



Tea Production: Socio-Economic Conditions Of Workers And The Problems In Production Of Tea In Meghalaya, India.

Junitha R. Marak^{1*} and Dr. S. Subramanian²

¹ * Ph.D. Research Scholar, Department of Commerce, Annamalai University, Annamalai Nagar, Tamil Nadu, India, Ph.: 8787790860, E-mail: junitha95@gmail.com.

²Professor, Department of Commerce, Annamalai University, Annamalai Nagar Tamil Nadu, India, Ph.: 9443214332, E-mail: manian3666@gmail.com.

Citation Junitha R. Marak et al (2024). Tea Production: Socio-Economic Conditions Of Workers And The Problems In Production Of Tea In Meghalaya, India....*Educational Administration: Theory and Practice*, 30(4), 1413-1418, Doi: 10.53555/kuey.v30i4.1681

ARTICLE INFO

ABSTRACT

In the present study, it is operationally defined as the inconveniences faced by the workers in performing various tasks at the tea garden and tea garden factory. The basic aim of this paper is to highlight the socioeconomic condition of the workers in tea estates and the problems that arise in the production of tea in Meghalaya. The study has been carried out in three districts, such as West Garo Hills, East Khasi Hills, and Re-Bhoi districts. Eight estates, under Private, Society, and Government, which were divided into three categories, were selected using the census sampling method. A total of 167 workers were selected as the sample size for the present study. Questionnaire-based and schedule-based interviews were conducted with the tea estate workers to collect primary data. To analyse the data, simple percentage analysis, descriptive statistics, and the Chi square test have been used in Statistical Packages for the Social Sciences. A hypothesis was framed to test whether there is no significant association between gender and the problems that arise in the production of tea. The test results found that there is an association between gender and problems in the production of tea. Also, the major findings of the study revealed that the low level of external inputs is the highest challenge facing the production of tea in Meghalaya, and this leads to the industry's progress, competitiveness, and sustainability by not allowing for innovation, efficiency improvements, or timely responses to challenges.

Keywords: Socio Economic Conditions, Estates Workers, Issues and Challenges, Production of Tea.

INTRODUCTION

India is the world's second-largest producer of tea. Although tea is one of the most popular drinks in the world, its production is very crucial, and many Indian tea plantation workers' living conditions receive little attention (Tripty Panwar, 2017). The tea sector is further impacted by the fact that, Indian tea growers are not receiving fair pricing for their tea in the market, which is passed down to the workers in the form of salary reductions. Additionally, the absence of adequate educational resources for the offspring of tea estate workers further exacerbates the problem. (R. Arthi, 2019). Large labour forces are needed in tea plantations. Since they make about half of the workforce in the tea industry, the workers on tea plantations are important to the sector. The main work in a tea garden is to hand pluck tea leaves, which is one of the most difficult chores. The additional tasks include transplanting, caring for immature tea saplings, pruning tea bushes, manuring, and weeding. In addition to additional manual labour, the labourers in the tea factories shorten tea leaves and clean the facilities. Because, tea leaves are sprayed with pesticides, workers who pluck tea leaves with their bare hands are exposed to specific toxins that can be harmful to their health. Furthermore, in tea gardens in the summer, snakes might pose a threat to those who are picking tea leaves for hours. Similarly, in the winter and during the rainy season, mosquitoes, leaches, and frogs become involved (Toko Jumi, 2021). Worker has the right to work in an environment where risks to their health and safety are properly controlled. Regarding issues faced by the workers in the production process of tea, employers are required to interact with employees or their representatives (M. Sushanti, 2023).

STUDY AREA

Meghalaya, one of the eight states in northeastern India, is a land of pristine beauty and rich biodiversity. While many people associate Meghalaya with betel nuts (known as Kwai) and turmeric-flavoured rice (called Ja Stem), there's another hidden gem that is tea¹. Meghalaya's topography, elevation, and climate make it the perfect location for growing premium highland tea. Around 3000 hectares of land dedicated to plantation for cultivation of tea in Meghalaya. The pure and virgin area on which these tea estates are located enhances the tea's flavour and purity. Meghalaya farmers continue to grow tea using age-old techniques. (D. Rymbai, 2013) With about two-thirds of the workforce employed in agriculture and 70% of the people dependent on it, Meghalaya's economy is mostly centre on this sector. Meghalaya's total land area, of which just 11 per cent is used for agriculture, Low productivity and a restricted application of contemporary techniques define the state's agriculture. Inadequate infrastructure such as roads, transportation and processing facilities, hinder the efficient production and distribution of tea in Meghalaya. The producers, especially in the Ri-Bhoi district, have been greatly impacted by the labour shortage in the tea garden (D. Rymbai, 2012). This study focused on qualitative analysis of the concept of issues facing by the workers in production of tea and their socioeconomic conditions, in Meghalaya.

Literature Review

Mushtaq Ahmed Klasra et.al (2007), In their study highlighted that, tea yield was greatly effect on by the weather, altitude, harvesting, pruning techniques, programme plucking, manuring, regulation shade and use of pesticides for economic production. Tea plantation and industry has facing various problems including tea production was not uniform in taste and also quality.

Boriah (2011), A major problem facing the tea industry worldwide is the use of pesticides in tea cultivation increasing the cost of production substantially as well as contributing to environmental and health issues. The tea Board has recently started conducting research projects to investigate and identify the answer. .

R. Jayaranjani Sutha (2011), examined that the production is declined in the world tea production and trade and face many issues for past several decades, even small holder sector also face the challenges such as quality, unity, and identity. Also faced difficulties on how establish the country's on international market effectively due to wage increase in tea production, exchange rate fluctuation, inflation, cost of production is high, increase bargaining power of buyer because of high treats of substitute products. Tea industry is one of the gaining foreign exchange in Sri Lanka and exported tea to 21 countries which strictly adheres to minimum product quality standard for all tea exported.

R. Singh (2012), this study showed that, as described by survey respondents, the lack of labour on tea gardens lowers productivity and production in Meghalaya tea production. The issue is further exacerbated by the exodus of skilled labourers. Over the previous three to four years, the average labour salary has doubled. The strategy to lessen the severity of the crises from the State Govt side is by subsidising the equipment and assets required at the field to enable the farmers to acquaint the same.

Achinto Roy (2013), In his study examined that the reason of challenges faced by the Indian tea industry are tea trees are old and no replanting was done, shortage of plantation labour, usage of pesticides in tea cultivation as tea bushes are affected to diseases. Extensive spraying pesticides increasing the cost of production as well as giving to environment and health problems.

Effendi Andoko et.al (2022), the authors stated that, Indonesia tea industry needs a serious attention in plantation and policy due to critical things happen. Tea area has been decreasing due to depreciate price and lower National production. Tea productivity decrease significantly, the reason is inappropriate climatic conditions, improper fertilization process, lack of cooperation among stakeholders and aspects of soil physical condition. Lower humidity and higher causes the less productivity of tea plant. Indonesia tea industry fails in conducting trade transaction and the major problems that arise in the development of tea industry is the climate change and weather.

Materials and Methods

This study has been carried out in Meghalaya tea estates of West Garo Hills, East Khasi Hills and Ri-Bhoi Districts. Census sampling procedure has been used to select sample size for the study. To assess the socio-economic conditions and the problems faced by the workers in production of tea in Meghalaya, the survey was conducted in the tea estates which has their own factory, namely; Anderson tea estates, Nalari, Meg tea, Upper Shillong tea farm, Denmar, Sharawn, Areng, Durama. These eight estates, which were divided into three categories—Private, Society, and Government—were spread throughout three districts in Meghalaya: Ri-Bhoi District, East Khasi Hills, and West Garo Hills. For this study, total 167 respondents were selected for sample size. Secondary data were collected from different related journals, internet, books, newspapers etc. The personal interview method was applied for the collection of primary data with the help of the structured questionnaire and schedule from the tea estates workers which was prepared according to the objectives of the study.

¹ One of The Tea Producing States of India - Meghalaya (zizira.com)

Objectives

1. To analyse the socio-economic conditions of the workers in production of tea
2. To identify the challenges faced in production of tea in Meghalaya.

Hypothesis

1. There is no significant association between gender and the problems that arise in the production of tea.

Tools and Techniques

The researcher has applied the necessary tools, such as simple percentage analysis, descriptive analysis and Chi square test through SPSS (Statistical Packages for Social Science Research), to analysis the concept of issues facing by the workers in production of tea and their socioeconomic conditions, in Meghalaya.

Analysis and Interpretation

Table 1. Socio economic profiles of Tea estates workers

Variables	Categories	Percentage
Sex	Male	33.5
	Female	66.5
Age	Below 25	1.2
	26-35 years	71.3
	36-45 years	27.5
Marital status	Married	56.3
	Unmarried	40.7
	separated	3.0
Education Qualification	Illiterate	89.2
	S.S.L.C	9.6
	H.S.S.L.C	0.6
	Graduation	0.6
Nature of Job	Permanent	37.7
	Temporary	58.7
	Daily basis	3.6
Amount of wages paid	250	62.3
	300	7.8
	350	20.4
	400 and above	9.6
Mode of Payment	Monthly	80.0
	Twice in a month	20.0

Source: Computed primary Data

Results and Discussions

Table.1. shows that, the majority of the respondents (66.5 er cent) were female workers and 33.5 per cent of them were male. The age group of the respondents reveals that, (71.3 per cent) were under the age group of young category i.e.,26-35 years followed by (27.5 per cent) i.e., 36-45 years and1.2 percent of them were belong to the age group of below 25 years. The marital status of the respondents found that, the majority of them (56.3 per cent) were married whereas 40.7 per cent of them were unmarried and 3 per cent of them were separated or divorce. The educational status of the respondents revealed that, the majority of the respondents (89.2 per cent) were illiterate followed by S.S.L.C level (9.6 per cent) and a very less percent (.6 percent) of respondents studied up to H.S.S.L.C level and graduation level respectively. The Nature of Job were found that, majority of the respondents 58.7 per cent of them were working as temporary, whereas only 37.7 per cent of them were permanent workers and the rest 3.6 per cent of them work as daily basis. The amount of wages paid for the respondents were, 62.3 per cent of them were paid 250 Rs. Per day and 20.4 per cent of the respondents were paid 350 Rs wages and 7.8 per cent of them were paid 300 wages and only 9.6 per cent of them paid 400 and above wages in a day. The mode of payment of the respondents were reveals that, 70 per cent of them received monthly basis and 20 per cent of them received twice in a month after 15 days. Welfare measures of the respondents shows that, 83.7 per cent of the respondents were getting the housing facility, 15.6 per cent received the medical facility and a very few 0.7 per cent received the canteen facility by the workers.

Table No 2. Descriptive Analysis of Problems arise in Production of Tea

	N	Minimum	Maximum	Mean	S.D
Low level of external inputs	167	1.00	5.00	4.024	.95660
Physically challenging conditions by tea pluckers	167	1.00	5.00	3.844	1.18716
Working environment is not comfortable	167	1.00	5.00	3.509	1.18661
Scarce financial resources	167	1.00	5.00	3.149	1.23517
Inferior quality of green leaf	167	1.00	5.00	2.910	1.15031
Dissatisfied with production schedule	167	1.00	5.00	2.850	1.14927
Long distance to working place	167	1.00	5.00	3.161	1.15288
Unpredictable weather conditions	167	1.00	5.00	3.586	1.17835
Processing problems in factory	167	1.00	5.00	3.562	1.20513
Job is burden to the workers	167	1.00	5.00	3.515	1.16089
Scarcity of labour	167	1.00	5.00	2.748	1.24047
Lack of skilled labour	167	1.00	5.00	3.550	1.18555
Lack of Welfare measures	167	1.0	5.0	2.455	1.1807
More absenteeism	167	1.00	5.00	2.802	1.26700
Lack of technical knowledge	167	1.00	5.00	3.556	1.13331
Small scale farm	167	1.00	5.00	2.053	.96479
Non repayment of loan	167	1.00	5.00	2.772	1.23052
Inadequate training and extension services	167	1.00	5.00	3.706	1.15285
Outdated machinery	167	1.00	5.00	3.431	1.07815
Valid N (listwise)	167				

Source: Computed Primary data

The data in table 2, the study has analysed the challenges facing in production of tea in Meghalaya. The table shows the mean value of the problems arises, the highest mean score were low level of external inputs with mean score (4.024) followed by physically challenging conditions by tea pluckers with mean score (3.844) and Inadequate training and extension services with mean score (3.706), unpredictable weather conditions with mean score 3.586, processing problems in factory with mean score 3.562, lack of technical knowledge with mean score 3.556, lack of skilled labour with mean score 3.550, Job is burden to the workers with mean score 3.515 working environment is not comfortable with mean score 3.509, Outdated machinery with mean score 3.431, Long distance to working place with means score 3.161, Scarce financial resources with mean score 3.149, Inferior quality of green leaf with mean score 2.910, Dissatisfied with production schedule with mean score 2.850, More absenteeism with mean score 2.804, Non repayment of loan with mean score 2.772, Scarcity of labour with mean score 2.748, Lack of Welfare measures with mean score 2.455 Small scale farm with mean score 2.053. The finding indicated that ensuring adequate external inputs is crucial for the long-term success and growth of the tea production sector. The study has a found that, low level of external inputs is the highest challenges facing in production of tea in Meghalaya and these leads the industry's progress, competitiveness and sustainability by not allowing for innovation, efficiency improvements or timely responses to challenges. The second highest issues faced by the workers in production of tea is physically challenging conditions by the tea pluckers often go deep into the tea bushes for natural calls and are prone to various infections and other risks and tea gardens workers were not provided with any kind of protective gears while working which made it difficult for them to work at tea garden by increasing the risk while working at the tea garden and the lack of training facilities is also another problems arise in production of tea in Meghalaya. Therefore, it makes detrimental effects on tea production, quality sustainability and market competitiveness of tea in Meghalaya.

Hypothesis

Null Hypothesis: There is no association between Gender and the problems arise in production of tea in the study area.

To assumes that there is no relationship or effect between the gender of tea production workers and the issues that occur during the production process.

Table No. A.3. Chi-square test

Gender	Problems in production of tea			Total	Chi-square	P value
	Low	Moderate	High			
Male	22 (39.3) [52.4]	18 (32.1) [21.7]	16 (28.6) [38.1]	56 (100.0) [33.5]	12.312	0.002
Female	20 (18.0) [47.6]	65 (58.6) [78.3]	26 (23.4) [61.9]	111 (100.0) [66.5]		
Total	42 (25.1) [100.0]	83 (49.7) [100.0]	42 (25.1) [100.0]	167 (100.0) [100.0]		

Source: Computed Primary Data.

Note: 1. The value within () refers to Row Percentage

2. The value within [] refers to Column Percentage

Since P value is less than 0.01, the null hypothesis is rejected at 1% level of significance. Hence, concluded that there is an association between Gender and the problems in production of tea. These indicates that, there is a statistically significant relationship between gender and the issues faced in tea production. Based on row percentage, 39.3 per cent of male have low level of problems in production of tea and 28.6 per cent of male have high level of problems is production of tea whereas 18.0 per cent of female have low level of problems in production of tea and 23.4 per cent of female have the high level of problems in production of tea. Therefore, the result has found that, majority of the female workers has faced problems like Physically challenging conditions, not comfortable with the working environment, long distance to working place, lack of welfare measures, lack of technical knowledge and the job is burden in working tea estates and due unpredictable weather conditions during the time of working in the tea gardens, and other factors which is analysed in above Table No.2.

Conclusion

The study has concluded that, socio economic conditions of the tea estate workers in Meghalaya were facing several problems. Women tea plantation workers are one of the significant features in the tea estates as majority 66.5 per cent of the workforce are women in the study area. According to the major findings of the problems which has facing in production process is low level of external inputs such as inadequate training and extension services, insufficient access of modern equipment, tools or technology in tea cultivation and processing, insufficient transportation facilities, storage infrastructure that impact the overall tea production process. Scarcity of financial resources which is also limit the ability to expand or modernize tea production operation and leading to stagnation or quality issues. Due to the unpredictable weather conditions and long distance to the working place, the workers in estates were facing the physically challenges and leads to scarcity of labour and more absenteeism. Therefore, several implications arise affecting overall tea production process, like quality and quantity of tea produce, additional replacement of labour and overtime pay is required and these challenges disrupts the entire supply chain, impacting tea processing, packaging and distribution timelines. Hence, to address these challenges effectively, tea producers may need to implement strategies such as investing in technology, improving worker welfare, providing the training and extension services, diversifying income sources, implementing efficient scheduling and management practices and developing external inputs like infrastructure facilities and contingency plans to mitigate the impact of unpredictable factors and the workers is essential to address these challenges and support the growth and development of the tea industry in the region.

Acknowledgement

The article is derived from the Ph. D Thesis on the topic- Production and Marketing of Tea in Meghalaya State, India, submitted to the Department of Commerce Annamalai University, Annamalai Nagar, Tamil Nadu, India-608002, duly acknowledgement to respected research supervisor who assist in writing and helps in proof reading the articles. The authors are thankful to the staffs of all the Meghalaya tea factories and estates for the kind help during data collection and workers who shared their knowledge regarding the production and marketing practices during our field visit.

Reference

1. Indonesian Tea Development Outlook: Challenges and Opportunitie
2. Jumi. T., Sayanika Borah., and Manju Dutta Das. (2021), "Problems Faced by Women Tea Plantation Workers in Performing Their Duties", Indian Research Journal of Extension Education, Volume 21 (Issue no.3) pg. 98- 100.
3. Klasra. M.A., Khalid Mahmood Khawar., and Muhammed Aasim.,(2007), " History of tea production and marketing in turkey", International journal of Agriculture & Biology, Volume 09 (Issue no. 3) pg. 523-529, <https://www.fspublisher.org>
4. Panwar. T., (2017) "Living Conditions of Tea Plantation Workers", International Journal of Advance Research and Development, Volume no.2, (Issue no. 8) pg. 4-8, Available online at www.ijarnd.com ©2017,
5. Rafani. I., Effendi Andoko., Iriana Ekasari., and Tahlim Sudaryanto,(2022), "Indonesian Tea Development outlook: Challenges and opportunities", FFTC Agricultural Policy platform, April 8, <https://www.researchgate.net/publication/361643978>.
6. Roy. A (2013), " An Institution Based Insight into India's Tea Industry", Academy of Taiwan Business Management Review, Volume no.9, (Issue no. 3)., pg. 20-24. <http://hdl.handle.net/10536/DRO/DU:30060228>.
7. Rymbai, D., Singh, R., Feroze, S. M., Debbarma, B., (2012), "Factors associated with labour supply for tea plantation and productivity, a case study of tea growers in Meghalaya", Indian Journal of Hill Farming, Volume no. 25, (Issue no.2), pg.6-9, Available online at www.kiran.nic.in.
8. Sutha. R. J., and Dharmadasa., R.A.P.I.S (2011) "A Study Of Tea Export Marketing In Sri Lanka: Application Of Boston Consulting Group Matrix", Conference: International Conference Of Business Management University Of Sri Jayawardanapura, Volume 6, <https://Www.Researchgate.Net/Publication/301823007>.
9. Sushanti, M., (2023), "Tea Estate Female Worker's Hardworking And Health Issues: Special Reference At Glassaugh Estate, Nanu-Oya", <https://www.researchgate.net/publication/376521794>.
10. One of The Tea Producing States of India - Meghalaya (zizira.com)
11. Indonesian Tea Development Outlook: Challenges and Opportuniti