



Impact of Communication on Livelihood of Tribal Goat Farmers of Kandhamal District in Odisha, India

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The present study was conducted to find out the intensity of communication of tribal goat farmers with different stakeholders to improve their livelihood. Kandhamal district of Odisha was purposively selected for the study as this district is highly concentrated with local goats. From randomly selected four blocks of the district, four villages were also selected randomly from each block. Thereafter, seven goat farmers from each village were selected randomly which constitute the sample size of 112 goat farmers for the study. The data for the study was collected personally by the researcher with the help of pre-tested interview schedule. The study employed ex-post facto research design to capture field data. Communication impact a component of overall livelihood impact was measured with the help of 10 validated statements in a five-point Likert type scale with

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scores on a continuum with 1 (strongly disagree) to 5 (strongly agree) for each of the statement. The study revealed that the farmers exposure to mass media, and interactions with professionals of veterinary department has increased due to goat farming. However, their overall communication impact is medium in nature indicating that the important stakeholders including government agencies involved in promotion of goat farming in the tribal areas should put emphasis on improving the communication ability of the famers which will be useful to them to access relevant information for strengthening their livelihood.

Keywords: Communication impact; livelihood; tribal farmers; goat farming; Odisha.

1. INTRODUCTION

Goat husbandry plays a significant role in the tribal economy of our country. This occupation provides readymade case to the farming community and in the event of crop failure and emergencies, its importance to meet the financial needs increases manifold. This small animal rearing not only meets the financial requirement but also meets the important social and cultural needs of the community. Since time immemorial, goat rearing is one of the important supplementary occupations of the tribal community due to its various advantages like ease in handling, low inputs requirement for rearing, and ease managemental practices. But in the recent past, due to changes in the economic condition of the people and change in preference of food, the demand for chevon has increased in the country for which the people have started goat farming on a commercial basis. The present-day goat entrepreneurs are increasing their knowledge and skills on goat farming, studying urban and rural markets for selling products, seeking opportunities to get credit, increasing extension and communication contact, etc. to get maximum benefit from the business. Whereas a few years back, it was mainly associated with marginal, landless and tribal farmers of the country. The tribal farmers of Odisha, which constitutes 23 per cent of the population, predominantly rear the goat to meet their financial and social needs. The state is famous for the native goats like Ganjam, Black Bengal, Raighar, Badavihana which are in heavy demand for meat in the eastern part of the country. These breeds are unique in nature and adapt to the local situation very well. But the tribal farmers of the state are not getting enough return from the occupation due to their scale of operation and low level of knowledge and skill on scientific goat farming. One of the important factors which contribute significantly for growth and promotion of any activity is the communication and extension behaviour of the individual engaged in occupation. The urban

educated entrepreneurs in goat farming are getting all such information due to their higher education level and ability to take risk. The same is not found amongst the tribal community. Studies by various authors have indicated that the extension contact, and communication ability of the goat framers play significant role in opting right decisions for goat farming which leads towards the improvement of livelihood condition of the farming communities [1,2,3,4]. Keeping these facts in mind, the present investigation was carried out to study the impact of communication on the livelihood of tribal famers of Kondhamal district of Odisha.

2. MATERIALS AND METHODS

Kandhamal district of Odisha was selected purposively for the study as this district is highly concentrated with local goats. Out of 12 blocks of the district, four blocks- Phulbani, Khajuripada, K. Nuagaon and Baliguda, were also selected randomly and from each block, four villages were also selected randomly. Thereafter, from each village seven goat farmers were selected randomly which constitute the sample size of 112 goat farmers for the study. The goat farmers were selected for the study who were having experience of rearing goats for five years and have minimum of 10 goats at the time of selection of the respondents. The selection of the respondents for the study was done with the help of local goat farmers, para-veterinary workers of the blocks and field veterinary doctors. The researcher collected data personally with the help of pre-tested interview schedule. The study employed ex-post facto research design to capture field data. With the help of 10 statements validated by experienced faculties of College of Veterinary Science and Animal Husbandry, Odisha and experienced field officers of Sate Veterinary department of Government of Odisha, communication impact a component of overall livelihood impact was measured.

The responses of the goat farmers were recorded in a five-point continuum Likert type

scale on a continuum with 1 (strongly disagree) to 5 (strongly agree) for each of the 10 statements. Before final data collection, the complete schedule was pretested with 10% non-sample neutral respondents to see what might be removed, added, or changed. Changes in the construction of items and their sequences were made in response to the results of the pre-testing. Personal interview technique was used with the help of pre-tested structured questionnaire for data collection. The questions were asked in local language (i.e. Odiya). Enough probing and explanation were done to ensure that the respondents had a thorough comprehension of the questions to receive an adequate response. Afterward, group talks with the respondents were held in certain cases to confirm the individual replies. The data collected from tribal goat farmers were edited tabulated and analyzed using suitable statistical tools i.e. frequency, percentage, mean, standard deviation and Pearson's coefficient of correlation to draw the inferences.

3. RESULTS AND DISCUSSION

The reciprocal exchange of ideas through any effective means is referred to as communication [5]. Through communication with the experts or exposure to media, farmers used to get valuable information which helps them to develop capacity for better management of animals [1,6]. The change in extension behaviour occurs due to exposure to scientific goat farming which helps the farmer to earn more from the occupation. In measuring communication impact on beneficiaries, the farmers' communication with the different stake holders is considered. Their exposure to mass media, frequency of visits to different institutions like market, bank, veterinary hospitals, etc., are also included in the study. For this, ten statements were carefully constructed in this study, measuring the farmers' capacity to communicate with other farmers, feed, medication, and meat stores, as well as banks for accessing loans, which would have a direct influence on his livelihood. The 112 farmers were presented these 10 questions, and their replies were tallied on a five-point scale (5 to 1).

3.1 Communication Impact on Livelihood of Goat Farmers

The response of the tribal goat farmers to these 10 communication impact statements are presented in Table 1. The majority of the respondents (41.96%) had expressed that their exposure to the TV,

magazine, newspaper, etc., has increased whereas only 5.35 % reported that there was no change in their exposure to multi-media. Similarly, 46.84 respondents expressed that their contact with veterinary officials and PRI members has increased whereas 6.30% disagreed with it. A majority, 42.72% farmers responded favourably to the statement of increased visit to town due to goat farming whereas 0.90 % disagreed to the statement. To a question to the respondents whether your exposure to Krishi and Animal Husbandry programme in TV viewing has increased due to goat farming, 29.72% agreed with the statement and only 1.80% respondent disagreed to this statement. To the question on your ability to interact with medicine and feed suppliers, 41.81% remain undecided on the statement whereas 7.27% disagreed. The study also revealed that 32.72% of the respondents' ability to approach banks and other financial institutions for availing credit has increased due to goat farming whereas 3.63% of the respondents disagreed to the statement. To know whether the goat farmers ability to bargain with the meat traders has increased or not, it was found that 39.63% of the respondents mentioned that their ability to bargain with goat meat retailers for better pricing has developed whereas only 2.70% of the respondents said their ability has not improved. 29.35% of the beneficiaries expressed their inability to travel to cities to attend agricultural exhibitions whereas 1.83% expressed their strong inability especially to state headquarters having 3.43 mean score of this statement. The majority of farmers (34.54%) agreed that they could communicate and demonstrate better scientific management practices of goat farming to their fellow villagers. Due to goat farming, the respondents were exposed to training programmes conducted by different agencies, and interacted with different stakeholders which has increased their communication ability. In the study, 35.13% of the respondents agreed that their skill of interpersonal relationship has increased and they are now comfortable to interact with anyone, whereas, 8.13% did not agree to this statement. The overall mean score for impact of communication of beneficiaries was 35.27.

The distribution of the respondents on the level of communication impact due to goat rearing is presented in Table 2. The findings presented in the table indicated that 63.41% of the goat farmers had medium level of impact on communication due to goat farming followed by

2.67% and 33.92% respondents were having high and low level of communication impact, respectively.

Small ruminants provide not only economic advantages but also intangible benefits (e.g., savings, emergency insurance, cultural and ceremonial purposes) [5]. This is achieved by having effective communication between the different stakeholders in the process of development. Communication should lead to shared understanding between individuals [5]. Access to information and improved communication are critical to improved livelihood

options [7]. Individuals' lack of access to information including marketing information affects sustainable livelihoods [8]. The findings of the present study reveals that there is improvement of communication between the tribal goat farmers and other players which is very important for improving livelihood as reported by different authors above. The studies on goat farming conducted in Odisha by the authors produced similar results [9,10]. The tribal goat farmers of the study area are consulted by other farmers in the community and acknowledged by government officials due to their improved communication ability.

Table 1. Communication impact on livelihood of goat farmers

Sl. No.	Statement	Responds					mean
		SA	A	UD	DA	SD	
1	Exposure to multimedia like TV, Newspaper, magazine, radio, etc. has increased	47 41.96	29 25.89	18 16.07	12 10.71	6 5.35	3.42
2	Viewing frequency of Krishi darshan programme in TV has increased	32 28.82	33 29.72	31 27.92	13 11.71	2 1.80	3.69
3	Frequency of interacting with veterinary, para-veterinary workers, PRI and other officials has increased	52 46.84	32 28.82	15 13.51	5 4.50	7 6.30	3.95
4	I am visiting to town and other places now more frequently than before	22 20	47 42.72	24 21.81	16 14.54	1 0.90	3.64
5	My communication ability to interact with feed suppliers, medicine and instruments dealers has increased	19 17.27	46 41.81	23 20.90	14 12.72	8 7.27	3.46
6	My feeling ease and comfortable now than before to approach financial institutions like banks for credit and other services	24 21.81	29 26.36	36 32.72	17 15.45	4 3.63	3.53
7	My ability to demonstrate and explain scientific goat management practices to my fellow villagers has increased	24 21.81	38 34.54	26 23.63	17 15.45	5 4.54	3.49
8	I am now attending frequently in agricultural and A H exhibition at district and state headquarters	14 12.84	30 27.52	31 28.44	32 29.35	2 1.83	3.21
9	My interpersonal skill to communicate with different functionaries has increased.	11 9.90	39 35.13	38 34.23	14 12.61	9 8.10	3.25
10	My bargaining power with the goat traders has increased now than before	17 15.31	44 39.63	26 23.42	21 18.91	3 2.70	3.45
	Mean score	35.27					
The figures in upper row are frequency and lower is percentage							

Table 2. Distribution of beneficiaries as per communication impact

Communication Impact		Remarks	
Sl. No	Impact range	Frequency	Percent
1	High level impact (Mean+1S.D) (>37.95)	3	2.67
2	Medium level impact (Mean+1S.D) to (Mean-1S. D)	71	63.41
3	Low level impact (Mean-1 S.D) (<26.37)	38	33.92

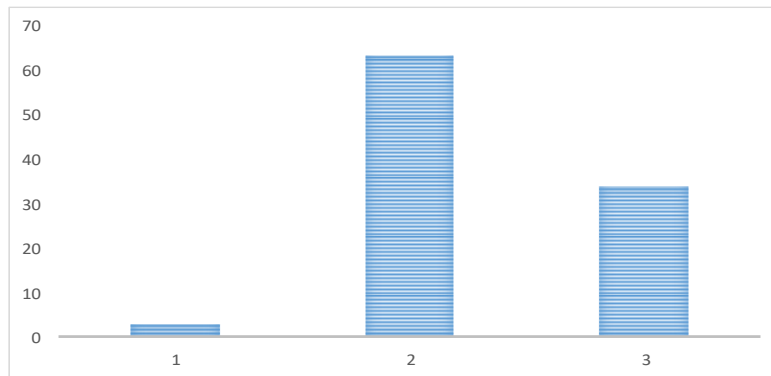


Fig. 1. Distribution of the goat farmers according to level of communication impact

Table 3. Correlation analysis of selected socio-economic variables of respondent with communication impacts on respondent

	Age	Education	No of Goats owned	Communication Impact
Age	1			
Education	-0.160*	1		
No of Goats Owned	-0.010	0.828**	1	
Communication Impact	0.145*	0.196**	0.107	1

(* 5% level of significance, ** 1% level of significance)

3.2 Correlation Analysis of Selected Socio-economic Variables of Respondents with Communication Impacts on Respondents

Selected socio-economic variables of respondents with communication impact gives an indication of positive and negative association between variables [11]. The data of selected socio-economic variables with communication impacts were subjected to zero order Pearson's correlation coefficient and findings are presented in the Table 3 [12].

The analysis of above data reveal that age and education of the respondent are positively and significantly correlated with communication impact of goat rearing on the livelihood of farmers whereas number of goats owned by the beneficiaries is positively related to communication impact [13]. The studies conducted by authors in Odisha on goat farming yielded similar type of results [9,10,3].

4. CONCLUSION AND RECOMMENDATION

This paper attempted to find out the improvement of communication ability of the farmers due to engagement in goat farming. All stake holders

including state agencies, development organisations, research institutions, media and individual citizens have responsibility towards the promotion of effective communication mechanisms to enhance tribal farmers capacity to access information. The findings of the study revealed that there is medium level of communication impact on livelihood of farmers. The authors emphasize that no livelihood improvement is successful without effective communication improvement strategies. Therefore, the government agencies, non-government organisations and others should provide relevant information and improve the skills of the farmers to seek information from different players of the ecosystem of goat farming.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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