A Study on the Living Conditions and Status of Shifting Cultivators in Tripura

Dr. Sukanta Sarkar
Former Doctor of Literature Scholar,
Department of Economics, Berhampur University, Odisha,
Email: sukantaeco@gmail.com, Ph: 9856321179

Abstract
The paper discussed about the living conditions and status of shifting cultivators in Tripura. It has been found that shifting cultivation is subsistence farming for tribals in Tripura. Output and income from the shifting cultivation is very less. Level of living of shifting cultivators are not good. Majoring of the cultivators are living in kaccha houses. Few of the have semi kaccha house or pakka houses. Kaccha houses is the houses constructed by the soil and the bamboo. They are generally lived in the Government holding land. Firewood is the main source of fuel for cooking. Majority of households are collecting drinking water from the pond or lake. Many places also have shortage of water. Many cultivators are also inflected by the water-borne diseases. Shifting cultivators do not have proper sanitary facilities. They do not have financial capacity for construction of the permanent sanitation. Majority of cultivators unable to collect enough food for their daily requirement. Shifting cultivators have less income and whatever foods they harvesting from the shifting cultivators are not adequate. Rainfalls are decreasing due to the climate change which directly affecting the yield of the shifting cultivation. Income of shifting cultivators are declining due to less production. Dropout rate among the children's of shifting cultivators are also very high. Majority of households are included in Below Poverty Line category. Therefore, government should implement policies for upliftment of such marginalised people though the alternative livelihoods.
Keywords: Households, Income, Shifting cultivators, and Standard of living.

Introduction

Shifting cultivation is an old and traditional cultivation method. It is also known as slash and burn cultivation or jhum cultivation. It is an integrated rain fed farming system with rotation of land. It is a popular method of cultivation for the tribals in hilly areas. The people who are involved in such cultivation are known as Jhumias (Sarkar, 2010). It is a temporary agricultural system, where land is abandoned for a particular period for unplanted flora to grow freely after harvesting of crops. During this time the cultivators move to another patch of land for cultivation. After a particular period, the cultivators again cultivate in the previous lands. This time gap is known as Jhum cycle. Jhumias generally cut and burn the trees for cultivation. After burning the jungles, ashes of the burnt tress are mixed with the soil and the clean land is prepared for future cultivation. It is a subsistence farming method which uses little technology and inputs (Chaudhury et. al., 2023).

Shifting cultivation has a long history in north-eastern states of India. The

pattern of shifting/jhum cultivation are nearly same in the region, which involves the cleaning jungles, burning forests, mixing the soil, sowing seeds and harvesting the crop (Sarkar et. al., 2011). Tripura has more land such cultivation, where Nagaland has the lowest land area under this cultivation. Nagaland has the highest number of families who depend on shifting cultivation (Ray, and Sarkar, 2016). According to some government reports, significant area of north-eastern states has already been affected by shifting cultivation. Such cultivation requires more physical labour for preparing the land for cultivation and during cultivation villagers use their traditional instruments (Sarkar, 2011). After prohibition of shifting cultivation of the state, government is encouraging tribal people for rubber and other agro-forestry activities with the hope that it will help local communities to earn additional income and will increase afforestation in the hilly areas (Chaudhury et. al., 2022). The objective of this paper is to study the living conditions and status of shifting cultivators in Tripura.

Methodology:

Survey Area: Tripura is the third smallest state in India and the second smallest state in north-eastern India after Sikkim. Nearly seventy percent of its land area is covered with hills and forests. Tribals are the main inhabitants in the selected sample villages of the state.

Sample Size and Sampling Design: The relevant data have been collected from the four undivided districts of the state viz., West Tripura, North Tripura, South Tripura and Dhalai. A total of 600 Jhumia households who were engaged shifting cultivation activity were selected from the twenty villages of the four undivided districts of the state. Five villages are randomly selected from each of these four districts. The thirty sample households are randomly selected from each village. Total sample households selected from the four districts are 600.

Method of Data Collection: The present study is based on primary data. Primary data are collected using the self-administrated questionnaire written in the local language. Primary data are collected through a personal interview with the household head or a selected member of the household.

Method of Data Analysis: Data is analysed by the quantitative and qualitative methods comprising of tabulation, rank analysis, and text analysis.

Results and Discussion

Jhum cultivation has a long history among the tribals in Tripura. It is not only the source of livelihood of the tribals but also the way of life for them. Shifting cultivation is a traditional method of cultivation, where land is cultivated temporarily and then it is abandoned for a particular period. Forest burning is a main part of such cultivation. Forest burning increases air pollution. It is also responsible for reducing acidity and organic components of the soil. It causes deforestation and changes the forest ecosystems. It also increases the soil erosion. All tribals in the State are not intensively involved in jhum cultivation.

Shifting cultivation is subsistence farming for tribals in Tripura. Output and income from the jhum cultivation is very less for the cultivators. Excessive

cultivation of jhum is harmful to the soil and environment. It has reduced biodiversity of forests and rainfall of the region. Loss of biodiversity also affects the environment. It promotes carbon emission and deforestation. Production of food grains/vegetables from settled cultivation is higher than the jhum cultivation in the state. Production of crops per hectare from jhum land is less than the settled cultivation.

Table 1: Type of Houses of Shifting Cultivators

House Type	No. of Respondents	Percentage	Rank
Kaccha	*440*	*73.33*	I
Pakka	*3*	*0.5*	V
Semi kaccha	*40*	*6.66*	II
Made of tin	*7*	*1.16*	IV
Any Other	*10*	*1.66*	III
Total	600	100	

Source: Field survey (2020)

The above table (1) discussed the housing patterns of the shifting cultivators. It has been found that majoring of the cultivators are living in kaccha houses. Few of the have semi kaccha house or houses made by tin. Only 0.5 percent houses have the pakka houses. Kacch houses means houses constructed by the soil and the bamboo. Shifting cultivators are very poor. Many are moving from one place to another for cultivation purpose. Jhumia families are lives together and generally lives in the isolated places.

Table 2: Types of Residential House of Shifting Cultivators

House Type	***No. of Respondents***	***Percentage***	**Rank**
Own	*53*	*8.83*	II
Government Holding Land	*547*	*91.16*	I
Rented House	*0*	*0*	III
Total	600	100	

Source: Field survey (2020)

The above table (2) depicted the types of the residential houses of the shifting cultivators. It has been found that majority of cultivators (91.16%) are living in the Government holding land. Less number of households (8.8%) lives in their own houses. Generation by generation they are living in the hilly areas and majority of the do not have any legal documents of the land. They constructed the temporary houses with the materials from the forest. Bamboo is the most prominent of them. Their life style is very simple and believes on the communal harmony.

Table 3: Pattern of fuels used by Shifting Cultivators for cooking purposes

Fuel Type	*No. of Respondents*	*Percentage*	Rank
Gas	*5*	*0.83*	III
Firewood	*545*	*90.83*	I
Charcoal	*50*	*8.33*	II
Stove	*0*	*0*	IV
Total	*600*	*100*	

Source: Field survey (2020)

The above table (3) represented the pattern of fuels used by shifting cultivators for cooking purposes. It has been found that firewood is the main source of fuel for cooking purpose. More than 90% of the households are using firewood as fuel for cooking. Few households (8.3%) are also using the charcoal. Very few households (0.83%) are using the LPG gases for cooking purpose. Shifting cultivators are basically collects firewood from the forest or nearly jungles. They prepared the charcoal by burning the forest during the shifting cultivation. They collect the firewood and charcoal free of cost. Many households are also earning income by selling the firewood and charcoal in the local market.

Table 4: Sources of Lighting for Houses of Shifting Cultivators

Lighting	*No. of Respondents*	*Percentage*	Rank
Electricity	*24*	*4*	II
Kerosene	*565*	*94.1*	I
Solar	*11*	*1.83*	III
Total	*600*	*100*	

Source: Field survey (2020)

The above table (4) depicted the sources of lighting for houses of shifting cultivators. It has been found that kerosene is the main fuel for lighting the houses. More than 94% of the households are using kerosene for lighting their houses. Few households (4%) have electricity connection in their houses. More than one percent households are using the solar cell for lighting purpose. Shifting cultivators are purchase kerosene from the local market. Price of kerosene varies in the market on the availability. They are also using firewood for lighting purpose in their yards.

Table 5: Sources of Drinking water of Shifting Cultivators

Water Source	*No. of Respondents*	*Percentage*	Rank
Tap water available at home	*34*	*5.66*	IV
Tube well	*172*	*28.66*	II
Pond/lake	*305*	*50.83*	I
Well	*89*	*14.83*	III
Any other	*0*	*0*	V
Total	*600*	*100*	

Source: Field survey (2020)

The above table (5) discussed the sources of drinking water of shifting cultivators. It has been found that majority of households (50.8%) collecting drinking water from the pond or lake. More than 28.6% households are collecting water from the tube well. Nearly 15% households are collecting drinking water from the well. Only 5.6% are collecting water from the tap water available at home. Shifting cultivators lives in interior places and most areas do not have good road connectivity. Many places also have the shortage of water during the summer period. Many cultivators are also inflected by the water-borne diseases

. **Table 6: Sanitation pattern in Houses of Shifting Cultivators**

Sanitation Type	*No. of Respondents*	*Percentage*	Rank
Temporary	*433*	*72.16*	I
Permanent	*23*	*3.83*	III
No satination	*144*	*24*	II
Total	*600*	*100*	

Source: Field survey (2020)

The above table (6) discussed the patterns of sanitation in the houses of shifting cultivators. It has been found that majority of households (72.1%) have the temporary sanitation and 24% households do not have any satination facility in their houses. Only 3.83% households have the permanent satination facility. Many shifting cultivators are using the open field for the natural calls. They do not have financial capacity for construction of the permanent sanitation. In hilly areas there are no shortage of land, so they are using the temporary sanitation or the open fields.

Table 7: Food taking timely by Shifting Cultivators

Food Taking	*No. of Respondents*	*Percentage*	Rank
Always	*32*	*5.33*	*32*
Sometimes	*439*	*73.16*	*439*

Most of the times	*129*	21.5	*129*
Rarely	0	0	*0*
Total	*600*	*100*	

Source: Field survey (2020)

The above table (7) discussed the availability of foods of the shifting cultivators. It has found that majority of cultivators unable to collect enough food for their daily requirement. Shifting cultivators have less income and whatever foods they harvesting from the shifting cultivators are not adequate. Rainfalls are declining due to the climate change which directly affecting the yield of the cultivation. Income of shifting cultivators also decreasing due to less production.

Table 8: Sources of Debt of Shifting Cultivators

Bank Account	***No. of Respondents***	***Percentage***	**Rank**
Bank	*0*	*0*	IV
Friends	*322*	*53.66*	I
Moneylenders	*120*	*20*	III
No Debt	*158*	*26.33*	II
Total	*600*	*100*	

Source: Field survey (2020)

The above table (8) considered the sources of debt of shifting cultivators. It has been found that friends and moneylenders are the main sources of debt for the shifting cultivators. Social communities are playing vital role for assisting among themselves. Shifting cultivators are basically tribals, and they live together within the community. There is the social custom of the tribal communities for assisting the same community people. It acts like a social insurance. Nearly 26% households informed that they do not have any debt.

Table 9: School Attendance status of children of Shifting Cultivators

Children in School	***No. of Respondents***	***Percentage***	**Rank**
Regularly	*20*	*3.33*	IV
Some times	*343*	*57.16*	I
Rarely	*50*	*8.33*	III
No	*187*	*31.16*	II
Total	600	100	

Source: Field survey (2020)

The above table (9) discussed school attendance status of children of shifting cultivators. It has been found that very less percentage (only 3.3%) children are regularly attending the schools. Majority of children are irregular in school

attendance. Nearly 31.1% children are never attended the school. Many parents do not send their children in school due to the cost of education. Many children help their parents in cultivations. Dropout rate among the children's of shifting cultivators are also very high.

Table 10: Nature of Disease of the Shifting Cultivators

Nature of Disease	*No. of Respondents*	*Percentage*	Rank
Back pain/ Leg pain	*56*	*9.33*	IV
Headache/ Goiter	*45*	*7.5*	V
Old age disease/ Diabetes and B.P	*67*	*11.16*	III
Malaria/ Stomach Disease	*340*	*56.66*	I
None	*92*	*15.33*	II
Total	*600*	*100*	

Source: Field survey (2020)

The above table (10) discoursed the nature of disease of the shifting cultivators. It has been found that malaria and stomach diseases are common among the them. Back pain, leg pain, headache, old age disease, diabetes and blood pressure are the other diseases facing by the shifting cultivators. Shifting cultivators lives in the hilly areas surrounded by forest. So malaria, and other mosquito-borne diseases are common among them. Shifting cultivation is more labourers job. Workers are work in the paddy land for long hours in a day. So many of them are facing the back pain and leg pain issues.

Table 11: Treatment Patterns of the Shifting Cultivators

Treatment	*No. of Respondents*	*Percentage*	Rank
Primary health centre/ Hospital	*20*	*3.33*	IV
Cabiraj	*440*	*73.33*	I
Shop	*40*	*6.66*	III
Known person in village	*70*	*11.66*	II
Own	*30*	*5*	V
Total	*600*	*100*	

Source: Field survey (2020)

The above table (11) discussed the types of treatment of the shifting cultivators. It has been found that the cabiraj have the vital role for treatment of the shifting cultivators. More than 73.3% households are received treatments from the cabiraj. Cabiraj is the person who have knowledge of herbal medicine, and uses medical plants for the treatment purpose. Very less percentage of shifting cultivators receive treatment from hospitals or primary health centres. Many cultivators also collect medicines from the local medicine shops.

Table 12: Poverty Level among the Shifting Cultivators

Poverty Line	*No. of Respondent*	*Percentage*	Rank
Below Poverty Line	*384*	*64*	I
Above Poverty Line	*216*	*36*	II
Total	600	100	

Source: Field survey (2020)

The above table (12) described the poverty level among the shifting cultivators. It has been found that majority of households are fallen in Below Poverty Line (BPL) category. Nearly 64% households are fallen under the category. Nearly 36% households are above the poverty line. Income of the shifting cultivators are less. Production from shifting cultivation is declining. They are considering as the most vulnerable marginalised class people.

Conclusion:

Shifting cultivation is subsistence farming for tribals in Tripura. Majoring of the cultivators are living in kaccha houses and use firewood's for cooking purposes. Shifting cultivators are living in the hilly areas generation by generation and majority of the do not have any legal documents of the land. They constructed the temporary houses with the materials from the forest. Bamboo is the most prominent of them. Their life style is very simple and believes on the communal harmony. Many shifting cultivators are using the open field for the natural calls. They do not have financial capacity for construction of the permanent sanitation. Shifting cultivators have less income and whatever foods they harvesting from the shifting cultivators are not adequate. Rainfalls are decreasing due to the climate change which directly affecting the yield of the shifting cultivation. Income of shifting cultivators also declining due to less production.

Friends and moneylenders are the main sources of debt for the shifting cultivators. Many parents not send their children in school due to the cost of education. Many children help their parents in cultivations. Dropout rate among the children's of shifting cultivators are also very high. Malaria and stomach diseases are common among the them. Back pain, leg pain, headache, old age disease, diabetes and blood pressure are the other diseases facing by the shifting cultivators. Cabiraj have the vital role for treatment of the shifting cultivators. Majority of households are fallen in Below Poverty Line (BPL) category

Shifting cultivators are considering as the most vulnerable marginalised class people. Government may take policies for upliftment of them. There may be various possible solutions for shifting cultivation like (a) rehabilitation of jhumias through the alternative means of livelihood; (b) diversification of agricultural system; (c) introduction of joint forest management system, involving the jhumia families; and (d) change of the land distribution system.

References:

Chaudhury, S. K., Sarkar S., Pel, D R, and Panigrahi A, A. (2023). A study of socio-economic and religious diversity of rubber cultivators in Tripura. Journal of

Management Research and Analysis. 10(1), 51.

Chaudhury, K. S. and Sarkar, S. (2022). Poverty Eradication of Jhumias through Rubber Plantation in Tripura: A Case Study. Ecology, Environment and Conservation Journal, 28 (2). 764.

Ray, K.A., and Sarkar, S. (2016). Jhumias Rehabilitation through Rubber plantation: A Strategy for Poverty Eradication. IUT Journal of Advance Research and Development, 1 (1), 46.

Sarkar, S. (2010). Revolution of Jhumia's life through Rubber plantation: A Case Study of Dhalai District, Tripura. FEPPCAR (Forestry, Environment, Plantation Crops and Permaculture Consultancy and Research), 6 (1). 3.

Sarkar, S. (2011). Rubber plantation: A new hope for rural tribals in Tripura. International Journal of Plant Sciences. 6 (2), 274.

Sarkar, S., Pandey, K, P., Ghoshal, P.K. and Mallik, R. (2011). Intercropping in immature rubber plantation of Dhalai district in Tripura. International Journal of Plant Sciences. 6 (1), 207.

***