

Need and accessibility of agricultural information among the tribals of Thuamul Rampur Block of Kalahandi District, Odisha

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ABSTRACT

Agriculture, which is considered as an age old economic activity, constitutes an important source of livelihood in India. The role of farmers in general and tribal farmers in particular, is of great importance due to their contribution to the nation's economy. The present study tries to investigate the way tribal farmers access and use information in their agricultural fields to attain sustainable livelihood in Thuamul Rampur block of Kalahandi district, Odisha. The paper also attempts to highlight agricultural information needs of the tribal farmers. The study seeks to establish the farming activities of the tribal farmers, ascertain their information needs, channels of information and the problems they face while seeking information and suggest ways for improvement in the potential of farming. It is based on primary survey using random sampling method covering 66 tribal farmers of three Panchayats of Thuamul Rampur block of Kalahandi, Odisha. The study concludes that most of the farmers are illiterate, small-scale farmers, with low income levels and therefore, dependent upon other farmers for relevant information on agriculture. This process delays and limits their access to and implementation of various government schemes and scientific knowledge to boost their agricultural production.

Key Words : Tribe, Agricultural information, Information needs, Sustainable livelihood

INTRODUCTION

The progress of agriculture sector directly contributes to the economic development of any state. Relevant and timely information helps farmers to take right decision for growth of agriculture activities. Various factors affect agricultural productivity. Among others, use of correct and timely agricultural information enhances productivity in a number of ways. Information on weather change, best practices of farming and access to market information helps farmers take correct decisions about the crops to be planted and sold. The tribal farmers require various types of information for their day to day agricultural activities.

The present study focuses upon the dominant tribes of Thuamul Rampur block of Kalahandi district. Thuamul Rampur is a tribal dominated block with 58.17 % of population belonging to scheduled tribe category. It is situated at 723 metres above sea level in the Eastern Ghats. It is one of the 13 blocks in Kalahandi district and lies in the southern-most part of the district. Situated at

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coordinates of 19° 32" North and 82° 55" East, it is surrounded by Rayagadadistrict in the East and Koraput and Nabarangapur districts in the west, respectively. A dense vegetation and hilly topography favours their world of isolation. Therefore, tribal concentration is more in these parts of the state. The block has no urban population and transport facilities are very critical. The block has a favourable climate as compared to other blocks of district due to its high altitude.

Tribes of Thuamul Rampur mainly consist of the Gonds, the Kuttia Kondhs and the Parajas. They inhabit the densely forested hilly terrain of the Eastern Ghats. The basic occupation of tribes of this region includes cultivation, animal rearing and firewood collection. The 'Gond' or 'Gondi', a scheduled tribe of Odisha, presently is a tribal peasant community, although the history records them as a 'warrior community'. 'Kuttia Kondh' is one of the primitive sub-tribes of the Kondh tribe. The Kuttia Kondhs reside mostly in Lanjigarh, Thuamul Rampur, Madanpur Rampur and Bhawanipatna blocks of Kalahandi district. Kuttia Kondhs are mostly dependent on shifting cultivation, cultivation of minor agricultural products and rearing of animals. The 'Parajas' are one of the well-known tribes of Odisha and found in the southern part of Odisha and some other parts of the Dandakaranya region. Their mother tongue is Porji, a form of Gondi, belonging to Dravidian family of languages. It is further modified by local tongues like Odia or Telugu. Parajas are generally hill cultivators. They are fond of cattle wealth.

The region lacks basic infrastructural facilities like transport, irrigation etc. which restricts them in their traditional domain of agriculture practices. The endemic agriculture is confined to production of maize, finger millets and rice. Poor road connectivity and un-surfaced roads to most of the villages remain hindrances to the growth in Thuamul Rampur block. The indigenous knowledge of agriculture needs an improved farming system. Modern farming practices help to improve agriculture yield. Thus, agriculture information is a powerful tool in addressing agriculture needs. The present study is meant to identify the areas of information needs and problems which restrict tribal farmers from accessing agriculture information for improved crop production.

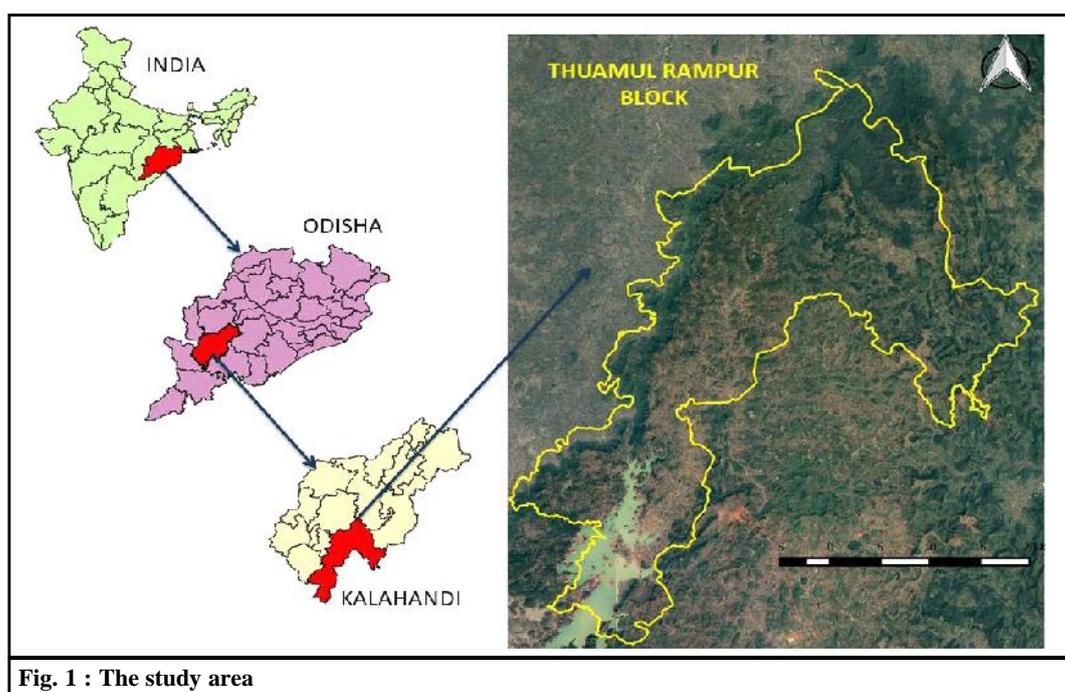


Fig. 1 : The study area

Literature Review:

Okwu and Umoru (2009), in their case study on women farmers' agricultural information need and accessibility of Benue state, Nigeria, explained regarding the areas of information needs, sources of agricultural information and intensity of demand for agricultural information needs. Data were collected primarily using simple random sampling technique and it was found that most of women farmers had no formal education and need information particularly on fertilizer application, pesticide application, improved farm implements, high yielding variety crops and marketing system.

Access and use of agricultural knowledge among the farmers were explained by Lwoga and others (2011) in a case study over six districts of Tanzania, Africa. Their study is based on mixed quantitative, qualitative and participatory techniques which revealed that the information needs and information seeking patterns are local specific and they mostly depend on neighbours and friends for agricultural knowledge. Radio and advanced technologies like cell phones and internet were used at a very low rate, despite their availability among the communities. The study emphasized to conduct awareness programmes and establishment of centres to provide information in the form of print technologies to deliver relevant information to farmers.

A study carried by Bachhav (2012), on rural farmers of Maharashtra shows that, most of rural farmers preferred to drag information on agriculture from fellow farmers following by newspapers and government offices. Large numbers of respondents need information on daily basis, while seeds availability, new crop production and fertilizer availability are the areas farmers need information about. The study emphasized on new crops, better yielding seeds, fertilizer availability for better agricultural development.

In a comparative study of peri-urban and rural setting of Kenya's agricultural information access among smallholder farmers, Odongo (2014) found that in both areas the agricultural knowledge shared among the neighbours and own tacit knowledge on agriculture was being used. He observed that government extension agents were a vital source of information at peri-urban areas, while entry of private stake holders increased in rural areas. The use of ICT was influenced by the nature of crops grown, information needs and infrastructure.

Objectives of the Study:

The present study has the following objectives:

1. To identify various agricultural information needs of tribal farmers in the study area.
2. To examine the sources of information to tribal farmers.
3. To find out major problems encountered by tribes during accessing agricultural information.

METHODOLOGY

The study is based on primary survey of the respondents of three selected Panchayats of Thuamul Rampur block of Kalahandi district. The data collected by primary survey includes the demographic profile of the respondents as well as deals with types of information needs, areas of information needs, various types of information sources and the problems faced by the tribes to access agricultural information. A well-structured interview schedule was developed for data collection. The survey was conducted with random sampling method by taking 66 respondents from three Gram Panchayats of Thuamul Rampur block of Kalahandi district, namely, Ranipadar, Dumerpadar and Majhigaon.

Sex	Ranipadar	Dumerpadar	Majhigaon	Total
Males	17	16	19	52
Females	05	06	03	14
Total	22	22	22	66

Source: Primary Survey by the Authors.

Sr. No.	Variables	Category	Total No. of Households:(n = 66)	
			No	Percentage (%)
1.	Age	<30	05	7.57
		30-40	17	25.75
		40-50	27	40.9
		50-60	11	16.66
		>60	06	9.09
2.	Family Size	Small (<4)	28	42.42
		Medium (4-8)	31	46.96
		Large (>9)	07	10.6
3.	Educational	Illiterate	38	57.57
		Primary	17	25.75
		Secondary	08	12.12
		Intermediate and above	03	4.54
4.	Land Holding	Small (< 1 acre)	41	62.12
		Medium (1 acre-3 acre)	20	30.3
		Large(>3 acre)	05	7.57

Source: Primary Survey by the Authors.

The highest percentage of tribal farmers belongs to the age group of 40-50(40.9%) followed by age group 30-40(25.75%) and age group 50-60(16.66%). The age group less than 30 and more than 60 are 7.57% and 9.09%, respectively. This indicates that the younger section of population participates in agricultural activities while the percentage of elder section is comparative high. Most of the farmers have medium size family (46.96%) followed by small size family (42.42%) and large size family(10.6%). A very marginal section attended intermediate and above, while 25.75% and 12.12% tribal farmers attended primary and secondary education. Most of the farmers are illiterates (57.57%), which is an obstruction to access agricultural information. Farmers with small land holding are 62.12%, while medium and large land holding farmers are 30.3% and 7.57% respectively.

RESULTS AND DISCUSSION

The survey revealed some startling facts about the information needs, its sources and problems in this tribal belt.

Sr. No.	Type of response	No.	Percentage
1.	Monthly	14	21.21
2.	Sometimes	41	62.12
3.	Never	11	16.66

Source: Primary Survey by the Authors.

It is obvious from Table 3 that as far as the periodical information need is concerned, 21.21% of tribal farmers need monthly information, 62.12% of farmers need information sometimes and 16.66% of tribal farmers never need any information related to agriculture. Hence, a large proportion of farmers need some or the other agricultural information sometimes.

Sr. No.	Areas of Information Need	Frequency	Percentage
1.	New crop production	39	59.09
2.	Seeds availability	52	78.78
3.	Fertilizer availability	40	66.66
4.	Fertilizer application methods	37	56.06
5.	Insecticide availability	52	78.78
6.	Pesticide availability method	39	59.09
7.	New agricultural equipments	38	57.57
8.	Government scheme	39	59.09
9.	Transport facilities	39	59.09
10.	Marketing facilities	43	65.15
11.	Weather condition	40	66.66
12.	Irrigation	45	68.18

Source: Primary Survey by the Authors.

Table 4 indicates the areas of information needs in which seeds availability (78.78%) and insecticide availability (78.78%) rank the highest. The other areas of information need to farmers are irrigation (68.18%), fertilizer availability (68.18%), weather conditions (66.66%), marketing facilities (65.15%), new crop production (59.09%), government schemes (59.09%), transport facilities (59.09%), new agricultural equipments (57.57%) and fertilizer application methods (56.06%). Thus, tribal farmers need information largely on ground of seeds availability, insecticide availability, irrigation, fertilizer availability and marketing.

Sr. No.	Information sources	Frequency of responses	Percentage (%)	Rank
1.	Govt. Offices	25	37.87	4 th
2.	Field officers	29	43.93	3 rd
3.	Community leaders	16	24.24	6 th
4.	Other farmers	49	74.24	1 st
5.	NGOs	38	57.57	2 nd
6.	Radio	18	27.27	5 th
7.	Television	02	3.03	9 th
8.	Newspapers	03	4.54	8 th
9.	Posters	13	19.69	7 th

Source: Primary Survey by the Authors.

Table 5 shows the various sources through which farmers can get agricultural information. It reveals that the sources like other farmers (74.24%) and NGOs (57.57%) are prominent sources of agricultural information to farmers, while field officers stand at 43.93%, government offices 37.87%, radio 27.27%, community leaders 24.24%, posters 19.69%, newspapers 4.54% and television 3.03%. It proves that the inter-personal communication among farmers for agricultural production

as their dependency for information is high on other farmers. Certain NGOs are trying to provide them information as well as seeds, fertilizers and plants.

Table 6 : Major problems faced by tribal farmers while seeking information: (n=66)

Sr. No.	Types of Problem:	Response Frequency	Percentage
1.	Lack of personal interest	42	63.63
2.	Illiteracy	38	57.57
3.	Ignorance of information sources	39	59.09
4.	Language problem in accessing information	31	46.96
5.	Irregular touch with field officers	47	71.21
6.	Poverty	49	74.24
7.	Unavailability of information centres	39	59.09
8.	Ignorance of government responsibility	39	59.09

Source: Primary Survey by the Authors.

Poverty and irregular touch with field officers are the major problems faced by tribal farmers with 71.21% and 74.24% respectively. Lack of personal interest (63.63%), ignorance of information source (59.09%), unavailability of information centres (59.09%), ignorance of government responsibility (59.09%) and illiteracy (57.57%) are other problems faced by the tribal farmers. Language problem in accessing agricultural information is the least with 46.96%. It reveals the dark side of poverty which limits them within certain crops of traditional origin.

Main Findings:

It is found that most of the tribal farmers in Thuamul Rampur block need agricultural information for various purposes to attain sustainable livelihood and sizeable income. The main findings are follows:

1. Most of the tribal farmers are above the age of 40 and small-scale farmers. Due to high levels of illiteracy they are not able to know the potentiality of the information sources to meet the agricultural needs.
2. Most of the tribal farmers need information on the ground of seeds availability, fertilizer availability and irrigation.
3. Most of the farmers depend on other farmers for agricultural information.
4. Poverty, irregular touch with field officers and illiteracy are the major constraints encountered by tribal farmers of Thuamul Rampur block.

Conclusions:

Most of the farmers in Thuamul Rampur are small-scale farmers and practice subsistence agriculture like rice, maize and finger millet (*Mandia* in local language). Other crops of mainstream are the least practiced due to the unavailability of seeds, fertilizers and unawareness of cropping process. Improvement of communication and transport facilities are the need of the hour in this region for development of agriculture. Development of other crops and promoting marketing facilities is also required.

Recommendations:

Based on the study, some recommendations may be made:

1. Agricultural information programmes should be conducted by government officials for

promoting agriculture among the tribals.

2. Field officers should concentrate on the need of agricultural information in areas of seeds availability, fertilizer availability and irrigation.

3. Development of transport routes in the interior tribal villages for marketing of their products is an urgent need.

4. There is a need of provision of easy loans to tribal farmers to improve the production capacity.

5. Government should promote ICT-based agricultural awareness programme through field officers for the benefit of local farmers.

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