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## Original Research Article

## A study of socio-economic and religious diversity of rubber cultivators in Tripura

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## ABSTRACT

This paper is an attempt to highlight the socio-economic and religious life of tribal rubber cultivators in Tripura. It has been found that the majority of cultivators have a monthly income between Rs. 10,000-20,000. Income from rubber cultivation fluctuates due to the quality and quantity of latex. Hinduism is the popular religion among rubber cultivators. Rubber cultivators have the basic knowledge of writing, speaking and normal arithmetic calculation. The majority of households are actively involved in politics. Firewood is the main source of fuel, but the popularity of LPG is also growing. Electricity is the main source of energy. The use of tape water and tube well is increasing continuously. So, it can be concluded that the social-economic life of tribal rubber cultivators is empowered after rehabilitation in the rubber plantation.

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## 1. Introduction

Rubber is an important commercial plantation. It has its origin in the Amazon basin and from there it was brought to India and has become the more popular plantation in the country today (Chaudhury & Sarkar, 2020). Rubber plantation was first familiarized in Kerala during the British period. Natural rubber or latex is a commercial product of rubber plantations (Bela, 2016). Rubber is the basic component for manufacturing various goods used in our daily life (Ziegler et. al., 2009). It is an important raw material for heavy industries like kitchenware, motor tire, plastic, houseware etc. Rubber items are being used by people from birth to death (Chaudhuri et. al., 2016).<sup>1-5</sup>

North-eastern India has extensive areas suitable for natural rubber cultivation. Governments of northeastern states have taken many initiatives for the expansion of

rubber cultivation (Dey, 2016). Tripura and Assam are the leading rubber plantation states in north-eastern India. This region is considered a non-traditional rubber plantation region (Chaudhury & Sarkar., 2022). Rubber is also cultivated in limited land areas in Nagaland, Manipur, Meghalaya, Manipur and Arunachal Pradesh (Joshi, 2015). Rubber plantation is an important commercial plantations in Tripura. Tripura was the first state to introduce rubber plantations in the northeast region in 1963 (Lalmeizo & Reddy, 2010). Tripura is the leading rubber manufacturer in north-eastern India and the second-largest producer of rubber in the country. Rubber plantations is increasing in Tripura since 2004 (Chaudhury & Sarkar, 2022). The total cultivated area under plantation was 34.63 thousand hectares in 2004 which increased to 67.54 thousand hectares in 2011 and then reached 85.45 thousand hectares in 2019 (Mardi & Sarkar, 2021).<sup>6-9</sup>

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Tripura is a leading rubber-producing state in northeast India. It is also known as the 'Second Rubber Capital of India' (Vongkhamheng et. al., 2016). Recently, the Government of Tripura has started the Rubber Mission for good harmonization of various agencies connected with rubber production and marketing (Chaudhury & Sarkar, 2022). Rubber plantation is considered one of the most popular and profitable plantations because of its demand and prospects (Nandi, 2017). Rubber plantation has already improved the social and economic status of its growers. The Rubber Board has been executing many schemes for increasing the cultivated land of rubber plantations in the state (Chaudhury & Sarkar., 2022). The main objectives of this paper are (a) to study the social status of rubber cultivators in Tripura; (b) to evaluate the standard of living parameters of rubber cultivators in Tripura, (c) to assess the educational and health status of the rubber cultivators in Tripura, and (d) to examine the consumption pattern of the rubber cultivators in Tripura.<sup>10–14</sup>

## 2. Materials and Methods

The present study is based on primary data. This study was conducted in Tripura which is a smaller state in the Northeastern region of India. It is surrounded by north, west and south Bangladesh and on the eastern side by the Indian states Assam and Mizoram. Primary data have been collected with the help of a semi-structured questionnaire from 600 rubber cultivator households, randomly selected from the four undivided districts of Tripura where the shifting cultivator's rehabilitation programme had been implemented by the government.

There are two subgroups of the respondents identified; the first group is engaged in cultivation work on their land. The second group is engaged in cultivation work both on their land and as a labourer on other's land while the third group is engaged only as a labourer in the cultivation land owned by others only because they don't have their land. The sample households have been selected from the following 24 randomly selected villages from four districts (i.e. North Tripura, South Tripura, West Tripura, and Dhalai) of Tripura where shifting cultivators have been transformed into rubber cultivators.

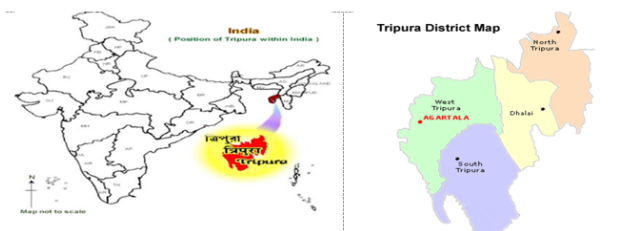


Fig. 1:

## 3. Result and Discussion

Tripura has experienced marvellous alterations in its demographic arrangement with a key absorption of the non-tribal population. This has marked the political scenario and cultural, social, and economic setup of the state. The livelihood of tribal people is more challenging as they live in hilly areas and the forest is an integral part of their life and shifting cultivation is the main source of food for them (Chaudhury & Sarkar, 2021). Table 1 shows the details of the rubber cultivators' lifestyle in Tripura.

The Table 1 depicted that joint family is popular in the survey areas. As the areas are more backwards and the effect of modern lifestyle is less. Hinduism and Christianity are popular religions among rubber cultivators. The majority of the families have family members between 2-6. It is because of the popularity of family planning and awareness. The majority of the families have children between 1-3.

Kokborak is the common language among rubber cultivators because all belong to the schedule tribe. The majority of respondents have aged between 41-50 ages. The majority of the cultivators started rubber plantations 6-15 years back only. TRPC is the main institution for assisting shifting cultivators for rubber plantations. The tribal welfare department provides funds for running the programme. The majority of households are actively involved in politics. The main reason behind it is the influence of the political parties and political assistance. Vegetable plants, fruit plants and timber plants are common in the house of households. Gardening is increasing in popularity among households.

The Table 2 presented that the majority of households have pucca and tin-made houses. The basic reason behind it is the improving purchasing power. Most of the households stay on government-held land. Firewood is the main source of fuel, but it also shows the popularity of LPG. Electricity is the main source of power. Many households are using solar in interior places. The use of kerosene is decreasing continuously. The use of tape water and tube well is increasing continuously. Government effect and implementations of various programmes are the basic reason behind it.

**Table 1:** Social status of rubber cultivators in Tripura

<b>Family Type</b>			
Family Status	No. of Respondent	Percentage (%)	Rank
Nuclear	117	19.5	II
Joint	483	80.1	I
Total	600	100	
<b>Religion Status</b>			
Religion Type	No. of Respondent	Percentage (%)	Rank
Hinduism	247	41.16	I
Muslim	11	1.83	IV
Christian	232	38.66	II
Buddhism	110	18.33	III
Total	600	100	
<b>Number of Family Members</b>			
Family Members	Respondent	Percentage (%)	Rank
Between 2-4 Members	200	33.33	II
Between 5-Members	332	55.33	I
More than 6 Members	68	11.33	III
Total	600	100	
<b>Number of Children</b>			
Children	No. of Respondent	Percentage (%)	Rank
One	100	16.66	III
Two	387	64.5	I
Three	113	18.83	II
Total	600	100	
<b>Language Profile</b>			
Language	No. of Respondent	Percentage (%)	Rank
Bengali	0	0	II
Kokborak	600	100	I
Others	0	0	III
Total	600	100	
<b>Age of Rubber Growers</b>			
Age of Growers	No. of Respondent	Percentage (%)	Rank
Between 18-30 Year	38	6.33	IV
Between 31-40 Year	102	17	III
Between 41-50 Year	270	45	I
Above 50 Years	190	31.66	II
Total	600	100	
<b>Years of Involvement in Rubber Plantation</b>			
Involvement Years	No. of Respondents	Percentage (%)	Rank
Between 6-15 yrs.	439	73.16	I
Between 15-25 yrs.	161	26.83	II
Total	600	100	
<b>Assistance Institutions for Rubber Plantation</b>			
Institutions	No. of Respondents	Percentage (%)	Rank
Rubber Board	100	16.66	II
TFDPC	20	3.33	IV
TRPC	430	71.66	I
Other Govt. agencies	50	8.33	III
Total	600	100	

Source: Field Survey

**Table 2:** Standard of living parameters of rubber cultivators in tripura

<b>Type of House</b>			
House Type	No. of Respondents	Percentage (%)	Rank
Kaccha	23	3.83	IV
Pakka	140	23.33	II
Semi kacha	40	6.66	III
Made of tin	397	66.16	I
Total	600	100	
<b>Residential Land Type</b>			
Land Type	No. of Respondents	Percentage (%)	Rank
Own	250	41.66	II
Government Holding Land	350	58.33	I
Rented House	0	0	III
Total	600	100	
<b>Type of Fuel Use for Cooking Purposes</b>			
Fuel Type	No. of Respondents	Percentage (%)	Rank
Gas	150	25	II
Fire Wood	450	75	I
Charcoal or stove	0	0	III
Total	600	100	
<b>Sources of Lighting at Home</b>			
Lighting	No. of Respondents	Percentage (%)	Rank
Electricity	432	72	I
Kerosene	48	8	III
Solar	120	20	II
Other oil	0	0	IV
Total	600	100	
<b>Drinking Water Source</b>			
Water Source	No. of Respondents	Percentage (%)	Rank
Tap water available at home	120	20	III
Tube well	320	53.33	I
Pond/lake	39	6.5	IV
Well	121	20.16	II
Any other	0	0	V
Total	600	100	
<b>Kind of Sanitation at Home</b>			
Sanitation Type	No. of Respondents	Percentage (%)	Rank
Temporary	169	28.16	II
Permanent	400	66.66	I
No sanitation	31	5.16	III
Outside premises	0	0	IV
Total	600	100	
<b>Food Taking Timely</b>			
Food Taking	No. of Respondents	Percentage (%)	Rank
Always	600	100	I
Sometimes	0	0	-
Most of the time	0	0	-
Rarely	0	0	-
Never	0	0	-
Total	600	100	
<b>Premium Food</b>			
Food	No. of Respondents	Percentage (%)	Rank
Rice	600	100	I
wheat	0	0	II
Other	0	0	III
Total	600	100	

Table 2 Cont....

Income of Rubber Growers (Monthly)			
Income	No. of Respondents	Percentage (%)	Rank
Less than Rs. 5000	3	0.5	V
Between Rs. 5000-10000	237	39.5	II
Between Rs. 10000-20000	335	55.83	I
Between Rs. 20000-30000	20	3.33	III
Between Rs. 30000-40000	5	0.83	IV
More than Rs. 40000	0	0	VI
Total	600	100	
The pattern of Bank Account			
Bank Account	No. of Respondents	Percentage (%)	Rank
Saving	340	56.66	I
Fixed	0	0	V
Current	153	25.5	II
Post office	34	5.66	IV
Not have account	73	12.16	III
Total	600	100	
Sources of Debt			
Bank Account	No. of Respondents	Percentage (%)	Rank
Bank	45	7.5	III
Friends	58	9.66	II
Moneylenders	24	4	IV
None	0	0	V
No Debt	473	78.83	I
Total	600	100	
Account in Money Savings Institution			
Bank Account	No. of Respondents	Percentage (%)	Rank
Bank/ Post office	480	80	I
Own house	120	20	II
Friends/relatives	0	0	III
Total	600	100	
Conveyance Use for Work			
Conveyance	No. of Respondents	Percentage (%)	Rank
Bicycle	430	71.66	I
Scoter/Motorcycle	120	20	II
Car	0	0	IV
None	50	8.33	III
Total	600	100	

Source: Field survey

Parmanent sanitation is increasing continuously. The implementation of government schemes and awareness is responsible for it. All the households are getting good food properly, because of the increasing purchasing power. Rice is a premium food for households. Although they are taking new types of items, rice is the main food. The majority of them have a monthly income between Rs. 10,000-20,000. The income of cultivators fluctuates in various months, because of weathers condition, quality and quantity of latex. The majority of households have a bank account. There are many reasons behind this, but the most prominent is the increasing importance of bank accounts and their need in business. The majority of households do not have any debt and few others are taking loans from banks, friends

and moneylenders. Banks and post offices are the main money savings institution of households. Bicycle is the main source of conveyance, but the popularity of motorcycle is increasing.

The Table 3 shows that the majority of children are going to school regularly. The basic reason is the increasing awareness and higher income. The majority of children depend on the school teachers for study. The popularity of home teachers is increasing continuously. Biri and alcohol are more popular among households. It is a component of the culture. The majority of households are affected by malaria and stomach Disease. The popularity of primary health centres and the hospital is increasing continuously. The number of illiterate households is very less. The

**Table 3:** Educational and health status of the rubber cultivators in Tripura

<b>Children Going to School</b>			
	No. of Respondents	Percentage (%)	Rank
Children in School			
Regularly	440	73.33	I
Some times	128	21.33	II
Rarely	0	0	IV
No	32	5.33	III
Total	600	100	
<b>Educational Guidance to the School Going Children</b>			
	No. of Respondents	Percentage (%)	Rank
Educational Guidance			
By school teacher alone	403	67.16	I
By school teacher and home tutor	130	21.66	II
By school teacher and family teacher	67	11.16	III
None	0	0	IV
Total	600	100	
<b>Educational Status of Head of Household</b>			
	No. of Respondent	Percentage (%)	Rank
Type of Education			
Illiterate	30	05	V
Primary	143	23.83	II
Secondary	80	13.33	III
Class 10th	54	9	IV
Class 12th	23	3.83	VI
Graduate or above	0	0	VII
Adult education	270	45	I
Total	600	100	
<b>Addiction of Goods</b>			
	No. of Respondents	Percentage (%)	Rank
Addiction			
Pan	123	16.66	III
Biri/ Cigarette	432	72	II
Khani/ Alcohol	450	75	I
Others	0	0	V
None	23	3.83	IV
Total	600	100	
<b>Nature of Disease</b>			
	No. of Respondents	Percentage (%)	Rank
Nature of Disease			
Back pain/ Leg pain	28	4.66	V
Headache/ Goiter	52	8.66	II
Old age disease/ Diabetes and B.P	34	5.66	IV
Malaria/ Stomach Disease	430	71.66	I
None	56	9.33	III
Total	600	100	
<b>Types of Treatment</b>			
	No. of Respondents	Percentage (%)	Rank
Treatment			
Primary health centre/ Hospital	359	59.83	I
Kabiraj	150	25	II
Shop	34	5.66	IV
Known person in the village	48	8	III
Own	12	2	V
Total	600	100	

Source: Field Survey

**Table 4:** Consumer pattern of the rubber cultivators in Tripura

<b>Expenditure on Food</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	0	0	V
20-30%	0	0	IV
31-40%	250	41.66	I
41-50%	210	35	II
More than 50%	140	23.33	III
Total	600	100	
<b>Expenditure on Health</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	430	71.66	I
20-30%	170	28.33	II
31-40%	0	0	III
41-50%	0	0	IV
Total	600	100	
<b>Expenditure for the Education of Children</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	530	88.33	I
20-30%	70	11.66	II
31-40%	0	0	III
41-50%	0	0	IV
More than 50%	0	0	V
Total	600	100	
<b>Expenditure on Entertainment</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	12	2	III
20-30%	320	53.33	I
31-40%	268	44.66	II
41-50%	0	0	IV
More than 50%	0	0	V
Total	600	100	
<b>Expenditure on Own requirement</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	48	8	III
20-30%	397	66.16	I
31-40%	155	25.83	II
41-50%	0	0	IV
More than 50%	0	0	V
Total	600	100	
<b>Expenditure on Others</b>			
Percentage of Expenditure	Respondents	Percentage (%)	Rank
Less than 20%	435	72.5	I
20-30%	165	27.5	II
31-40%	0	0	III
41-50%	0	0	IV
More than 50%	0	0	V
Total	600	100	

Source: Field survey

majority of them have the basic knowledge of writing, speaking and normal arithmetic calculation. The reason behind this is the own awareness, needs of the job and the assistance from the Govt. departments.

The Table 4 showed that the majority of households spend approximately 31-50 per cent of their income on food. Nearly 23 per cent of households spend more than 50 per cent of their income on food. The majority of households are spending less than 20 per cent of their income on health. They spend less than 20 per cent of their income on the education of children. The majority of households are spending approximately 20-40 per cent of their income on entertainment. They are spending nearly 20-30 per cent of their income on their requirements. Nearly 72 per cent of the household spends less than 20 per cent expenditure on others.

After comparing the expenditure pattern it has been found that the percentage of expenditure on food decreased after rehabilitation. Where during the shifting cultivation more than 50 per cent of income was spent on food, but after rehabilitation, it is nearly 31-50 per cent. Expenditure on children's education is increased after rehabilitation. The percentage of expenditure on entertainment is increased after rehabilitation. The percentage of expenditure on own purpose is increased after rehabilitation, which was less than 20 per cent during shifting cultivation and nearly 20-30 per cent during rubber cultivation. The percentage of expenditure on other purposes is nearly the same for both shifting cultivators and rubber cultivators (less than 20 per cent).

#### 4. Conclusion

Hinduism is the popular religion among rubber cultivators. The majority of the families have family members between 2-6, and children are between 1-3. Kokborak is the common language among rubber cultivators. Rubber board and Tripura Rehabilitation Plantation Corporation is the main institution for assisting jhumias for rubber plantation. The tribal welfare department provides funds for running the programme. The majority of households are actively involved in politics. Firewood is the main source of fuel, but it also shows the popularity of LPG also growing. Electricity is the main source of power. The use of tape water and tube well is increasing continuously. The number of permanent sanitation is increasing. The majority of them have a monthly income between Rs. 10,000-20,000. The income of cultivators fluctuates in various months because weather affects the quality and quantity of latex.

The majority of children are going to school regularly. The popularity of home teachers is increasing continuously. Biri and alcohol are popular among cultivators. The

majority of households are affected by malaria and stomach Disease. The popularity of primary health centres and the hospital is increasing. Rubber cultivators have the basic knowledge of writing, speaking and normal arithmetic calculation. The percentage of expenditure on entertainment, education and own purpose is increased after rehabilitation in the rubber plantation.

#### 5. Source of Funding

None

#### 6. Conflict of Interest

None.

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