The Socio-Demographic and Socio-Economic Conditions of Some Tea Garden Workers in The West District of Tripura

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Abstract
This cross-sectional study was undertaken to study the socio-demographic and socio-economic conditions of the tea garden workers between 18 to 60 years of the West district of Tripura. Information like age, sex, educational status, religion, marital status, household status, employment status, monthly family income etc has been collected using a standardised questionnaire. Some additional data were also collected on the worker's families, like living conditions, food intake and health status. We have also measured the social risk score of the worker's families using a standardized questionnaire. The results were used to classify workers' families into three categories: high-risk families (scores ≥8), at-risk families (scores between 4 and 7), and families without risk (score ≤3). The current study revealed that the tea estate workers in the West district of Tripura were economically and socially deprived of basic needs, and the living standard was alarming. In our study population, 72% were illiterate, 23% had finished primary, and 5% had secondary education. 62% of the respondents live below the poverty line (BPL), 64% of the workers earn between Rs 2001-5000 per month and only 1% had one hygienic toilet facility. The result of the social risk score study shows that 70% of workers are at social risk (Score ≥ 4), among which 6% are at high risk (Score ≥ 8) and 30% of the workers are without any social risk (Score ≤ 3). This study reveals that many were unaware of various social welfare schemes and policies undertaken by central and state governments and various management of tea estates to improve their status.

Keywords: Tea Garden Workers, West Tripura District, Socio-Demographic Conditions, Socio-Economic Conditions.

1. Introduction
India is the second-largest producer of tea plantations and the biggest consumer of tea. The tea industry occupies a prime position in India, holding considerable potential for economic development as it earns substantial foreign exchange and provides employment to a large number of unskilled labourers in India (Choudhury, 1978). The tea sector is also India’s largest private employer, with production concentrated primarily in the north-eastern states of Assam and West Bengal and to a lesser extent in the southern states
of Tamil Nadu and Kerala. The biggest production of tea in India is in Assam, West Bengal, Kerala, and Tamil Nadu (Panwar, 2017). Tripura has a history of tea plantations dating back to 1916 and has been categorized as a tea-growing state where about 54 tea estates, 21 tea processing factories, and more than 4000 small tea growers are situated. About 8.66 million kg of tea is produced in a year, and Tripura achieved the 5th largest production among the 16 tea-producing states in India. There is considerable scope to increase the productivity and area under tea plantations (http://industries.tripura.gov.in/tea/). Tea is also an important agro-industry of Tripura, contributing immensely to the state’s economy.

It is well known that the health and socioeconomic status of workers in any industry are important factors for productivity, development, and growth. It has been reported that most tea workers in north-eastern India are descendants of tribal communities from different states of India. During India’s colonial period, they were brought to the tea estates as bonded or forced labour (Panwar, 2017). Tribal populations generally have poor nutritional status due to their traditional socio-cultural practices and low literacy levels. A high magnitude of undernutrition and infectious diseases among the tea garden population of Assam was reported by Medhi et al. (2006) due to the lack of awareness and low literacy rates. Another report by Deka (2011) revealed that tribal populations working in the tea industry are affected by various social, economic, and developmental constraints that potentially expose them to high rates of malnutrition and health problems. Several studies have revealed that tea garden workers are vulnerable to various communicable diseases and malnutrition due to poor socio-economic conditions, ignorance due to illiteracy, and overcrowded and unhygienic living conditions in residential colonies. A study by Debnath and Debnath (2017) with workers in a garden in the West Tripura district revealed that they live in poor socio-economic conditions. This study reported that the socio-economic condition of tea garden workers in the West Tripura district of Tripura is in a very despondent condition during the study period.

2. Research Methodology

2.1 Sampling method:

This study was carried out in the tea gardens of the West district of Tripura state from January 2018 to December 2018. The age group of the subjects between 18 to 60 years was included in this study. The sampling method chosen for this study was a multistage stratified random sampling technique. There are 21 tea gardens available in the West Tripura district, and 2 tea gardens were randomly selected for this study, which was 10% of the total gardens. Then, 100 workers from each tea garden were selected randomly and filtered via inclusion and exclusion criteria. In this stage, 18 workers were rejected. Basic verification of data, including name, age, and gender, was done through the voter ID card/birth certificate of the participants. Then, the research work was explained in detail, including the aim, objective, and procedure in local languages, and written consent was taken from the interested participants. The final sample from both gardens was 182. The participants of this study are mainly tea pluckers, and some of them work in the tea processing factory.

2.2 Ethical considerations:

Before conducting the study, ethical clearance was obtained from Assam Downtown University (Memo No. adtu/ethics/PhD Scholar/2017/003 dated 21/11/2017).

2.3 Parameters for this study:

To study the tea garden workers' demographic, economic and social conditions, we have collected the following information like age, sex, educational status, religion, marital status, household status, employment status, monthly family income using a standardized questionnaire. Social Assessment was
also done through standard questionnaires as per Ortiz-Andrellucchi et al. (2009). Additional data were also collected on the workers' families, like living conditions, food intake and health status. Therefore, a questionnaire was devised to measure the social risk factors in workers' families. The results were used to classify workers' families into three categories: high-risk families (scores of 8 or higher), at-risk families (scores between 4 and 7), and families without risk (scores below 3).

3. Result:
The investigation of the workers' socio-economic conditions in a tea plantation reveals some essential facts and issues. First, it is found that the most critical problem in these areas is their socio-economic status and necessities; this is a major hindrance to their development. Second, few children are enrolled in schools because of a variety of hurdles like distant schools, inadequate transportation and elder siblings taking responsibility for households as their parents are mostly tea plantation workers.

Figure 1 shows that most tea estate workers are between 18 and 30 years old, with 41% falling into this category. The next largest group consists of workers between 31 and 40 years of age, with 26% of the workforce falling into this category. Workers over 41 years of age account for only 3% of the workforce.

Figure 2 indicates that 52% of workers are female, and 48% male. It shows that most tea plantation workers are women, who pluck soft leaves. This means that female workers have a significant role in improving women's economic freedom by improving their incomes.

Figure 3: Educational Qualification of the Workers

- Illiterate (72%)
- Primary (23%)
- Secondary (5%)

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According to Figure 3, 72% of workers are illiterate. 5% studied up to 6th grade or above, and 23% studied up to 5th grade. Despite the Tea Plantation Act 1952, which provides that every tea garden should have at least one school. However, most respondents discontinued their education due to financial constraints since most parents cannot afford to educate all their children; this is especially true for girls who often drop out of school to marry early.

In Figure 4, 72% of the workers were married, and 15% were unmarried. Furthermore, 9% of the population were widows because their husbands had died due to different types of disease such as liver disease, lung disease etc which was caused by excessive consumption of alcohol, smoking habit etc; 4% were separated females with deplorable financial conditions.

Figure 5 shows an early marriage trend among the workers. 76% of male workers marry before they turn 21, and 24% do so after turning 21. Early marriage deprives the young generation of proper education which causes persistent poverty. Early marriage may present financial difficulties to some men due to early marriage. Early marriage among tea garden workers has serious consequences for the community.

Figure 6 shows that 29% of female workers in this community have married before they reached 18 years old, while 71% of these women are currently married above 18 years old. Early marriage may negatively
impact their mental and physical development by causing them to be less educated than they might otherwise be.

According to Figure 7, 76% of West Tripura district's tea estate workers are permanent employees, while 24% are temporary workers. Permanent-employee workers receive weekly rations of rice and wheat from the tea estate authorities. Temporary-employee workers receive only a third as much food as their permanent counterparts. Medical care and other benefits that permanent workers enjoy are not available to temporary employees.

The income source of the tea garden workers was studied monthly followed by data collection. In Figure no 8 it is clearly shown that the majority of the workers which is 64%, earned between two thousand to five thousand rupees monthly. The second income slab which is rupees five thousand one to ten thousand is drawn by only 8% of the workers. The third income group which is above ten thousand is only obtained by very limited numbers of workers (4%). Surprisingly approximately one-fourth of the population (24%) earns below two thousand per month.
Figure 9 represents the Public Distribution Scheme (PDS) coverage to the workers. The maximum number of workers (86%) belongs below the poverty line (BPL) as approximately one-fourth of the population (14%) belongs to above the poverty line (APL) category. This scenario proved that the workers are struggling hard for their financial situation.

![Figure 10: Status of Electricity Connection](image)

**Figure 10** illustrates that most respondents do not have access to electricity affecting their quality of life. 17% of respondents had an electricity cut-off due to non-payment of bills, 31% had an electricity connection in their home, and the remaining 52% never had an electricity connection.

![Figure 11: Sources of Drinking Water](image)

**Figure 11** indicates that most respondents (84%) collect their drinking water from tube wells, whereas 16% use dug wells. No respondents reported that having water treatment facilities can potentially introduce toxic and harmful substances.

![Figure 12: Status of Toilet Facilities](image)

**Figure 12** shows that only 1% had one hygienic toilet facility, while 97% of the workers reported having a toilet (Kaccha latrine), and the remaining 2% did not. This practice is detrimental to the health of tea workers as they are prone to many infectious diseases.
4. Social Risk Score Evaluation:

The result of the social risk score analysis (Figure 13) revealed that 70% of the tea garden workers are at social risk (Score ≥ 4), among which 6% are at high risk (Score ≥ 8) and 30% of the workers are without social risk (Score ≤ 3).

![Figure 13: Analysis of Social Risk Score of the Workers](image)

4. Discussion

Workers in India's tea gardens are particularly vulnerable to various health issues because of their poor socioeconomic conditions, ignorance due to illiteracy, and overcrowded and unhygienic living conditions in the residential colonies. As a result, several reports revealed that tea garden workers suffer from malnutrition and other non-communicable diseases.

In this study, the socioeconomic condition of the workers of the West Tripura district was studied. Most workers are illiterate, although gardens are operated under the Tea Plantation Act 1952, which states that every tea garden should have at least one school. Most respondents discontinued their education due to financial constraints since most parents cannot afford to educate all their children.

We have also found that early marriage among tea garden workers is prevalent and negatively impacts their mental and physical development instead of obtaining an education. Results also revealed that 29% of the workers marry below 18 years of age (Figure 6), which is below the rule of the Govt of India. Mudoi (2020) has also confirmed this issue in his research.

In the tea gardens of the West Tripura district's tea estate, most workers are permanent employees who receive weekly rations of rice and wheat from the tea estate authorities. In contrast, temporary workers receive only a third of this amount. The workers get only Rs. 105 per day regardless of gender, which is significantly lower. This finding also corroborates earlier studies by Majumder & Roy (2012), which reported that it could affect the quality of life. So raising their daily wages can have a positive impact on their lives. A significant portion of the respondents lives below the poverty line (BPL). Due to a financial crunch, most respondents do not have access to an electrical power supply.

It was also found that most respondents collect their drinking water from tube wells, whereas a small portion use dug wells. Since these water sources are not treated, they can introduce harmful and toxic substances and may cause waterborne diseases. Sanitation also plays a vital role in impacting the worker's health; It was found that 97% of the workers have unsanitary toilets (Kaccha latrine), and 2% have no toilets at all (Figure 12). It can adversely affect the workers' health as they will be prone to infection. A lack of knowledge about hygiene is one of the significant factors for the bad health condition of the
workers (Sarma, 2017). The government of India already implemented the “Individual Household Latrine (IHHL)” scheme under the Swachh Bharat Abhiyan in 2014. However, these workers do not have access to basic sanitation, which can be attributed to the lack of awareness about such a scheme, as they are mostly uneducated. Our finding reported that 72% are illiterate (Figure 3).

The result of the social risk score analysis revealed that a significant number of workers are at social risk (Score ≥ 4), among which 6% are at high risk (Score ≥ 8) and 30% of the workers are without social risk (Score ≤ 3). Therefore, the problems mentioned here must be addressed to improve the socio-demographic and socioeconomic status of tea garden workers.

5. Conflict of Interest: None.

6. Conclusion:
The problems faced by the workers are not only one direction problems; multiple factors are involved, such as socioeconomic conditions, cultural status, poor habits and belief in superstitions. Education and increasing their daily wages can alleviate some of their problems.

However, although the government has implemented primary schools, IIHL schemes, primary healthcare centres, health insurance, maternal & child health care assistance, social pensions, water supply, and subsidized electricity, due to a lack of awareness, they are not availing of these facilities. Awareness camps can regularly help them become aware of such schemes provided by the central government, state government and tea estates.

7. Acknowledgement
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8. Reference:
