

Poverty Eradication of Jhumias through Rubber Plantation in Tripura: A Case Study

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ABSTRACT

The study makes an attempt to assess the poverty eradication of Jhumias through the rubber plantation in Tripura. The result indicates that poverty among the jhumias are reduced after rehabilitation through the rubber plantation. The human poverty index and multidimensional poverty index shows that during jhum cultivation respectively, 98.68 per cent and 100 per cent jhumias were fallen under the poverty line. It means poverty were very high during the shifting cultivation., Human poverty index and multidimensional poverty index shows that after rehabilitation of jhumias through the rubber cultivation respectively, 1.68 per cent and 0.6 per cent are under the poverty line. It means poverty among the jhumias are effectively reduced after rubber plantation. Thus the paper suggests that rubber plantation will be a useful strategy for rehabilitation of jhumias and poverty eradication.

Key words: Income opportunity, Jhumia, Rubber plantation and Shifting cultivation.

Introduction

Development is a continuous process. Different sections of people of the society are effected by the development process. It changes the income and inequality pattern of the economy (Murtem *et al.*, 2008). The marginalized group of people suffer more in this regards and needs more assistance. Governments of various countries are running schemes for upliftment of those people through various income generating programmes (Nath, 2015). The study is based on Tripura, which is a small State in North-eastern part of India.

Shifting cultivation is an old technique of cultivation and it is the livelihood of tribal people in the initial period of human settlement. It is known as slash-and-burn cultivation or jhum cultivation (Nongkynrih *et al.*, 2018). People who are involved

in shifting cultivation is known as jhumias. Shifting cultivation is an agricultural technique which involves cutting and burning of forests or woodlands to create fields. It is a method of cultivation which needs little technology and depends on rainfall for water. Income from such cultivation subsistence level (Mukul and Herbohn, 2015). Shifting cultivation basically follows in the hilly areas. Tribal people are more involved in such cultivation. Such practices commonly follow in hilly areas of Indian States. Arunachal Pradesh, Tripura, Meghalaya, Mizoram, Nagaland, Odisha and in some districts of Bangladesh like Khagrachari and Sylhet (Overbeek *et al.*, 2012).

There are some negative concepts regarding ecological implication of shifting cultivation, but such cultivation is an important part of tribal culture (Rai and Chutia, 2014). As reported by the Indian Coun-

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cil of Agricultural Research for North-Eastern Hill Region, about 14.66 lakh hectares has been affected by shifting cultivation in states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura. As Jhum requires tremendous amount of physical labour, the cultivators in an effort to divert their minds indulge in singing and dancing.

Methodology of the Study

The present study is an empirical study based on both primary data. Primary data was collected with the help of a well-structured questionnaire from 600 jhumia households randomly (who are rehabilitated by rubber plantation) selected from the four districts of the state where jhumias rehabilitation programme was implemented by government.

Tripura Rehabilitation Plantation Corporation is basically working for rehabilitating the jhumias through rubber plantation. There are eight districts in Tripura and TRPC is mainly working in four districts, namely, South Tripura, West Tripura, North Tripura and Dhalai of the state. A total of 600 jhumia households (who are rehabilitated by rubber plantation) are selected from different villages (where jhumias rehabilitation programme is implemented) of the four TRPC working districts of the state. From each village, 25 households are randomly selected. Therefore, the total sample households to be selected from each district are 150 and the total sample sizes are $(150 \times 4) = 600$.

Table 1. Human Poverty Index of Jhumias

Survey Area	Value	Percentage
Human Poverty Index of Jhumias in South Tripura District	96.64	96.64
Human Poverty Index of Jhumias in West Tripura District	86.71	86.71
Human Poverty Index of Jhumias in North Tripura District	99.34	99.34
Human Poverty Index of Jhumias in Dhalai District	98.70	98.70
Human Poverty Index of Jhumias in Tripura	98.68	98.68

Source: Field Survey

Table 2. Human Poverty Index of Rubber Growers

Survey Area	Value	Percentage
Human Poverty Index of Rubber Growers in South Tripura District	3.41	3.41
Human Poverty Index of Rubber Growers in West Tripura District	1.37	1.37
Human Poverty Index of Rubber Growers in North Tripura District	0.70	0.70
Human Poverty Index of Rubber Growers in Dhalai District	2.33	2.33
Human Poverty Index of Rubber Growers in Tripura	1.68	1.68

Source: Field Survey

Results and Discussion

For measure of impact of rubber plantation on poverty of jhumias following index are used: Human Poverty Index, and Multidimensional Poverty Index.

Human Poverty Index

The Human Poverty Index (HPI) was an indication of the standard of living in a country, developed by the United Nations to complement the Human Development Index and was first reported as part of the Human Development Report in 1997.

Human Poverty Index of Jhumias

Result of district-wise Human Poverty Index of jhumias after calculation is showed in the following table:

The above table shows that percentage of poverty was very high among the jhumias in all districts. Poverty ratio was less in west Tripura district compare to the other districts. Human Poverty Index of Jhumias in Tripura was 98.68, it means 98.68 per cent jhumias were under poverty line.

Human Poverty Index of Rubber Growers

Result of district wise Human poverty index of rehabilitated jhumias through rubber plantation are showed in the below table

The above table showed that Human poverty index is improved after rehabilitation of jhumias through rubber plantation. During the jhum cultiva-

tion HPI value was 98.68 in Tripura. It means during that period 98.68 per cent jhumias were lived under poverty line. HPI value of south, west, north and dhalai district of Tripura was 96.64, 86.71, 99.34 and 98.70 respectively. After rehabilitation, HPI of jhumias is 1.68. It means during that period only 1.68 per cent jhumias are under poverty line after rehabilitation through rubber plantation. During that time, HPI of South, West, North and Dhalai district of Tripura was 3.41, 1.34, 0.7 and 2.33 respectively. This demonstrated improvement of poverty of jhumias through rubber plantation.

Multidimensional Poverty Index

Multidimensional Poverty Index (MPI) is an international measure of acute poverty covering over 100 developing countries. The index assesses poverty at the individual level. The MPI can be used to create a comprehensive picture of people living in poverty, and permits comparisons both across countries, regions and the world and within countries by ethnic group, urban/rural location, as well as other key household and community characteristics.

The MPI is the product of both: $MPI = H \times A$.

(a) Multidimensional Poverty Index of Jhumias

Result of district-wise Multidimensional Poverty Index of jhumias after calculation is showed in the following table:

The above table shows that during the jhum cul-

tivation, 100 per cent of jhumias were MPI poor. According to the MPI, this means that they were in acute poverty. They were deprived at least either (a) all the indicators of a single dimension or (b) a combination across dimensions such as being in a household with a malnourished person, no clean water, a dirt floor and unimproved sanitation.

The poor were deprived in 97 per cent of the weighted indicators, so the intensity was 97 per cent. The MPI represents the share of the population that is multidimensionally poor adjusted by the intensity of the deprivation suffered. However, because they were on average deprived in 97 per cent of the weighted indicators, that society were deprived in 97 per cent of the total potential derivations it could experience overall.

Multidimensional Poverty Index of Rubber Growers

Result of district wise Multidimensional Poverty Index of rehabilitated jhumias through rubber plantation are showed in the below Table

The above table shows that after rehabilitation of jhumias through rubber plantation, in the state 0.6 per cent of people are MPI poor. The poor are deprived in 34 per cent of the weighted indicators, so the intensity is 34 per cent. However, because they are on average deprived in 34 percent of the weighted indicators, that society are deprived in 0.4

Table 3. Multidimensional Poverty Index of Jhumias

Area	Multidimensional Headcount Ratio (H)	Intensity of Poverty (A)	Multidimensional Poverty Index (MPI)
South Tripura	1	0.95	0.95
West Tripura	1	0.97	0.97
North Tripura	1	0.99	0.99
Dhalai	1	0.98	0.98
Tripura	1	0.97	0.97

Source: Field Survey

Table 4. Multidimensional Poverty Index of Rubber Growers

Area	Multidimensional Headcount Ratio (H)	Intensity of Poverty (A)	Multidimensional Poverty Index (HxA)
South Tripura	0.010	0.39	0.004
West Tripura	0.004	0.30	0.001
North Tripura	0.006	0.30	0.008
Dhalai	0.005	0.40	0.002
Tripura	0.006	0.34	0.004

Source: Field Survey

per cent of the total potential derivations it could experience overall. So poverty ratio decreased after the rehabilitation. Where during the jhum cultivation 100 per cent jhumias were under poverty line, but after rehabilitation only 0.6 per cent people are under poverty line. Multidimensional Poverty Index of people of Tripura is 26.9 per cent, which is very high compared to the poverty ratio of rehabilitated jhumias.

Concluding Observations

In north-eastern states of India shifting cultivation is the source of income for tribal groups. Rubber plantation is a pathfinder for the jhumias for improving their lifestyle by increasing income. Government of Tripura introduced the Jhumia rehabilitation scheme for rehabilitation of jhumias through rubber plantation. From the above analyse it has been concluded that rubber plantation reduced poverty among the jhumias families. From various index it has been found that: The human poverty index shows that during the jhum cultivation 98.68 per cent jhumias were under the poverty line. After rehabilitation of jhumias is 1.68 per cent are under poverty line. The multidimensional poverty index shows that during the jhum cultivation 100 per cent jhumias were under poverty line, but after rehabilitation only 0.6 per cent people are under the poverty line.

Therefore, rubber plantation is very useful tool

for poverty eradication of jhumias. Government should cover more jhumias under the rubber plantation and should properly monitor the implementation of the scheme for empowerment of future generation.

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