

Analysis of Jhumias Rehabilitation Programmes in Tripura

Vanlalrema Kuki

Rehabilitation of the jhumias of Tripura became a priority for the state administration to achieve inclusive growth and development. The attempts started during Maharaja Bir Bikram reign by keeping aside a land reservation for jhumias settlement in different parts of the state. The successive state governments also follow the rehabilitation process through various programmes. The significant programmes included agricultural farming, colony scheme, animal husbandry, sericulture, pisciculture and most importantly, horticultural crops, tea and rubber plantations. The first formal attempt began in the 1950s in the southern part of Tripura. The government's efforts initially appeared a failure because of the massive desertion of the programmes. However, the introduction of permanent-based cultivation of the horticultural and plantation crops as part of the schemes proved successful. Specifically, Block Plantation Scheme became a game changer in the gamut of the jhumias settlement programme, promoting the state as the second largest rubber producer in the country. At the same time, the positive impacts could be seen in the life and livelihood of the beneficiaries. It empowered the beneficiaries socially and economically due to the higher economic returns from plantation cultivation than shifting cultivation. Henceforth, jhumias could forgo their traditional migratory nature of wandering and leading a settled life.

Keywords: Jhuming, Tripura, Tribes, Government Strategies, Impacts

Introduction

Shifting cultivation is a primary occupation of the jhumias of Tripura, providing major livelihood support to the community. In good years, jhumias had sufficient production to meet their annual requirements when the land was fertile and free to access. Sometimes jhumias would leave part of their jhum production in the jhum land unharvested to be eaten by the animals because their requirements were low (Ganguly 1969 & Dasgupta 1986). However, the situation was altered with the entry of immigrants from her neighbouring states and Bangladesh between 1951 and 1971, leading to the land man-ratio declining (Bhattacharyya 1988; Bhowmik 2013) and

Dr. Vanlalrema Kuki is Assistant Professor at the Department of Economics, Iswar Chandra Vidyasagar College, Belonia, South Tripura - 799155. [Email: vanlalremastu@gmail.com]

reducing the jhum cycle from 27-30 years to 2-3 years (Choudhury 2012). Besides, jhum cultivation on a shorter cycle caused loss of soil fertility (Tripathi and Barik 2003) and soil erosion, thereby reducing agriculture surplus (Arun 1976). At the same time, jhumias continue to practise jhuming in the small area, provide low yields (Paul and Paul, 2006), uneconomical use of resources (Nga 2008), affecting jhumias livelihood (Debbarma 2005), and becoming non-sustainable cultivation (Das 2006).

A development programme is a joint effort of scientists, planners, policymakers and extension workers (Paul and Paul 2006). In Tripura, jhumias development occupied the core concern of successive governments (Das et al 2012). The well-coordinated efforts among the different government agencies promoted the socio-economic development of the beneficiaries (Dey 2009). Gebeye (2016) states that a resettlement policy is essential to improve beneficiaries' livelihoods. Jhumias show their desire to accept a new method of earning a livelihood. In this context, rubber and its allied activities with animal husbandry were more desirable (Dasgupta 1986). As such, traditional farming is gradually replaced by rubber cultivation, becoming a primary source of income. In contrast, income diversification is possible by adopting extra agriculture activities of rubber, oil palm, agro-forestry and nursery activity (Penot and Trouillard 2002). Moreover, it is needed to promote bamboo, cane, medicinal plants, herbs, shrubs, broom grass, and climbers as a source of livelihood (DoF 2001). Negi et al (2019) stated that crop diversification is more gainful and viable for the survival of small and marginal cultivators. Promoting plantation cultivation in remote areas develops trade, businesses and jobs (Pirard et al 2017). Hence, the plantation economy could sustain regional economies and mixed cropping reduced uncertainties in the case of monoculture (FAO 1999).

Jhumias rehabilitation policy in Tripura had twin objectives. The first aim is to increase jhum productivity in the short run. And the second goal is to wean them away from shifting cultivation in the long run. According to Devvarman (1999), the need for rehabilitation for the tribal jhumias did not happen suddenly. It started when the tribal populace met a crisis with the decreased forest timber business owing to the partition of Bengal in 1947. Such loss of livelihood source left them with no alternatives but to entirely depend upon jhum cultivation. Primarily, these were considered the *first group* among the tribals who required rehabilitation. The *second group* were those with a mainstay in shifting cultivation but their dependence upon forest resources also being secondary. This group lacked plain land cultivation, owned large chunks of jhum land, and had limited knowledge of plough cultivation. The *third group* were those with a supplementary source of income though practising jhum cultivation to meet shortfall arising out of indebtedness to village money lenders; these people were always considered hardcore jhumias.

Rehabilitation of jhumias, therefore, should be inclusive in the core position of economic development and requires regular monitoring in the transition process in the interest of societal affairs (Vaid et al 2011). The rehabilitation process should deal with shifting from traditional agriculture to high value horticulture and plantation crop like rubber as well as alternative vocation to pursue livestock related activities such as piggyery, fishery and poultry (Viswanathan 2012). According to Datta and

Singh (2012), introducing horticultural crops and plantations in the fallow jhum lands was highly suitable to promote the livelihood of the croppers as the economic impacts directly felt upon the society. The growth of this sector has broadly benefitted the poor and weaker sections of the tribal people in terms of income and employment. It has become the cultivators' major livelihood source (Joseph 2014).

It is in this background that the current study attempts to explore the various tribal developmental policies formulated and implemented by the state and highlight the major features of the various jhumias rehabilitation models adopted in Tripura and also to examine how far the various rehabilitation schemes adopted and implemented by the state government for tribal jhumias have been successful.

The study is descriptive in nature and is based on secondary data collected from the Department of Tribal Welfare and Department of Forest, Tribal Research Institute, Government of Tripura. Personal interviews were conducted among the retired government officials and village elders involved in jhumias rehabilitation. The article is organized into four sections. Section one is the present introduction, while the second section highlights tribal development policies in the state and the third is an assessment of jhumias rehabilitation problems found in Tripura. The fourth section deals with conclusion and suggestions.

Rehabilitation Schemes Adopted in Tripura

In Tripura, jhumias rehabilitation schemes were introduced because jhuming was a traditional form of livelihood and was not always beneficial. It should be noted that the need for jhumias rehabilitation was realised even during the princely state. Maharaja Bir Bikram made the first attempt by keeping aside an area of 28490 hectares called Kalyanpur Reserve to settle tribal jhumias (Gupta 2000). The Annual Administration Report (AAR) of 1962-1963 indicated an essential scheme for the development of tribes related to the settlement of jhumias. Moreover, the AAR of 1973-1974 shows that the Amarpur pilot project for the jhumias settlement made steady progress and has been crucial in rehabilitating the jhumias household (Reang 1999). The schemes were undertaken and implemented by various government agencies and departments such as the Tribal Welfare Department, Tripura Tribal Autonomous Area District Council, Department of Forest, District Administration, Tripura Rehabilitation Programmes and Primitive Group, Rubber Board, Tripura Forest Development and Plantation Corporation, Tripura Rehabilitation and Plantation Corporation.

Sources of Funds for Jhumias Rehabilitation Programmes

After independence, the Government of India has faced the most significant challenge is the proper provision of social welfare to the Scheduled Tribes by ameliorating their socio-economic conditions. Accordingly, special programmes for tribal development have been implemented in our country and state to benefit the tribal population (Reddy and Kumar 2010), particularly with the inception of the Five Year Plans. The grant-in-aid to the States to meet the cost of such development schemes as may be undertaken for promoting the welfare of the STs or raising the level of Scheduled Areas under Article 275(1) are also guaranteed. In the First Five Year Plan(1951-1956), certain

piecemeal attempts on educational and welfare schemes were introduced, which had a tangible impact on tribal development (Devvarman 1999 & Reang 1999). In the meantime, the Fifth Five Year Plans (1974-1978) approach marked a transitional shift in the strategies with the launching of the Tribal Sub-Plan (TSP) for the comprehensive development of the tribals. The TSP predetermined that the funds of the state and centre should be quantified on the ST population on a proportional basis with budgetary mechanisms for welfare and development (Reddy and Kumar 2010). For implementing the TSP strategy, Integrated Tribal Development Projects (ITDP) was provided in the tribal majority states. Moreover, Special Central Assistance (SCA) to TSP and Grant-in-Aid under Article 27(1) of the Constitution were also initiated in this plan to enhance additional financial assistance to TSP implementing states. In Tripura, each development department has to contribute at least 31 per cent of its fund towards the Tribal Sub-Plan. Meanwhile, in the Seventh Five Year Plans (1985-1990), there has been a substantial increase in funds flow for tribal development in India.

Thus, the rehabilitation programme in the state was jointly financed by the State Government, the North Eastern Council (NEC), and the Central Government were highly concerned with the jhumias of Tripura's problems and adopted and implemented various programmes during the plan period to rehabilitate the landless tribal jhumias (DoAAE 1988). The central fund released in the forms of Grants under Article 275(1), Special Central Assistance (SCA), Centrally Sponsored Schemes (CSS), the Non-Lapsable Central Pool of Resources (NLCPR) (DESP 2002-2003) and the Soil Conservation (Forestry) Sector of the Department also sponsored the rehabilitation scheme. The success of the rehabilitation programmes largely depends upon the availability of funds received from the Central Government (Dasgupta 1986). For instance, each beneficiary received the unit cost of Rs 109000 per hectare under the rehabilitation scheme of rubber, which is to be borne by the Tribal Welfare Department (Rs 63325) and cash subsidy from the Rubber Board (Rs 45675) to be paid over a span of seven years (DESP 2011-2012).

Table 1 provides a snapshot of the numerous rehabilitation schemes started with agriculture activities as the primary mode of resettlement. It should be noted that the schemes have a distinctive nomenclature, identified with the amount of money involved per beneficiary household. The amount of money sanctioned for rehabilitation has increased over the years. At the same time, the focus has remained on agriculture and its allied activities. Livestock and horticulture cropping has been a core part of the resettlement programmes since the 1970s across the entire state. The increase in rehabilitation areas in the lower panels is because of the disintegration of the civil administration divisions over time. The table clearly shows that the biggest scheme is the Rs. 500 scheme covering over 1106 villages. Remarkably, it has been the most extended scheme since the mid-1950s and lasted over 15 years with 21240 beneficiaries enrolled. Land allotment to the beneficiaries was the prominent feature of the scheme. The first instalment of Rs.200 was for reclamation of land, while the second instalment, Rs. 300, was provided for purchasing bullocks and agriculture tools and inputs. The second scheme was Rs. 300 per family, which ran for a shorter

period beginning in 1960-61 with lesser scopes and size than the earlier one. The financial assistance was mainly for buying agricultural inputs. Apparently, there was a reduction in the scheme from the Rs 500 scheme to the Rs 300 scheme. According to Parasu Ram Debbarma (*former supervisor of the jhumias rehabilitation scheme*), the inadequacy of funds received from the state government resulted in re-modelling the jhumias rehabilitation scheme. Since the State government is the major source of funds for jhumias rehabilitation programme. Similarly, Lalhmingliana Darlong (*former supervisor of the jhumias rehabilitation scheme*) said that a pair of bullock whose price was Rs 200 in those days had been dropped from the scheme component due to the financial problem (*personal communiqué*).

In the 1970s, another scheme of Rs. 1910 was introduced whereby reclamation of land, agricultural tools and implements, housing and horticultural crops farming were a part of resettlement. The scheme has benefitted 7141 households and spread across 323 villages. The first instalment comprised of Rs.500 for reclamation of land and Rs. 500 for seeds and fertilisers. The second instalment included Rs.500 for constructing house, Rs.230 for buying agriculture inputs and Rs.180 for horticulture cropping (Reang 1999).

The mid-seventies saw the introduction of another scheme of Rs. 6510, whereby land development and animal husbandry were considered for jhumias rehabilitation. Besides, housing and the purchase of agricultural inputs remained major support instruments in this scheme. The scheme was extended to 9079 beneficiaries across 223 villages. The scheme entitlements were- land development at Rs.3610, house construction at Rs.1000; purchase of livestock for Rs.1000; Rs.700 for buying agriculture inputs and Rs.200 for poultry or piggery farming (Reang 1999). Many beneficiaries deserted the settlement scheme because of the lack of land and employment around the colonies. According to Devvarman (1999), the first reason was that tribal jhumias were not generally interested in rehabilitation; however, they wanted to have plain land to settle down. Meanwhile, the government cannot provide a suitable plain land where the jhumias could be rehabilitated. Hence, the land allotted was generally tilla lands (hill slopes), where only one-time cropping is possible during the rainy season. The yield from such cultivation was much lower than their previous jhum yields. Besides, they also found it inconvenient to adopt plough cultivation and tried to resort to traditional cultivation. The habit of cultivating fruit crops and other cash crops has not been inculcated in their way of life. Secondly, the employment crisis is another challenging issue in the vicinity of the tribal colonies, as the rehabilitated beneficiaries remained unemployed even when they were not busy in the fields. However, in their original village, the jhumias could at least cut forests and collect fuels for selling, but in a colony, forest resource was not available to exploit to meet their rising demands. Thirdly, jhumia beneficiaries would mortgage their allotted land to the money lenders for taking loans with high-interest rates. As such, in a short time, the amount got multiplied, and they became heavily indebted. Thus, to free themselves from debt trapped, the only way out was to transfer their land ownership/title to the lenders. So the number of landless jhumias increased, and the problem also extended as the landless further required settlement. Hence, jhumias reverted to their original village. Fourthly, the colony scheme is in the condition

Table 1: Jhumias rehabilitation programmes in Tripura

Scheme	Year	Characteristics	Area/Sub-Divisions	Total Beneficiaries	Total Villages
Rs. 500	1953-54 to 1968-69	i. Agriculture based development ii. Allotment of 5 acres of arable land iii. Subsidy for land reclamation.	SD, KHW, SNM, KSH, KMP, DMN, SBR, ARP, BLN & UDR	21240	1106
Rs. 300	1960-61 to 1969-70	i. Allotment of 2 acres of land ii. Jhumia grant.	SD, KHW, SNM, KSH, KMP, SBR, ARP, BLN & UDR	3529	175
Rs. 1910	1970-71 to 1976-77	i. reclamation of land ii. purchase of agriculture tools & implements iii. housing iv. cultivation of horticulture crops	SD, KHW, SNM, KSH, KMP, DMN, SBR, ARP, BLN & UDR	7141	323
Rs. 6510	1975-76 to 1982-83	i. Land development ii. Housing iii. Purchase of livestock iv. Purchase of agricultural inputs	SD, KHW, SNM, KSH, KMP, DMN, SBR, ARP, BLN & UDR	9079	223
Rs. 8000	1985-86 to 1987-88	i. Land reclamation & development ii. Purchase of agricultural inputs iii. Housing iv. Animal husbandry & Pisciculture	SD, KHW, SNM, KSH, KMP, DMN, SBR, ARP, BLN & UDR	1254	205
Rs. 25000	1988-89 to 1991-92	i. Horticulture crops cultivation ii. Animal husbandry/pisciculture iii. Housing	SD, KHW, KSH, KCHP, KMP, GDC, DMN, SBR, ARP, BLN & UDR	4181	58
Rs. 30000	1992-93 to 1996-97	i. Horticulture & agriculture programmes ii. Animal husbandry/ Pisciculture iii. Housing	SD, KHW, BSG, SNM, BLN, UDR, SBR, ARP, DMN, KCHP, KSH, KMP, GDC, LTV	3668	135

Source: Department of Tribal Welfare, Government of Tripura, 1955-1992.

Notes: SD=Sadar; KHW=Khowai; SNM=Sonamura; KSH=Kailashahar; KCHP=Kanchanpur; GDC= Gandacherra; KMP=Kamalpur; DMN=Dharmanagar; SBR=Sabroom; ARP=Amarpur; BLN=Belonia; UDR=Udaipur; LTV=Longtharai valley; BSG=Bishalgarh

of a pilot scheme for which permanent houses were not built in the colonies. When a house needs repairing by the beneficiary families, it has been observed that many of them were not taking serious about repairing their houses but ran away from the colony to settle in the deep forest or remote area and build their choice of house. Jhumias stayed in the colony as long as the houses were in good condition and the support items such as animals and grants were not finished. The moment these were exhausted, they escaped from the colony and began to live a pre-rehabilitation period.

To ascertain the reason for abandoning the rehabilitation scheme, the jhumia beneficiaries of the Tripura Reserved (TR) colony, set up in 1982 (initially 100 families were rehabilitated) in Dhuptali, Gomati District, have been interviewed. The observation with Mrs Lalmawi Kuki (whose husband was a jhumia beneficiary under this colony) mentioned that they received pineapple saplings of 50-100 numbers only. When it became mature, finding a market to sell the fruit was challenging, making them desert the plantation garden while looking for alternative vocations that could sustain/support family needs. Moreover, they also received a sericulture scheme, which was short-lived due to the absence of cocoon buyers except the government. Here, the market plays an important role in promoting such a scheme. Another beneficiary, Mr Adin Murasing, was rehabilitated under the rubber plantation scheme in 1997; the scheme was implemented and supervised by Tripura Rehabilitation and Plantation Scheme (TRPC). In addition, the family also received one cow, twelve pigs, twelve goats, twelve ducks, and twelve hens under the animal husbandry scheme to supplement the family income. Similarly, he got land deeds of one hectare under the scheme where rubber plantation is planted. The beneficiary is transferred with land ownership rights when the rubber matures (tapping stage). Initially, he tapped his garden and received a sufficient amount of money from rubber. However, he leased the garden for Rs. 30000 to a Bengali money lender for six years. Since his home is located within the rubber garden, he has to leave the plantation site and does become a landless fellow again. After some years, local self-government intervention helped him to stay on his land (personal interview).

Parasu Ram Debbarma (*former supervisor of the jhumias rehabilitation scheme*) considers the colony settlement scheme a failure and cited the example of Mr. Amarendra Debbarma, a jhumia who stayed for a few months and left the colony. He also mentioned that the selection process was biased; as a result, it failed to select the hardcore jhumias because there were many issues of nepotism in its concept. Calling himself the guardian of the colony owing to his official posting, whenever any jhumia fled from the colony, he would search and bring them back and, at times, personally taught the art of ploughing and plantation of horticultural crops. He firmly believes that political consideration played a spoilsport often, and the rehabilitation schemes failed in most cases. He also said that some of the selected jhumia beneficiaries possessed large areas of jote land (legal land deeds) in their original home. As such, they were unwilling to stay long in the colony; such beneficiary was Mr Chandrakumar Debbarma in the Amtali colony in Bishramganj, who had more than 7 hectares of plain land. He also believed that the rehabilitation programme of jhumias was carried from the government's viewpoint during that time without considering the views of the tribal jhumias. Thus, it has little impact on the life and livelihood of the jhumias

even after spending a lot of money (personal communiqué). Another knowledgeable and experienced person, Mr Lalhmingliana Darlong (*former supervisor of the jhumias rehabilitation scheme*), said that the financial support was provided on an instalment basis in different forms such as reclamation of land, purchased of a bullock, implements or tools, seeds, weeding, housing construction and fruits such as coconut, mango, sopedá, litchi, lemon, arecanut, banana and pineapple which might take year/s (*personal communiqué*). The most crucial issue for the limited success has been the poor quality and quantity of rehabilitation materials provided. Some beneficiaries such as Baia Kuki, Laltlungpuia Kuki and Rolianthanga Kuki from Dhuptali village informed that about receiving only five jackfruits plants and coconut saplings, ten arecanut plants, three mangoes plants etc. which indeed were not adequate to make long term livelihood sources. As a result, the monetary support provided for production inputs was always used for consumption to meet short-term requirements (*personal interviews*).

The Rs. 8000 scheme was introduced in 1985-86 and was functional only for a few years. The scheme component includes reclamation and development of land, purchasing agricultural inputs (implements, bullocks, seeds, fruit plants and fertiliser), housing and livestock rearing, including piggery and poultry. The first component was for reclamation and development of land whereby Rs.1500 was provided in the first year, Rs.1400 in the second year and Rs.800 per family in the third year. The second dimension provided financial assistance for purchasing agriculture inputs. Accordingly, Rs.300 was given in the first year for buying plough and agriculture implements, Rs.1500 in the second year for purchasing bullocks alongside Rs.500 for buying seeds, fruit plants and fertilisers. In the third year, Rs.500 was again given for buying seeds, fruit plants and fertilisers. The third part included housing with amounting to Rs. 1200 but provided only in the first year. The final approach dealt with animal husbandry such as piggery and poultry farming comprising a monetary amount of Rs.300 (Reang 1999). The scheme has benefitted 1254 households and extended to 205 villages.

The late 1980s saw the introduction of the Rs. 25000 scheme, which is larger than the previous schemes in size. However, the scope remained the same, and horticulture and its propagation became the central focus. The scheme's coverage was limited but more intensive as it accommodated 4181 households. The major components were the cultivation of horticulture crops, rearing livestock and housing assistance. The first instalment of Rs.15000 was released for the cultivation of horticulture and agriculture crops. The second instalment of Rs.5000 was for investment in animal husbandry or pisciculture, and the third instalment of Rs.5000 was disbursed for housing assistance. Further, in 1992-93 the rehabilitation package was enlarged to Rs. 30000 scheme with no significant changes in component. The fund was distributed in three phases. The first and second phase were identical to the immediately previous one while the third part enhanced the housing grant from Rs. 5000 to Rs. 10000 (Reang 1999). The total number of jhumias beneficiaries was 3668, extending over 135 villages. However, plain-land agriculture-based resettlement schemes were not the only strategy adopted. Plantation-based rehabilitation has also been an effective

approach in the state which comprises rubber and tea. The introduction of plantations for jhumia rehabilitation appeared to be the right strategy owing to the nature of the crops which are labour intensive, thus emerging as promising alternatives (Datta and Singh 2012), ensuring regular flow of income (Viswanathan 2012), which provided a vital boost to the jhumia economy (Choudhury 2012).

It should be noted that under the plantation project, the jhumias beneficiary did not receive direct financial support; instead, they were provided in kind like fertilizer, saplings, tools and implements by different implementing agencies, namely Tripura Forest Development and Plantation Corporation Ltd. (TFDPC), Tripura Rehabilitation and Plantation Corporation Ltd. (TRPC), the Rubber Board, Autonomous District Council (ADC) and the Tea Board. The observations in one of the rubber-based rehabilitation villages of Dhuptali in the ADC area under the Gomati District indicated socio-economic development for the rehabilitated families. The results were proper utilisation of land along with an extension of plantation area, increased income-earning opportunities, availability of work, and better education facility for the household children. Interestingly, jhum cultivation has been completely abandoned in this village and its surrounding areas since long time, owing to the introduction of rubber-based rehabilitation. The average annual income of the rehabilitated families was Rs. 160000, more than the income they used to earn from shifting cultivation. Rubber plantation cultivation has become a significant occupation among rehabilitated families and forms the primary source of livelihood. Besides, a regular flow of income made some of the rehabilitated families become big farmers (erstwhile jhumia), and now they can lease in rubber gardens from their neighbours, hence, making them more entrepreneurs. This is an indication of social and economic empowerment.

From the 1950s to the 1990s, the earlier rehabilitation programmes were mainly characterised by plain land cultivation, colony settlement, and animal husbandry. However, those schemes had less impact on the permanent settlement of the jhumias and did not contribute to the creation of long-term assets and often were sufficient only to create short-term improvement (Sengupta 2013); therefore the state government was re-modelling those schemes successively over the years to find the best suitable and viable means to rehabilitate the jhumias permanently. It should be noted that only those jhumias who were rehabilitated under the rubber plantation cultivation stayed in the colony scheme because of a regular flow of income and availability of employment throughout the year. In this way, the jhumias family were able to sustain their livelihood. Sengupta (2013) study also found that the Reang tribe of the South Tripura district, who were rehabilitated under the rubber plantation scheme, earned much better than those allotted plots for horticulture crops in the Dhalai district. According to Bhowmik (2006), rubber productivity rates decline by the 28th year, indicating a long-term asset and thus providing ample scope to the cultivator to boost livelihood strategy and further reinvesting in other allied agricultural activities.

Plantation Based Rehabilitation

In 1963, the Department of Forest introduced rubber plantations as part of the afforestation programme at Manu and Patichhari. Looking at its successful programme

, the state government established Tripura Forest Development and Plantation Corporation Ltd. (TFDPC) in 1976 and Tripura Rehabilitation and Plantation Corporation Ltd. (TRPC) in 1983 with a specific objective of economic settlement of tribal jhumias and small farmers through a rubber plantation. They were entitled to get 1.5 hectares of land occupancy rights. The corporations helped the beneficiaries set up the garden and work as labourers on their farms. Their wage was paid according to the provisions of the Plantation Labour Act 1951. As the trees mature, it produces latex; they process it and sell the dried sheets in the market. Besides, the beneficiary works to intercrop with banana and pineapple, until the canopy covers. Moreover, they were entitled to receive a subsidy, technical training and support provided by the Rubber Board (Bhowmik 2006).

Meanwhile, the growth of rubber plantations was further boosted by introducing the Block Plantation Scheme in 1992-1993, initially targeting 1500 hectares and benefiting 1200 households in 25 plantation centres across Tripura. Under this scheme, a compact land (Block) was identified, either allotted or to be allotted or recorded in beneficiary name, and then only plantation cultivation was undertaken (DESP 2001-2002). After selecting the beneficiary, the Rubber Board obtained site clearance from the TTAADC and District Administration if the plantation area comes under their jurisdiction. An agreement would be signed between the jhumias family and the Board, allowing the former to monitor during the immature stage, usually up to 7 years. After this stage, the plantation area would be transferred to the beneficiary households after all other facilities were arranged. The formation of the Rubber Producers Society (RPS) is a vital component in each block to assist latex processing. Besides, from each block, 2 to 3 literate cultivators were selected for training at a semi-skilled level for field supervision to minimise the roles of the Rubber Board staff. According to Paribalan (2006), the beneficiaries' income had increased from the pre-rubber days, wherever rubber tapping started, which can be considered a positive impact. For instance, the children of many rehabilitated rubber growers have had the exposure to the best possible education in and outside the state. Many have taken up professional jobs elsewhere and have mingled themselves to the urban centres where they had been sent for study and training (Kuki 2022).

Tea-based rehabilitation has also been practised in Tripura, but not as significant as rubber plantations. The scheme is supported for five years, considering an establishment cost of Rs. 76154 per acre. The tribals' beneficiaries were selected through the "Sub-Divisional level Jhumia Rehabilitation Committee" in collaboration with the "Block Advisory Committee" among the fully or partly STs jhumia households. Similarly, under the horticulture scheme, the landless jhumias household residing in remote areas was eligible to receive the benefit of Rs. 30000 as a grant on an installment basis (DTW 1998-2006). The Autonomous District Council (ADC) also developed orange orchards in the Jampui hills and Sakhani Ranges (Dasgupta 1986). A study undertaken by DoAAE (1986) suggested that a horticulture-based resettlement scheme increases the income of rehabilitated households more than an agriculture-based scheme.

However, rubber-based rehabilitation occupied the most popular form of the resettlement programme, as shown in Table 2. The total beneficiary of the jhumias

Table 2: Jhumias settlement scheme in 1997-98

District	Sub-division	No. of Family	Crop
West Tripura	Sadar	50	Tea
		50	Rubber
	Khowai	60	Rubber
	Bishalgarh	114	Rubber
South Tripura	Sabroom	50	Rubber
	Belonia	50	Rubber
	Udaipur	50	Horticulture
		61	Rubber
North Tripura	Kanchanpur	50	Tea
Dhalai	Longtharai Valley	40	Tea
	Kamalpur	45	Rubber
	Gandacherra	13	Horticulture
Tripura	Grand Total	633	

Source: Tribal Welfare Department

rehabilitation scheme provided by the Tribal Welfare Department in 1997-1998 was 633 households. Among the beneficiaries, 430 families were brought under the rubber scheme, 140 families were accommodated under tea-based rehabilitation, and rehabilitated 63 families under the horticulture project. Interestingly, rubber-based resettlement has been more in the West Tripura and South Tripura districts. Tea-based rehabilitation was more significant in the North Tripura region, while horticulture-based rehabilitation was used mainly in the Gandacherra sub-division of the Dhalai district and Udaipur sub-division of the South Tripura district, albeit in small numbers.

Settlement through Re-Grouped Village

The most recent approach adopted by the government to rehabilitate jhumias was the re-grouped village. There are 21 re-grouped villages in the state set up to bring together tribal jhumias from interior areas to cluster in the nearest national/state highways and roads, which started in 2005-2006 (DoF 2016). The aim was to provide developmental amenities to the unreached tribal jhumias practising jhuming, thereby reducing their dependency upon the forest and its resources through a sustainable livelihood approach. Under the programme, agro-forestry activities like bamboo plantation, the creation of nurseries and dams to control soil erosion, and the planting of medicinal herbs and broom grass were promoted (Choudhury 2012). Besides, employment was generated for the residents through Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) for about 115 person-days annually and financial support for agriculture and allied activities. At the same time, 137 Self Help Groups (SHGs) were formed to empower rehabilitated households (Panda 2013). The core economic activity of the SHGs includes fishery, piggery, duckery, poultry, agarbati stick making

and nursery of plantation sapling, making handicrafts and handloom which add their family income. Moreover, the households also earn from agro-forestry products such as turmeric, youngchak, ginger, banana and bamboo-shoots to improve their living status.

Table 3: Status of Re-Grouped Villages

District	Sub-Division	No. of Families	Population
North	Kanchanpur	868	3643
Dhalai	Ambassa	131	583
	Manu	626	4450
	Gumti	266	1198
Khowai	Teliamura	1036	5810
Gomati	Karbook	177	737
	Amarpur	435	2009
South Tripura	Baga fã	331	1772
All	Grand Total	3870	20202

Source: Department of Forest, Government of Tripura, 2016

There were 3870 households in the re-grouped villages, with the population being 20202 till 2016 across the state (DoF 2016). The Tribal Welfare Department and Forest Department work in tandem to provide basic necessary social and physical infrastructures (Bhowmik 2013) in the form of primary education, housing under Indra Awas Yojana (IAY) scheme, Anganwadi centres, electrification, creation of water bodies, conducting sanitation awareness, roads and bridges or culvert, market-shed, community hall, primary health sub-centres, drinking water facilities in each re-grouped village (Choudhury 2012). Table 3 depicts that the highest number of rehabilitated families was in Teliamura, which accounts for 1036, followed by 868 families in the Kanchanpur sub-division. However, the extent of re-grouping is comparatively less in the Ambassa sub-division, 131 families and 177 families in the Karbook region. However, the preliminary visits to the re-grouped village suggest that the people were unwilling to stay back as the provisions were paltry such as shortage of land (only one acre on average per family), difficulty in finding work and lack of income sources. The only opportunity was for their children's education. It should be remembered that the indigenous people live in remote areas often characterised by inaccessible roads, lack of proper transportation, deep inside forests, scattering in the vast distance, etc. As a result, it is not convenient for the government to provide development facilities, including schools. However, after the re-grouped village project, once they were settled in a common area selected by the government, they started to receive basic infrastructure and priority to their children's education. The government provides free education to their children, which is a dream for many children before the re-grouped village. Those children started pursuing higher studies, moving from primary to secondary education in their neighbourhoods. They began to imitate the children of plain people, opening their eyes in the matter and extending

the scope to understand the importance of education on the right path. Given proper facilities, they were expected to change. These people possessed available land in their original villages, allowing them to practise jhum cultivation. They also revealed that many families had reverted to their old village to pursue a traditional livelihood. Although jhuming is a non-economical resource utilisation process, households were still interested in adopting the traditional method to meet their rising demands, mainly due to the absence of timely employment. Thus, ensuring employment generation in this re-grouped village is an essential requirement.

It should be noted that the Forest Department established different re-grouped villages in various Reserve Forests across the state to settle some jhumia households in land and ensure a sustainable supply of labourers for plantation works and allied activities in the forests. The threats from insurgency to the life and livelihood of the tribal jhumias in the remote areas have been a primary factor for their shifting to the new habitations. Cooperation of all the departments in the same line to a single objective to rehabilitate jhumias is the main objective of the project, and the first attempt was made by the Forest Department. This attempt was the first time in the state that all the departments were working together to provide all the necessary facilities and basic infrastructures to improve the living condition of the beneficiaries' families (Bhowmik 2013).

Problems in the Rehabilitation Process

The earlier rehabilitation schemes were characterised by land agriculture activities, housing support, and animal husbandry. However, those schemes had less impact on the life and livelihood of the jhumias due to a lack of fertile valley lands, inadequate financial assistance, and poor quality of inputs leaving the beneficiaries discouraged (DoAAE 1988). Besides, those beneficiaries were not accustomed to plough cultivation, and their limited knowledge of horticultural cultivation and lack of entrepreneurship caused livelihood uncertainty. On various occasions, the plants died very quickly because of a lack of proper maintenance, and these beneficiaries became daily wage labourers. Nonetheless, the absence of work in the surrounding settlement colonies became burdensome (Bhattacharjee 1993). In 1964, the state government established 43 settlement colonies across the entire state to resettle 5106 jhumia families under various components of schemes. However, 302 families deserted the settlement programme. They were discontent and disappointed about the scheme implementation and follow-up activities (Ganguly 1969).

For instance, Bhattacharjee (1993) study found that in the Kanchani colony, 36 of the 56 rehabilitated jhumias families deserted the settlement owing to the lack of followed-up provisions from the government as well as the unemployment problem. Moreover, family expenditure exceeded income, besides diseases such as dysentery, chickenpox, fever and measles induced them to abandon the settlement. The post-mass desertation solution was that the remaining families were rehabilitated with rubber plantations. At the same time, the deserted families returned to their original villages because they grew up as free men in the hill environment and had unfailing love for jhum cultivation (Devvarman 1999). Similarly, in the Karamchhera colony, 30 families had deserted the colony settlement due to the practice of shifting

cultivation. Those beneficiaries received grants but were unwilling to stay in the colony. They used financial support to buy agricultural inputs on various occasions of festivals and enjoyment (Ganguly 1969). There were incidents where the jhumias deserted the settlement and returned to their traditional jhum cultivation, feeling neglected and unattended (Debbarma 2005).

At the same time, the rehabilitated jhumias beneficiary in Gongrai Molsom colony and Bishramganj Adivasi colony settlements revealed that wood selling was their major source of income (Reang 1999). Moreover, in the Kanchani colony, the beneficiaries sold firewood and forest products and became wage earners to meet daily needs (Bhattacharjee 1993). The continuous selling of wood from the nearby forest made the locals experience ecological imbalance, degradation of the surrounding environment, the massive scale of deforestation and loss of biodiversity (Reang 1999). Meanwhile, the study of DoAAE (1986) on the Primitive Group Programme involving 341 beneficiaries from north, south and west Tripura showed significant outcomes in the form of development in the socio-economic status of the rehabilitated Reang jhumias who had adopted pineapple cultivation, animal husbandry and poultry rearing. Similarly, rubber-based rehabilitation at Tripura Rehabilitation (TR) colony in Dhuptali, Gomati district, showed a transformation in the life and livelihood of the rehabilitated beneficiaries where rubber cultivators' income increased in manifolds as well as there was an improvement in their possession of physical assets (Kuki 2022).

Another study was conducted by the Law Research Institute (LRI) (1990) at Gurupada colony, which was set up in 1971 where 107 families were rehabilitated and allotted 1.5 hectares of land along with money to buy seeds, bullocks and agricultural inputs as well as land reclamation. They spent the money provided for buying bullocks on pure consumption needs. They cultivated pineapple on the hill slopes depending on the rainwater and did not use chemical fertilisers. The inadequate and infertile land allotted to them results in crop failures and less product. Consequently, the economic condition of the rehabilitated families became worse than their previous days of jhuming. Most of them reverted to their traditional practice of jhuming after abandoning the settlement colony. Moreover, a study on a re-grouped village in the Chakmaghat area of West Tripura was made by Choudhury (2012), wherein 318 families were resettled and received all the basic necessary social infrastructures. However, the resettlement process lacked a clear plan to rehabilitate them. The over-crowding resulted in a land shortage in the area, and the jhumias with little opportunity to start land-based economic activities because of the error in land distribution. As a result, they depended upon government support and labouring in their neighbouring villages to earn a livelihood. Furthermore, wood cutting and selling become another way of getting income for the beneficiaries while destroying the natural forest.

It should be remembered that jhumias had limited knowledge about the schemes, although the government has executed a remarkable effort. As a result, the beneficiaries were unwilling to make a permanent settlement in the colonies because most of the schemes were pilot projects. Instead, the jhumias desired to return to their original

village in the remote area, where they lived as free men. They remained in the colony settlements as long as the money was not finished (Devvarman 1999). The beneficiaries were always interested in returning to their old habitation to live as before and continuing jhum cultivation that they inherited the traditional knowledge from their forefathers. Numerous old resettlement schemes ended up in ruins, and large chunks of land considered for rehabilitation remained unutilised (Reddy 1999).

Conclusion

It is true that jhuming was once a primary occupation among the jhumias of Tripura; however, the system became unsustainable over time. As a result, jhumias rehabilitation has been the most prioritised area by the state authority since the princely era. But the impact of rehabilitation schemes and implementation was not up to the desired level. The continuous expansion and modification of the scheme components over successive periods show the continuance of jhuming in the state. The introduction of plain land cultivation has challenged jhumia beneficiaries whose way of life has been nomadic. The amount of money provided for resettlement has always been regarded as insufficient. Therefore, rehabilitation through plantation schemes, particularly rubber-based, can be regarded as effective, along with a few achievements in horticulture crop cultivation. Besides, the most recent approach of re-grouped villages is a wise attempt made by the government. Still, the programme cannot be considered adequate, as it was revealed that the experience is far from its stated objective. In short, the implementation of the jhumias rehabilitation programmes in the state has been successful in weaning away a large number of jhumias households mainly because of the success of rubber plantation cultivation as a long-term economic solution and livelihood strategy.

As it appears from the analysis, a few suggestions were made for better implementation and outcome of the rehabilitation programme. Since jhum cultivation is culturally attached to the life and livelihood of the indigenous tribes, strategies have to be adopted in a similar and acceptable system to the culture and social structure of the jhumia community. Any attempt towards a jhumia rehabilitation programme in the future should prioritise enquiring about the socio-economic condition of the targeted people. Involving the jhumias in decision-making would be another vital strategy to achieve a significant programme outcome. They must be informed of the project details and, if need be, organise training and demonstration on management, technical support, and the process of availing financial support if entitled to the scheme. This process must win over the condition of insecurity with a sense of security since the jhumias settlement aims not only to conserve forest but also to raise the living conditions of the jhumias. Therefore, colony settlement schemes or re-grouped villages of resettlement should be arranged near their original habitation of the beneficiary because the rehabilitation of the tribals' households far away from their home may result in a social crisis as almost every tribal community keeps a network of social relations through a local organisation.

Besides, the rehabilitation scheme should preferably be labour-intensive so that a jhumia can easily be employed to do the manual work; hence this may, to some extent, solve the unemployment problems. Moreover, the rehabilitation scheme has

to be reshaped in the context of current environmental concern. The adopted approach should be more environmentally friendly, like promoting agro-forestry farming or crop diversification instead of monoculture to avoid any market risks and crop failures. Since jhumias cannot be expected to perform well in the beginning, alternative vocations that can provide short-term income to the jhumias family must be arranged to supplement their family income. Among the plantations crop used for tribal jhumias rehabilitation, except rubber plantation cultivation seems more suitable and feasible than other cash crops used to rehabilitate jhumias. Hence, it is the right time to concentrate on such a project approach which can develop tribals in particular and accelerate the state's economic growth rate in general. The government should not further invest in those plantations which appear to be non-feasible. Innovative ideas among the horticulturists of having a short-duration improved jhum followed by plantation crop farming may be encouraged. The state government support mainly regarding the refinancing of their labour days may be considered, preferably with the MGNREGS programme. Flexibility and adaptation among the line departments like the Tribal Welfare Department, Autonomous District Council (ADC) and Horticulture Department regarding the schemes for the economic development of the tribal jhumias may be supported; providing training on skill improvement may enable them to use modern technology of farming. At the same time, timely distribution of saplings and planting in the right season is highly encouraged. In short, policy orientation is needed to ensure that the rehabilitation process ensures sustainability and the livelihood efforts of the rehabilitated beneficiaries take off towards a better lifestyle in the future.

References

- Arun, M. (1976). "Problems of Shifting Cultivation", *Economic & Political Weekly*, 1492-1493.
- Bhattacharyya, G. (1988). "Refugee Rehabilitation and Its Impact on Tripura's Economy", Omsons Publication, New Delhi: 1-187.
- Bhattacharjee, P.N. (1993). "Renovation of Jhumia Settlement Colony at Kanchani through Plantation – A quest for survival", *tui- A quarterly Research Journal on Tribal Life & Culture*, II (2): 37-46.
- Bhowmik, I. (2006). "A Status Report on Rubber Plantations in Tripura", In *Natural Rubber in Tripura Baseline Data and Future Planning*, (ed. Bahuguna, V. K.), TRM/2006/Technical Bulletin I. Tripura Rubber Mission, Government of Tripura, Agartala: 59-81.
- Bhowmik, I. (2013). "Rubber Based Rehabilitation in Tripura", *Development Dynamics*, (1) 2: 7-18.
- Choudhury, J. (2012). "Rethinking of Regrouping Villages for Rehabilitation of Shifting Cultivators in Tripura", in *Shifting Cultivation in Tripura*, (ed. Naresh Chandra Devvarma), Tribal Research and Cultural Institute, Government of Tripura, Agartala: 58-66.
- Dasgupta, M. (1986). "Jhumias of Tripura", *Economic & Political Weekly*, XXI (44&45):1955-1960.

- Das, D. (2006). "Demystifying the Myth of Shifting Cultivation Agronomy in the North-East", *Economic & Political Weekly*: 4912-4917.
- Das, S., Choudhury, S., and Roy, A. (2012). "The Success Story of Rehabilitation of Jhumias in Tripura-A study on Baramura-Deutamura Range", *Research Inventy: International Journal of Engineering and Science*, 1(10): 25-29.
- Datta, M., and Singh, N. P. (2012). "Shifting Cultivation: Land Degradation and an Approach to Remedial Measures in North East-India", in *Shifting Cultivation in Tripura*, (ed. Naresh Chandra Devvarma), Tribal Research and Cultural Institute, Government of Tripura, Agartala: 35-57.
- Debbarma, N. C. (2005). "History of the Land System and Land Management in Tripura (1872-2000 AD)", Manjushree Publications, Krishnanagar, Agartala: 11.
- Department of Analytical & Applied Economics (DoAAE). (1986). "Evaluation of Jhumia Rehabilitation Schemes: Report", Calcutta University Post-Graduate Centre, Agartala: 16-37.
- DoAAE. (1988). "Evaluation of Jhumia Rehabilitation Schemes in Tripura", Calcutta University Post-Graduate Centre, Agartala:1-82.
- Department of Forest (DoF). (2001). "State Afforestation Policy", Government of Tripura. Agartala:1-16.
- DoF. (2016). "Present Status Report on Re-grouped Villages upto May", Government of Tripura, Gurkhabasti, Agartala:1-18.
- Department of Tribal Welfare (DTW). (1955-1992). "Rehabilitation of Landless Jhumia Tribal Families under Settlement Programme of Tribal Welfare Department", Government of Tripura, Agartala:1-93.
- DTW. (1998 to 2006). "Tribal Welfare a mission to accomplish change", Government of Tripura. Agartala: 22-23.
- Dey, S. K. (2009). "Rubber Plantation for Development of Tripura", in *Development and Paradigm and Bottom up Approaches*, (eds. K N Jena et al.), Abhijit Publication: New Delhi: 52-62.
- Devvarman, S. B. K. (1999). "A Study over the Jhum and Jhumia Rehabilitation in the Union Territory of Tripura", Directorate of Research Department of Welfare for Sch. Tribes & Sch. Castes Government of Tripura, Agartala, I(2): 27-53.
- Directorate of Economics & Statistics Planning (DESP). (2001-2002), (2002-2003) & (2011-2012). "Economic Review", Government of Tripura, Agartala: 164 & 139.
- FAO. (1999). "From Evolution to Revolution in Agriculture", The FAO Field Programme and Agricultural Development in Asia and the Pacific. FAO Regional Office for Asia and Pacific, Bangkok, Thailand. RAP Publication 1999/28.
- Ganguly, J. B. (1969). "Economic Problems of the Jhumias of Tripura", Bookland, Private Ltd, 1 Sankar Ghosh Lane, Calcutta-6: 1-57.
- Gebeye, B. A. (2016). "Unsustain the Sustainable: An evaluation of the legal and policy interventions for pastoral development in Ethiopia", *Pastoralism: Research, Policy and Practice*, 6(2): 1-14.
- Gupta, A K. (2000). "Shifting Cultivation and Conservation of Biological Diversity in Tripura, North-East India", *Human Ecology*, 28(4): 605-629.

- Joseph, K. J. (2014). "Exploring exclusion in innovation systems: Case of plantation agriculture in India", *Innovation and Development*, 4: 73-90.
- Kuki, V. (2022). "Jhumias Rehabilitation through Natural Rubber Cultivation- A Case Study of Dhuptali Village of Tripura", in *Livelihood Diversification and Food Security for Sustainable Development: The Approaches for 2030*, (eds. Surabi Dutta and Supriya Shyam), Published by Publication House, Women's College Tinsukia, Assam: 1-8.
- Law Research Institute (LRI). (1990). "A Study of The Land System of Tripura", Gauhati High Court, Eastern Region, Guwahati, 119-156.
- Nga, H.T. T. (2008). "Upgrading Strategy for the Rubber Value Chain of Smallholders in Bo Trach District, Quang Binh Province", Discussion paper (June), Hanoi-Dong Hoi: 1-24.
- Negi, S. C., Pathania, P., Sharma, S. K., Sharma, S. K., Rana, S. S., and Katoch, M. (2019). "Integrated farming system approach for enhancing the livelihood security & productivity of hill farmers", *Indian Journal of Economics and development*, 7(2): 1-6.
- Panda, S. K. (2013). "Provision of livelihood opportunity in the fringe forest: Some experiences of Tripura", *Indian Forester*, 139(3): 187-192.
- Paribalan, P. (2006). "Role of Rubber Board in Tripura", in *Natural Rubber in Tripura Baseline Data and Future Planning* (ed. V K Bahuguna), Tripura Rubber Mission, Government of Tripura, Agartala, TRM/2006/Technical Bulletin-I: 41-52.
- Paul, P. K., and Paul, P. P. (2006). "The jhumias of Tripura may be frustrated", *Current Science*, 90(4): 475.
- Penot, E., and K. T. (2002). "Diversification of perennial crops to offset market uncertainties: the case of traditional rubber farming systems in West-Kalimantan", in 17th Symposium, International Farming Systems Association, (November: 17-20), IFSA University of Florida: 1-10.
- Pirard, R., Petit, H., and Himlal, B. (2017). "Local impacts of industrial tree plantations: An empirical analysis in Indonesia across plantation types", *Land Use Policy*, 60: 242-253.
- Reang, D. (1999), "Jhumia Settlement Scheme An Evaluation", *tui- A Quarterly Research Journal on Tribal Life & Culture*, 7(1): 27-53.
- Reddy, R. C. M. (1999). "Jhumias in Transition", *tui- A Quarterly Research Journal on Tribal Life & Culture*, VII (2): 1-19.
- Sengupta, M. (2013). "Shifting Cultivation and the Reang Tribe in Tripura", *Economic and Political Weekly*, XLVIII (40): 59-65.
- Tripathi, R. S., and Barik, S. K. (2003). "Shifting Cultivation in North East India", in *Approaches for Increasing Agricultural Productivity in Hill and Mountain Ecosystem*, (eds. Bhatt, B. P., Bujarbaruah, K. M., Sharma, Y.P., and Patiram), ICAR, Research Complex for NEH Region, Umiam, Meghalaya: 317-322.
- Vaid, P. K., Ajay, K., and Ravinder, K. (2011). "Policies and Programmes for Tribal Development in Himachal Pradesh", *Himachal Pradesh University Journal*: 1-9.
- Viswanathan, P. K. (2012). "Integrated Rubber Farming and Livelihood Systems in Northeastern India", in *Agriculture and a Changing Environment*, (ed. Sumi Krishna), Routledge, New Delhi-110001: 263-288.