

Occupational Variation A Comparative Study of Tea Tribes Confined Within and Beyond Tea Gardens in Sonitpur District, Assam

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Abstract

This study examines the occupational patterns of the tea tribes residing within tea estates and those living in *basti* areas of Assam. Through a logistic regression model, the influence of income, education, and gender on occupational status is analysed. The findings reveal some striking challenges in terms of unemployment, particularly in *basti* areas, where a significant portion of the population remains unemployed. Moreover, unskilled labour predominates in both settings; higher education and income levels are associated with reduced odds of lower-skilled employment. Apart from income and education, gender has also a significant role in determining the occupational pattern of these people.

Keywords: Tea Tribes, Occupational Variation, Regression, Challenges, Income & Education Patterns

8.0 Introduction

The trajectory of Assam's tea industry from its initial discovery of "tea plant" in the region to its current state has been significant and robust (Sarma 2013). About 1.26 million workers

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working in the tea gardens of Assam are directly dependent on them for their livelihoods (Mishra et al. 2012). These people have their own historical past with their roots creeping in the then famine and poverty stricken areas of eastern and southern eastern parts of India in states like Bihar, Jharkhand, Orissa, Chattisgarh, Andhra Pradesh. Their influx stemmed out of the dire necessity of cheap labourers, (mostly as permanent workers) to work in the tea industry of Assam. They were lured initially and subsequently on fallacious grounds of providing better living conditions and with sheer hopes of their repatriation once their contracts end (Guha 2006). These labourers were brought under varied circumstances as indentured workers and were highly vulnerable (Shunmugaraja 2017). They were termed "coolie" which through historical progression was viewed as offensive and later on was substituted with the term "mazdoor," meaning labourer, in official documents (Mipun & Shyam 2003). Under the colonial regime the demand for a good inflow of labour supply, accentuate families more so of individuals to settle in the tea gardens and hence were eventually caged for multiple generations due to forced immobility (Wolf 2022). They were exploited with various malicious practices to exert autonomy, regulate them both in work and their residential areas (Behal 2003). Arakatis and Sardars, two recruiting agents were assigned with the task of recruiting labourers for various tea plantations. They would gather group of workers and bind them to contracts, initially for duration of 05 years, which later got reduced to 03 years.

In Assam, they are broadly knowns as Adivasis and concomitantly as the Tea Tribes of Assam (Das 2022). Although constituting a large economic force (Duarah 2020) these people have endured challenging existence, grappled with socio-economic issues since the British era (Fernandes 2003).

The "colonial hegemony" which continued since the "migration" of "tea tribes" disassociated the tea garden people from the mainstream world. Such isolation, aloofness was created by the Britishers for their ulterior motive of making these people consolidate in the tea gardens for centuries so that their disconnection from the mainstream keeps them entangled in the tea garden space, a colonial custom that persisted until the time of the Independence movement (Mishra et al. 2012). This forced aloofness and ethnic heterogeneity also refrained them from developing a feeling of togetherness; a colloquial "Adivasi consciousness" among them (LaFavre 2013). Their integration therefore with the local community was toggled up with feelings of being side-lined by mainstream culture, of abandoning the garden life, an urge to move to towns and cities embedded with the fears of losing their identity (Hussain & English 2013).

The tea garden landscape offered therefore very little scope of occupational diversification; much of which concentrated to unskilled activities and only a negligible portion in factories or other semi-skilled positions. This scenario however underwent a gradual change after the colonial period with their heightened awareness and educational obtainment; and over the past years numerous educated youths from the tea gardens have chosen employment opportunities outside the gardens. Particularly among these people are Adivasi youth, who have shown apathy towards the gardens for various reasons and now resides independently in towns and cities. These individuals over the period of time have educated themselves with higher studies and have challenged the longstanding indentured practices controlling multiple generations in the past (Saikia 2008). Another befitting reason is the departure of major companies like "Hindustan Unilever" and "Tata" from the "tea industry" which brought a significant shift from large scale

plantations to small growers subsequently leading to casualisation of the workforce due to declining profitability. Many tea companies ceased offering new regular permanent labour contracts. (Mishra et al. 2012) which led their attention on activities other than associated to tea gardens. Moreover, individuals who do not possess cultivable land in the tea gardens are often observed abandoning their places and temporally settling as informal labourers in nearby urban areas and towns (Gupta 2011). Although there are previous studies on occupational pattern of the tea tribes but the paper here stands significant as there are no such studies on the comparison of the occupational pattern of the tea estates and *basti* area people. This paper therefore discusses on the occupational pattern of the tea tribes both in the tea estate and *basti* areas; parameters which determines the occupational pattern and the gradual shift towards other livelihood activities especially among the younger generation.

8.1 Conceptual Framework

The occupational pattern among the tea tribes of Assam is rooted in the historical recruitment processes, spatial isolation; institutional barriers all collaboratively produced and reproduced the stark patterns which have been discussed in the paper. In the tea garden scenario, the assumption of a unified labour market where the individual effort and human capital organically leads to advancement is a myth, which is upheld in the labour market segmentation theory. Labour markets are divided into primary and secondary segments as argued by Doeringer and Piore (1971) in their study. While the secondary segment is characterized by low wages, instability, and critically there is no other pathways into better employment. Workers in the secondary segment work harder earn little more and acquire new skills, although they still remain stuck in that loop as the structural boundaries between the segments are impermeable. In the tea garden context, the same situation holds true where income shows minimal independent effects on occupational status. A worker who earns a marginally higher wage is also performing same kind of unskilled works like plucking leaves, carrying loads. There is no up scaling, no internal labour organization that move workers from unskilled to semi-skilled or skilled workers. The tea garden thus stands as an extreme case of labour market segmentation one where the secondary segment absorbs nearly nine of every ten workers and provides no exit.

The tea tribe's do not just face economic segmentation but also social exclusion and marginality which together stands as a barrier in their development. Byrne (1999) and Silver (1994) conceptualised exclusion not merely as poverty but as the systematic denial of access across multiple domains simultaneously education, healthcare, social networks, political representation, and spatial integration. Social exclusion tends to be cumulative and self-reinforcing, with each dimension of exclusion amplifying the others. The tea tribe community exemplifies this cumulative exclusion. Their ancestors were recruited under colonial indenture as a captive, unskilled workforce, deliberately settled in isolated plantation enclaves far from towns and educational institutions. This spatial isolation was not incidental but systemised: it was made sure that workers do not easily leave, could not access alternative sources of income, and could not attain the education or professional knowledge that might lead to mobility. The marginally significant effect of gender in this study also finds theoretical grounding here, as women face an additional axis of marginality layered upon the community's collective exclusion.

Intergenerational mobility provides analytical tools for understanding how occupational status is shifted from parents to children and why some societies exhibit greater or lesser fluidity across generations. These frameworks conceptualise tea garden and adjacent *basti* areas not as lagging versions of mainstream labour markets but as a distinct socio-economic ecosystem.

8.2 Objectives

The major objectives of the study are:

- i. to assess the occupational pattern of the tea tribes residing within the tea estate and those ex tea tribes in the *basti* areas, and
- ii. to observe the impact of parameters like income, education and gender on their occupational pattern.

8.3 Methodology

In this study a structured methodology is incorporated for sampling and collection of data, emphasising six tea estates (Tinkheria, Dhulapadung, Dufflagarh, Belsiri, Durrung, Tulip and adjacent six *basti* (Bogipukhuri, Nagapathar, Kekurijan, Mejenjuli, Kothalguri, Oriantoli) areas (See table 8.1). The six tea estates and *basti* areas are selected on the basis of size and proximity from the nearest centre thus categorising them into large, medium and small on the basis of size of the tea estates and like (far and near) on the basis of proximity from the nearest urban centre. The *basti* areas are attached villages adjacent to the tea gardens where ex-tea tribes who have separated themselves from the tea gardens reside. A total of 5365 household including tea estates and *basti* is the universe of the study. For the particular study a sample size 20 households from each tea estates and accordingly 20 households from *basti* areas totalling 240 households is taken by adopting systematic random sampling. The total sample size is 5.4 percent of the total population which is more than the minimum requirement of 94 households for a 0.1 margin of error (Krejice & Moran 1970). The Sonitpur district has 59 tea estates according to Directorate of Tea Estates and Adivasi Welfare and several minor tea gardens. This district historically received a large number of indentured labourers brought by British planters in 1860s to 1990, thus depicting a long deep multigenerational roots, suitable to understand the social and economic patterns in this region.

Table 8.1: Database structured table

SI No.	TE	HH (TE)	Proximity	BA	HH (Basti)	TE+BA	Sample Size	Sample Size per 100 HH	Sampling intervals
1	Tinkharia	919	L+N	Bogipukhuri	126	1045	40	100:4	26
2	Dhulapadung	1102	L+F	Nagapathar	73	1175	40	100:3	29
3	Dufflagarh	1029	M+F	Kekurijan	64	1093	40	100:4	27
4	Belsiri	676	M+N	Mejenjuli	116	792	40	100:5	19
5	Durrung	728	S+F	Kothalguri	105	833	40	100:5	21
6	Tulip	296	S+N	Oriantoli	131	427	40	100:9	11
Total		4750	-	-	615	5365	-	-	-

Source: Field Survey, First author, 2021-23. *Note:* HH= Household; TE= Tea estates; BA= Basti area

From the table 8.1 the classification of the sample size is distinctively observed. For the six tea estates and adjacent *bastis* a cluster of 40 households is taken for study. For every 100 households in Tinkheria and Bogiphukhuri *basti* 04 household (a total of 40) is taken at an interval (after every 26 household) and likewise for all the other tea estates and *basti* areas the sample method is used.

8.4 Review of Literature

Available relevant literature is reviewed to identify the research gap.

8.4.1 Occupational mobility studies

Maity & Buragohain (2022) in their study emphasise the intergenerational mobility and the various factors which determines it. The authors highlighted on different types of occupational mobility like vertical mobility, horizontal mobility and also inter and intra generational occupational mobility. Moreover, techniques like transition matrices and multi-nominal regression is used by the authors to assess the occupational mobility of the tea tribe people to different sectors since many of them are historically tied as unskilled workers in the tea gardens. However, with the passage of time they are involved in different semi-skilled, skilled, professional activities. The authors aim to assess the income elasticity of the children to their parents' income.

Mech (2002) in his paper highlights about the life of those tea tribes living outside the tea garden who are mostly termed as ex tea tribes and their journey of discrimination encountered while adapting to the mainstream culture. Although these people have a long history and belongs to the tea gardens of Assam yet they are less accepted in the societal matrix compared to people from other communities like Bihari, Nepali and Bengali. The author also pens down the changes related to labour mobility, formation of trade unions and groups and making of some nongovernmental organization, one of which is "Pajhra" which has been working in the grass root levels of tea gardens of Assam.

8.4.2 Education and labour outcomes

Kurmi (2014) in his study on the educational status of workers in Derby Tea Estate found that there is no high school or college near the tea garden vicinity. The tea estate has one primary school and one middle school. There is no higher secondary and college within the jurisdiction of the garden. People have to travel more than 05 km to obtain high school education which is again a challenge as the road conditions are not good. Another hindrance is lack of sufficient teachers in the school. The author also studies further in the daily wage of labourers which is very less compared to their work loads and their salaries are completely decided by the management.

Saikia et.al (2014) in their paper emphasises the tea gardeners' living conditions and reveals their associated socio-economic condition. The gross enrolment ratio of the workers in the school is 67.04 per cent against 84.97 per cent of the state. The percentage of children who were never enrolled is 21.35 per cent. The number of drop out is high among girls as because they have to stay at home to look after their siblings when the rest of the members go to work. The wage structure is normal and is fixed in many states by the representatives of employers and employees

of the tea garden. Moreover, the tea gardens cannot sustain all the people in the garden so they are bound to work outside.

8.4.3 Post-independence transitions

Gogoi and Sumesh (2023) decolonial ethnographic study narrates a searing critique of health governance in Assam's tea plantations, arguing that "even after seven decades of post-colonial rule, tea garden workers are relegated to a ghettoised economy defined by closure and control." The study showcases how neither the state nor plantation authorities has taken needful actions to safeguard worker health and safety, especially during the COVID-19 pandemic. The study points towards a striking finding which concerns the everyday humiliation workers endure: "hearing *gaalis* (verbal abuses) from *babus* (the tea garden managers) is a part of their everyday life." This linguistic evidence of continued subordination the colonial terminology of "*babu*" still in active use demonstrates how colonial social hierarchies have been reproduced in post-independent India

Wolf (2022) in his paper put forth the tea garden scenario highlighting how much after Independence, colonial migration still continued. However, with time the pull towards a better livelihood faded eventually much after the withdrawal of few large companies from the tea plantation. These spiked the casualisation of labour which eventually led to the growth of small scale tea growers. The author also mentions in his study about three types of spatial mobility firstly migration of labourers to their origin i.e. from the source where they or their ancestors migrated for engaging in farming activities; secondly the younger generation migrating to urban centres for better opportunities and thirdly children of labourers engaging in trade unions and forming organisation.

Barua's (2024) work provides the most theoretically comprehensive analysis of tea tribe postcoloniality till date. By demonstrating how colonial plantation logics continue to structure labour relations, land use, and human-animal conflict, the study explains why formal decolonization has not translated into substantive transformation for tea tribe communities.

8.5 Discussion and Results

8.5.1 Demographic Profile

The tea garden topophilia is mixture of population residing in tea garden lines, workforce, and their social and economic composition. The demographic profile is presented in table 9.2. To take a leap into the depth of occupational structure of the tea garden without a forehand insight of the composition of population and gender in total can make a shallow understanding of the area. A legacy of colonial migration sums up their habitats in the lush green plantation economy of Assam in several patches of tea garden and also marking their presence in the adjacent *basti* areas. The entire Sonitpur district which is located in the middle Assam constitutes 59 major tea estates according to Directorate of Tea and Ex-tea tribe's welfare department. However, there are several minor gardens which complement to the economy of the state as a whole.

Table 8.2: Overall Demographic Structure of tea estates and *basti* areas

Demographic Structure	Overall(T.E & Basti)	Tea Estate(T.E)	Basti
Total Population	1186	632	554
Total Male Population	582(49.10)	302(47.80)	280(50.6)
Total Female Population	604(50.90)	330(52.20)	274 (49.4)
No. of 0-14 years of population	295(24.90)	152(24.10)	143(25.8)
(0-5) years	93(7.80)	58(9.2)	45 (8.1)
(6-14)	202(17)	104(16.5)	98 (17.7)
Working Population	522 (58.6%)	245(38.8)	134 (24.1)
Non-Working Population	369 (41.4%)	387(61.2)	278 (50.1)
Total Male Working Population	176(41.1)	97(32.1)	79 (39.1)
Total Female Working Population	193(41.7)	138(41.8)	55 (26.2)
Male Non-working	252(43.30)	130(67.9)	123(60.9)
Female Non-Working	270(44.70)	115(58.2)	155(73.2)
Literate Population	856(72.2)	461(72.9)	395(71.2)
Illiterate Population	330 (27.8)	170(27.1)	160(28.8)

Source: Field survey by the first author

It transpires from table 8.2 that 240 sample households with total population of 1186 were selected for the study. The population consists of 50.6 per cent male and 49.6 per cent and with a significant proportion (24.9%) of child population. The working people constitutes 60 per cent of the population which is less compared to the state's average working population. Although gender-wise work distribution is somewhat balanced but it is observed that in terms of non-working population, the concentration of female is higher (270) than male population (252). The literacy rate is 72.2 per cent and it can be deduced that more people have basic education and lesser number of them attained secondary or higher education.

8.5.2 Occupational Structure

The tea garden persons were originally brought to the tea fields of Assam to work as pluckers, or bush cleaners. However, with the passage of time they were engaged in different supervisory roles for overseeing the labourers and work coordination in the gardens. If we look back to the colonial time, the Britishers then, appointed recruiting agents, Arkatis and Sardars to bring in more and more labourers from the central and eastern India to the tea plantations of Assam (Shunmugaraja 2017). A large number of the tea garden people were engaged in tea processing units which includes activities like drying, rolling, packaging tea leaves. Gender roles were quite visibly defined within the plantation workforce, with women typically employed in tea leaf plucking and men engaged in estate maintenance, factory work, pesticide application, and weed removal. Although currently both genders are equally represented in plantation employment, women often find themselves in lower-paying, irregular, and informal positions (Biggsa et.al 2018). A large number of them are appointed as staffs and security guards in the tea garden offices. However, few of them migrated to nearby towns and cities for seeking better livelihood

opportunities. They engage themselves in different informal occupation in factories, as truck drivers, domestic workers, helpers which also became a significant part of labour market in Assam (Mech 2022).

If we precisely dissect the occupational framework of tea garden; there is prominently two categories of workers one is tea and other is non tea workers. The tea garden workers are those who permanently reside in the garden lines and work there in different skilled and unskilled works. On the other hand non tea workers are usually occupied in activities outside the tea gardens (Mishra et al. 2012).

However, to comprehend each stratum of the occupation heads of tea garden topography a table (table 8.3) is constructed keeping in mind Kuppuswamy scale of socio-economic classification (Wani 2019) and infusing it to understand the nuances of the tea garden occupation structure.

Table 8.3: Occupational classification following Kuppuswamy scale

Kuppuswamy socioeconomic scale (classification of occupation) in tea garden context	Classification
Unemployed	People who are not working
Unskilled workers	Tea pluckers
Semi-skilled workers	Working in leaf processing units in tea industry
Skilled workers	Skilled in operating machines in the tea garden units, factory workers , electricians
Shop owner, farm owner	People who have their own shop in the tea garden areas
Semi professional	Health professionals, people engaged in other vocational activities, field supervisors
Professionals	Teachers, Doctors

Source: Field survey by the first author

Unskilled workers in the tea garden are involved in economic activities requiring fewer amounts of specialisation which primarily includes tea plucking; manually harvesting tea leaves from the bushes and other general labour activities. Semi-skilled workers on the other hand are those people who are engaged in leaf processing where some level of training and expertise is required. These people may or may not have completed their formal education or any kind of specialised course. Whereas the skilled workers are generally those workers who are responsible for operating machine in the factories, as electricians and are responsible for maintenance and repair works in the tea industry. People who work as field supervisors, community health workers, and vocational trainers are termed as semi-professionals who might have the same level of expertise like the professionals but holds an important role in the tea garden areas.

Occupation, income and education are aggregated in the context of tea gardens in table 8.4.

Table 8.4: Occupation, Income and Education of overall Tea estates and *Basti* areas

Occupational Status of (Overall Tea Estate and <i>Basti</i> Areas)		
Occupation	Frequency	Percentage
Unskilled workers	389	74.5
Semi-skilled workers	70	13.4
Skilled workers	31	5.9
Shop owner, farm owner	17	3.3
Semi professional	13	2.5
Professional	2	.4
Total	522	100.0
Monthly Income (Overall Tea Estate and <i>Basti</i> Areas)		
Income	Frequency	Percentage
2570-7633	79	32.9
7634-12723	88	36.7
12724-19085	57	23.8
19086-25447	9	3.8
25448-50895	7	2.9
Total	240	100.0
Educational Qualification of (Overall Tea Estate and <i>Basti</i> Areas)		
Education	Frequency	Percentage
Primary school	414	48.4
Middle school	306	35.7
High school pass	60	7.0
H.S passed	54	6.3
Degree	21	2.5
Masters	1	.1
Total	856	100.0

Source: Computed from field data

The tea estates and *basti* areas have a unique matrix in terms of their occupation, income and education. Table 8.4 showcases the dominance of unskilled labourers (74.5%) in the tea industry compared to other skilled (5.9%) and semi-skilled at (13.4%). The percentage of people obtaining professional roles is insignificant compared to other occupational activities which clearly justifies a very minimal percentage of people acquiring higher education with 2.5 per cent and .1 per cent who have completed their graduation and post-graduation studies. People in the tea gardens are mostly illiterate or have been to primary (48.4%) or middle school (35.7%). With basic education and most people working as unskilled labours, their monthly income is generally low; mostly people are recorded falling under the lower income brackets ₹2570-7633/- and ₹7634-12723/- respectively. A large proportion of people living in tea estates or *basti* areas have no other choice but to succumb to the low paying works within the tea garden. This indicates a significant need of upward mobility in the tea garden areas.

8.5.4 Comparison of Tea Estate and *Basti* areas

The sampled tea estates have a moderately youth dependent population. The working population within the tea estate is comparatively more than the *basti* areas. Moreover, females are

engaged more in unskilled activities in tea estates than in the adjacent *basti* areas. However, issues of unemployment especially among the females still persist due to seasonal fluctuations in work.

Table 8.5: Comparison of occupation, income and education of tea estate population

Occupational status of Tea Estate population		
	Frequency	Percentage(%)
Unskilled workers	214	87.3
Semi-skilled workers	11	4.5
Skilled workers	5	2.0
Shop owner, farm owner	6	2.4
Semi professional	7	2.9
Professional	2	.8
Total	245	100.0
Monthly Income of Tea Estate household		
	Frequency	Percentage(%)
2570-7633	27	22.5
7634-12723	44	36.7
12724-19085	36	30.0
19086-25447	7	5.8
25448-50895	6	5.0
Total	120	100.0
Educational Qualification of Tea Estate population		
	Frequency	Percentage(%)
Primary school	220	47.7
Middle school	161	34.9
High school pass	38	8.2
H.S passed	30	6.5
Degree	11	2.4
Masters	1	.2
Total	461	100.0

Source: Computed from field data by first author

Table 8.5 indicates occupation, income and educational structure of the tea tribes living in the sampled estates only. There is an overwhelming dominance of unskilled labourers (87.3%) in the tea estates, indicating that a high proportion of people working as labourers in the tea gardens. People working in semi-skilled and skilled occupations are very less. People in the tea estates have their life revolved around the work attached to the tea industry. No doubt, only (2.9%) and (0.8%) of people are engaged in semi-professional and professional activities. This also indicates that there is less upward mobility and a lack of economic diversification within the tea estate population. The impact of education in the occupational pattern of tea tribes can be observed with 47.7 per cent and 34.9 per cent of people having primary and secondary education whereas only 2.4 per cent and 0.2 per cent have attained higher studies. This low educational attainment is due to several factors such as lack of awareness, illiterate parents, no proper interventions by

government for establishment of high schools within a particular radius. However, one of the pressing factors above all is the poor economic standard of this people. With a daily wage of less than ₹300/- these people, only way of surviving is to get their children work with them. There are incidences of young girls who leave their studies so that their mothers can work in the garden and run their family. About 22.5 per cent falls within the income brackets ₹2570 - 7633/-, and 36.7 per cent earns between ₹7634 - 12723/- monthly. This observation therefore implies the need of targeted interventions such as vocational training, adult education, and economic diversification to break the cycle of low-skilled, low-income dependency in tea estates.

Table 8.6: Occupation, Income and Education of *basti* areas population

Occupational Status of <i>Basti</i> Areas		
	Frequency	Percentage(%)
Unskilled workers	176	63.3
Semi-skilled workers	59	21.2
Skilled workers	26	9.4
Shop owner, farm owner	11	4.0
Semi professional	6	2.2
Total	278	100.0
Educational Qualification of <i>Basti</i> Areas population		
	Frequency	Percentage(%)
Primary school	194	49.1
Middle school	145	36.7
High school pass	22	5.6
H.S passed	24	6.1
Degree	10	2.5
Total	395	100.0
Monthly Income of <i>Basti</i> Areas household		
	Frequency	Percentage
2570-7633	52	43.0
7634-12723	44	36.4
12724-19085	22	18.2
19086-25447	2	1.7
25448-50895	1	.8
Total	121	100.0

Source: Computed from field data by the first author

The *basti area* showcases a slightly different scenario, although the percentage of people working as unskilled labourers (63.3%) still remains dominant. However, in the table 8.6 we can observe that the percentage of people working in semi-skilled (21.2%) and skilled occupation (9.4%) is more compared to the tea estates. The *basti* area people are those who live a life separate from the tea estates. Work diversification is observed among them even though a significant number of people are still working in the tea estate primarily as casual labourers. People here mostly have their basic education with almost 49.1 percent of the population having primary education whereas only 2.5 percent of people attaining higher education. Economically, these

people are still below the average income to run their family with almost 43 percent of the people earning within ₹2570-7633/- income range and only .8 percent of people has a monthly income of above ₹25448/-

8.6 Regression Results

Table No 8.7: Model Fitting Information for Multinomial Logistic Regression Analysis of Occupational Status

Model Fitting Information				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	215.137	-	-	-
Final	162.881	52.256	6	0.000

Source: Computed by the first author from field data

In Table 8.7 the drop in -2 log likelihood from 215 (intercept-only) to 163 (final model) validates the significance of including these variables. The model fitting statistics demonstrate that the final multinomial regression model significantly improves upon the intercept-only model ($\chi^2=52.256$, $df=6$, $p<.001$).

Table 8.8: Likelihood Ratio Tests for Effects of Education, Gender, and Income on Occupational Status

Likelihood Ratio Tests				
Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	190.245	27.364	2	.000
Education	179.297	16.416	2	.000
Gender	172.148	9.268	2	.010
Inc_each_member	181.896	19.016	2	.000

Source: Same as 8.7

In Table 8.8 the large chi-square value indicates that the predictors collectively have substantial explanatory power. The model therefore shows meaningful patterns in how education, gender and income are associated to occupational stratification. Education ($\chi^2=16.416$, $p<.001$) and income ($\chi^2=19.016$, $p<.001$) show highly significant effects, while gender is marginally significant ($\chi^2=9.268$, $p=.010$). The intercept test ($\chi^2=27.364$) confirms the occupational categories are meaningfully distinct while education shows the strongest individual effect. This confirms these variables collectively explain occupational differences, even if some effects are modest in the parameter estimates.

Table 8.9: Multinomial Logistic Regression Analysis of Occupational Status by Education, Gender, and Income

		Parameter Estimates							
Occupational Status		B	Std. Error	Wald	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
								Lower Bound	Upper Bound
Unskilled	Intercept	7.687	1.952	15.511	1	.000			
	Education	-1.062	.278	14.597	1	.000	.346	.201	.596
	Gender	.049	.916	.003	1	.958	1.050	.174	6.325
	Income	.000	.000	3.061	1	.080	1.000	1.000	1.000
Skilled	Intercept	10.112	2.304	19.261	1	.000			
	Education	-1.042	.340	9.389	1	.002	.353	.181	.687
	Gender	-1.512	1.061	2.031	1	.154	.221	.028	1.763
	Income	-.001	.000	14.770	1	.000	.999	.999	1.000

Source: Same as 8.7 *Note:* The reference category is: Professional

Table 8.9 showcases that education significantly reduces odds of being unskilled (OR=0.346) or skilled (OR=0.353) versus professional while income categories show minimal differentiation (OR=1.00 for unskilled, OR=0.99 for skilled vs. professional). For each unit increase in education, the odds of being unskilled (vs professional) are 65.4 percent lower.

In overall tea estates and *basti* areas about 48.4 per cent have attained primary education while only 0.1 percent pursue higher studies which increases the odds of being in unskilled occupations (74.5% are unskilled workers). This extreme concentration in low skilled work along with 0.4 percent attaining professional status indicates deeply entrenched barriers to upward mobility. The low occupational diversification especially in tea estates indicates that years after the colonial regime the historical legacy of limited social mobility still remains prevalent. Moreover, the minimal independent effects of income indicate that the tea garden economies differ from the mainstream labour market. The marginally significant effect of gender also indicates that female disadvantage in the tea garden labour economies is overshadowed by the overwhelming predominance of unskilled labourers for all genders in plantation contexts. These findings therefore show distinctiveness of tea garden ecosystem where the standard predictors of occupational attainment functions differently.

8.7 Discussions

Occupational immobility in tea gardens and *basti* areas are predominantly seen with 74.5 percent workers engaged in unskilled activities while only 03 per cent engaged in upward mobility. This scenario clearly indicates that even after seven decades of Independence the scenario has not much changed. Their immobility is structural trapping rather than economic. People settle and get entangled with the little comfort of a distorted line quarters, which might be taken from them if they don't continue working in garden. Here the idea of working outside the tea garden areas remains a mental battle. Moreover, lack of training programmes and promotion ladders leave them working in similar positions generation after generations. If we look back to history, the Britishers

purpose was to make this people live in the tea gardens for their highest profit maximization from them. However, this hierarchical control still persists where this control and dominance still persists within the mind of their offsprings. The spatial isolation of tea gardens, limited external labour market integration, and social control mechanisms (e.g., employer-provided housing, ration systems, and debt cycles) create a bounded environment where even those who might wish to exit unskilled work lack the necessary networks or institutional support). Over the period of years although their income increased but the overwhelming dominance of unskilled workers still remain unchanged.

During colonial times women were paid lesser than men and their work was relegated to plucking tea leaves in the garden with their nimble and tender fingers. The marginal statistical significance of gender does not indicate that there is gender equality this indicates a limited change where a small cohort of educated women now works outside the tea gardens as nurses, computer operators, teachers and in other allied roles outside the tea garden premises. Education is significantly associated with occupational attainment although the education attainment of tea tribe population is critically low with only a small percentage of population pursuing higher studies where about (48.4%) people have only fundamental education. However, those people who have achieved higher educational attainment demonstrate diversification of work across skilled and professional activities.

8.8 Conclusion

The study showcases the occupational pattern among tea tribes of sampled tea estates and adjacent *basti* areas of Sonitpur district are largely defined by lack of upward mobility and higher concentration in unskilled works. About (74.5%) per cent of the population are unskilled labourers while only 03 (three) per cent opts for other professional activities very clearly justifying the lower attainment of higher studies among the tea tribes. Secondly education and income determines the occupational pattern of the tea tribes, while higher education leads to occupational diversification but higher education itself is least accessible to these people creating a cruel irony. Moreover, income shows minimal independent effects on occupational mobility, indicating that better paid workers remain trapped in unskilled roles as there are no structural pathways for the advancement of these people. Thirdly, a section of people is unemployed and also illiterate which creates a hurdle as this increases the number of dependent population. However, Gender has emerged as a significant factor with some of the educated women moving towards activities like nursing, teaching and other allied professional jobs.

These findings necessitate policy interventions. While there are several policies with the intent of development of the tea tribes but their actual implementation in the ground remains far behind undermining the mobility of tea gardeners. The policy makers should also look into identification of the root causes of poor socioeconomic conditions of the tea tribes and hence frame policies accordingly. Government should decree tea estates to reserve 15 per cent of semi-skilled and supervisory posts for garden-worker families, with public reporting on an annual basis to break the unskilled concentration. In terms of educational barriers, high schools must be established within every tea estate and *basti* cluster, and a monthly stipend of ₹500–1000 for girls to remain in school beyond Class 8. To address the unemployment crisis, mobile vocational training vans should circulate through gardens, certifying workers in sewing, appliance repair, and computer basics, which need to be directly, associated with local job placements. To resolve the income-to-

mobility trap, a co-contribution savings scheme is essential: such as for every ₹1,000 a worker saves, the government adds ₹500 into a restricted "skill account" utilized only for specific certified courses. NGOs also should work in the tea garden areas to make people aware of the importance of education. All these schemes must unambiguously extend to *basti* residents living outside estate boundaries but still indirectly depended on the tea economy. Without such tailored strategies, the cycle of unskilled concentration, unemployment, and blocked mobility will persist across generations leaving in frail the very community that built Assam's tea industry.

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Conflict of Interest

The authors confirm that there is no conflict of interest to declare.

Declaration on AI Use

During the preparation of this work, the authors used ChatGPT to enhance language and sentence structure. The authors carefully reviewed and edited the content as needed and take full responsibility for the content of the article.

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