosmopoliteness (X_8)

Table 8. Respondent distribution based on how frequently they visit places outside of the village (n = 90)

Sl. No.	Category	Frequency	Percentage (%)
1.	Twice or more in a week	10	11.11
2.	Once in a week	19	21.11
3.	Once in a fortnight	17	18.89
4.	Once in a month	34	37.78
5	Rarely	10	11.11

According to the table, 37.78% of respondents went outside once a month, followed by once a week (21.11%) and once every two weeks (18.89%).

9. Extension Contact (X_9)

Table 9. a. Distribution of respondents based on their extension contact (n = 90)

Extension professionals	Mean score	Rank
State Agricultural Department	1.67	VI
KVK	1.78	IV
District/block Level Officials	2.03	II
Agricultural Input dealer	2.40	I
Private Companies	1.71	V
Financial Institution	1.80	III
Entrepreneurial Organization	1.62	VII
NGOs	1.71	V

The table found that the respondents were having more contact with agri input dealers (mean score=2.40) followed by district/block level officials (2.03) and financial institution (1.80). Due to more localite nature of the farmers the agri input dealer was dominating the extension contact of the farmers in terms of facilitating information mostly on insect and disease management. Contact with entrepreneurial organizations found least contacted by the farmers (1.62) [7].

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Table 9. b. Respondent distribution based on extended contact (n = 90)

Sl. No.	Category	Frequency	Percentage (%)
1.	Low	16	17.8
2.	Medium	57	63.33
3.	High	17	18.9

Only 18.9% (17 numbers) of the respondents had high extension contact, according to the data from the table, whereas 63.4 percent (57 numbers) and 18.9% (17 numbers) of the respondents had medium and low levels of extension contact, respectively. It showed that the responders were in good communication with the local extension agents.

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10. Extension Participation (X_{10})

Table 10. Respondent distribution based on extended participation (n = 90)

Extension Activities	Mean score	Rank
Meeting	2.39	I
Training	2.03	II
Demonstration	1.84	III
Krushi mela	1.69	IV
Campaign	1.69	IV
Field Days	1.66	V

The above table revealed that the respondents were attending meeting regularly (mean score=2.39) followed by training (2.03) and demonstration (1.84). The least extension participation was found with the field days with mean score of 1.66.

11. Social media Readiness (X_{11})

Table 11. a. Respondent distribution based on mode of social media use:

Sl.	Devices	Frequency	Percentage
1	Mobile	61	67.78
2	Laptop	4	4.44
3	Tablet	23	25.56
4	Desktop	2	2.22

It was found that 67.78 per cent of the respondents were using mobile to access social media followed by tablet (25.56%). 2.22 and 4.44 per cent found using desktop and laptop for accessing social media respectively. Dominance of smart phone had enhanced easiness to use social media by the respondents.

Table 11. b. Respondent distribution based on social media access

Sl. No.	Category	Frequency	Percentage (%)

1	Low	5	5.56
2	Medium	81	90
3	High	4	4.44

According to the above table, 90% of respondents had a medium degree of social media access, while 4.4% had a low level of social media access. Only 5.56 percent of those polled had extensive social media use. The effectiveness of social media use has increasingly encouraged more vegetable growers to use it for getting need-based information at any time and from any location with reliable internet access.

Table 12. Socioeconomic correlation Matrix

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	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}
Age	1										
Family size	.033	1									
Caste	-.135	-.135	1								
Education	-.424**	-.162	.236*	1							
Land Holding	-.305**	.247*	.097	.244*	1						
Annual Income	-.196	.105	.121	.211*	.585**	1					
Social Participation	-.147	.118	-.075	-.091	.075	.120	1	.452**	.087	.016	-.039
Cosmopoliteness	-.181	.090	-.268*	-.029	.180	.106	.452**	1			
Extension Contact	-.157	-.095	.089	.217*	.249*	.193	.087	.106	1		
Extension Participation	.063	.103	-.016	-.100	.016	-.098	.016	.078	.307**	1	
Social media Readiness	-.042	.127	-.046	.075	.039	.089	-.039	.030	.204	.170	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

CONCLUSION

The current study focused on determining the respondents' socioeconomic characteristics. It was discovered that the majority of vegetable producers, i.e., 56.67%, belonged to the middle-aged population, 60% of the farmers had families of less than five members, 51.11 % belonged to the general caste, and 36.67 % had education level up to middle school. It was also discovered that the majority (55.56%) of respondents were marginal farmers with less than 2.5 acres of land, the majority (40.00%) had yearly incomes ranging from (50,000 to 100,000) thousand and 32.22 percent were members of only two organisations. In terms of extension contacts, it was shown that agricultural input merchants were the most prevalent among vegetable growers, with the majority of them (63.33%) having a medium level of extension contacts.90% of farmers were classified as having a medium level of social media access.

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