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# The Protagonist of Tea Garden Youth in Sustainable Development in Assam

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### **Abstract:**

In the scientific community, review articles provide an overview of a particular field. Youth involvement in Assam's tea gardens and their contribution to sustainable development is explored in this review article. The paper examines society, the environment, and culture of tea gardens from the point of view of young people. Environmental conservation, social development, and economic empowerment are highlighted in the article. It focuses on youth's role in supporting sustainable agriculture, community development, and overall well-being within tea gardens. A systematic review of existing literature identifies key success factors, challenges, and gaps in the involvement of tea garden youth in sustainable development. Youth engagement in the tea industry, local communities, and regional sustainable development goals are explored. Additionally, the article provides recommendations for policymakers, stakeholders, and tea garden managers. Tea garden youth need targeted interventions, capacity building, education, and empowerment programs to ensure a sustainable future. Ultimately, this article seeks to provide an in-depth analysis of tea garden youth in Assam's sustainable development. It aims to inspire further research and action by synthesizing existing research and identifying key areas for improvement.

Keywords: Youth, Protagonist, Tea garden, Assam, Sustainable development

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I. Introduction

Known for its rich heritage and vast plantations, the tea business in Assam adds significantly to the state's economy and the livelihoods of its workers. In order to ensure a sustainable and prosperous future for both the tea industry and the local communities in Assam, youth engagement and empowerment are crucial [16].

Youth in tea gardens in Assam, which constitute a substantial part of the state's population, have the potential to drive positive change and contribute to sustainable practices in this industry. It is possible to achieve transformative outcomes through their active participation in initiatives related to environmental conservation, social development, and economic growth.

Assam's tea garden youth can play a significant protagonist in promoting sustainability. The practice of organic farming techniques, water conservation, and biodiversity preservation are examples of sustainable agricultural practices that they can engage in. Moreover, they are able to support community development initiatives, education and skill-building programs, and initiatives aimed at improving the overall well-being of tea garden communities.

Youth involvement in sustainable development aligns with the broader objectives of the Sustainable Development Agenda of the United Nations. There is a strong emphasis on youth engagement and its role in achieving sustainable development objectives, including poverty eradication, gender equality, quality education, and environmental sustainability [16].

While the specific review on the protagonist of tea garden youth in sustainable growth in Assam could provide more detailed insights and analysis, it is evident that their active participation is critical to driving sustainable practices, fostering social inclusion, and ensuring a thriving future for Assam's tea industry.

A. Background on Assam's tea industry

There is a strong tea industry in Assam, a state in north-eastern India. One of its most famous products is Assam tea. There is a long history of tea production in Assam, which contributes significantly to the economy and cultural heritage of the region.

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Assam has been cultivating tea since the early 19th century when Robert Bruce, a Scottish adventurer, discovered tea plants growing in the Brahmaputra Valley in 1823. A tea estate was established by the administration in 1833 in the former Lakhimpur region as a result of this discovery [4]. During the British colonial era, which lasted approximately 120 years, the British colonial government played a significant protagonist in the growth of the tea manufacturing in Assam [2]. Assam's tea gardens grew steadily during this period, surpassing 1,000 plants. The number of tea gardens has, however, declined to approximately 850 [5].

Tea from Assam is primarily derived from the Camellia sinensis var assamica plant, which is native to the region. Chinese varieties of tea plants did not thrive in Assam's soil, unlike other tea varieties. Tea leaves grown in this region contribute to the unique flavour and characteristics of Assam tea [1].

Assam's tea industry is crucial to its economy. It accounts for approximately 52% of the nation's total tea production and is one of the largest tea-growing zones in India. The industry contributes significantly to the socio-economic development of the region, especially for the local population. Assam's tea plantations are renowned for their vast landscapes, which add to the stunning natural scenery of the state, including picturesque rivers and lush green hills [3].

In conclusion, Assam has a long and significant history in the tea manufacturing. Due to the unique soil and climate situations of this region, as well as the indigenous tea plant variety, Assam tea is of high quality. Throughout Assam's history, the industry has played a very important protagonist in its economic growth and remains one of the most prominent symbols of the state's cultural heritage.

# B. Importance of sustainable development in tea gardens

It is impossible to overstate the importance of sustainable development in the tea estates of Assam. The following are some key reasons for the importance of sustainable development in this context:

Environmental Preservation: Sustainability in tea gardens promotes the conservation of natural resources and protects fragile ecosystems in Assam. In order to

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minimize the environmental impact of tea cultivation, efforts such as biodiversity conservation, water resource management, and organic farming practices are employed [6].

**Social and Economic Well-being:** A sustainable tea garden contributes to the social and economic well-being of its local community. It can be argued that sustainable development fosters a more equitable and inclusive tea industry by promoting fair trade, ethical labour practices, and ensuring the welfare of tea workers. Thus, tea garden communities are able to alleviate poverty, enhance their livelihoods, and improve their quality of life overall [7].

**Cultural Heritage Preservation:** A rich cultural heritage exists among the tea gardens in Assam, including the unique tea garden community, often denoted to as the Tea tribe. By preserving and promoting their cultural heritage, sustainable development in tea gardens recognizes and respects their cultural identities and rights [8][9].

Market Competitiveness and Reputation: Reputation and market competitiveness of Assam tea are enhanced by sustainable practices in tea gardens. In light of the growing awareness and demand for sustainably produced products worldwide, adherence to sustainable development principles can assist companies in attracting environmentally conscious consumers, ethical buyers, and investors. Fair trade and organic certifications enhance market access and validate a commitment to sustainable practices [6].

**Viability over the long term:** The tea industry in Assam is dependent on sustainable development to ensure its long-term viability and resilience. Tea gardens can adapt to changing conditions and reduce vulnerability by adopting sustainable practices that address issues such as climate change, soil degradation, and labour rights [7].

The establishment of sustainable tea gardens in Assam is essential for the preservation of the environment, social and economic well-being, and the preservation of cultural heritage, market competitiveness, and long-term viability. It is possible for the tea industry in Assam to achieve a balance between economic growth and environmental stewardship, while also promoting social equity and cultural resilience, by adopting sustainable practices.

# II. Historical overview of tea gardens in Assam

# A. Origins and growth of tea cultivation in Assam

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The cultivation of tea in Assam has a long and rich history, and it plays a significant role in the state's economy. An important portion of India's total tea manufacture originates from Assam, which is known for its high-quality tea production. Assam's tea cultivation history can be summarized as follows.

There is no doubt that the state of Assam is one of the biggest players in the Indian tea industry, contributing significantly to the country's overall tea production. During 2020–21, Assam produced approximately 503.46 thousand metric tons of tea, which accounted for 39.12% of India's total tea production [10]. Furthermore, in 2015, Assam only manufactured 652.95 million kilograms of tea, contributing approximately 52% to the total tea production in the country [11].

Assam's tea cultivation dates back to the British colonial era. Assam's climate and soil were recognized by British entrepreneurs and planters as having great potential for the cultivation of tea. After the British established tea gardens in Assam in the late 1830s, the region began to produce large quantities of tea [13].

Assam has experienced steady growth in the cultivation of tea over the years. Approximately 3.22 lakh hectares of tea plantations are located in the state [12]. The area is home to a large number of tea estates, industrial growth centers, and infrastructure development depots. It is estimated that these tea gardens employ a large number of people and contribute greatly to the economic well-being of the state [10].

With its favourable climate, abundant rainfall, and fertile soil, Assam is an ideal region for growing tea. It is known that the tea produced in Assam possesses a distinctive malty taste and strong flavour. Assam tea is highly sought after in the global tea market due to the unique terrier of the region.

Tea cultivation in Assam has not only contributed to the state's economy, but also contributed to the region's social and cultural fabric. With many jobs offered by the tea industry in Assam, the tea industry has become an integral part of the local community.

Overall, tea cultivation in Assam has a long history and has experienced significant growth over the past few decades. A favourable climate and fertile soil have made Assam a

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prime location for tea production. Tea gardens in the state contribute a substantial portion of India's total tea harvest and play a crucial protagonist in the regional economy and ethos.

# B. Socio-economic impact of tea gardens in the region

Research and analysis are being conducted on the socioeconomic impact of tea gardens in the region of Assam. In Assam, tea plantations play a vital protagonist in the socio-economic expansion of the tea garden community. In the Indian economy, the tea garden industry occupies a prominent position in Assam [14].

For many years, it has been a major contributor to the socio-economic development of the state. There are numerous tea gardens in Assam, with a rich past that dates back to the involvement of British officials in the 19th century [16].

In Assam, the socio-economic circumstances of tea plantation labourers have been a subject of concern and study. It has been investigated the living and functioning circumstances of these labourers, highlighting the challenges they face [15]. Research has been conducted to understand and improve the socioeconomic well-being of tea garden labourers in Assam and other areas [18].

Youth have also been examined in relation to the socio-economic progress of the tea estate civic in Assam [14]. The impact of youth behaviour and entrepreneurship in tea garden communities has been studied, as well as ways to enhance their participation and contribution to the socioeconomic growth of the region [16]. The tea garden areas of Assam are striving to improve the socioeconomic status of their youth [17].

In general, the research results indicate that studies have been conducted on the socioeconomic impact of tea estates in Assam, focusing on the living conditions of tea plantation labourers and the role of youth in their economic development. Even though specific reviews on this subject are not available in the provided search results, the information highlights the importance of the tea garden business in Assam's economy and the on-going efforts to address socio-economic challenges faced by tea garden workers.

# III. Environmental sustainability in tea gardens

# A. Biodiversity conservation efforts

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Assam tea gardens, including non-protected areas, can contribute to the conservation of species and the preservation of biodiversity. Studies have examined the relationship between tea plantations and biodiversity, highlighting the potential for conservation beyond protected areas. According to research, elephants, for example, use a significant portion of the non-protected landscape in tea-garden-dominated regions. As a result, it is important to take into account the biodiversity value of tea gardens when planning for conservation [19].

Biodiversity conservation can be influenced by the management practices employed in tea plantations. When implemented in tea plantations, agro-ecological practices and sustainable practices support biodiversity, including native plants, wildlife, and microorganisms. As a result, the potential for managing tea gardens in a manner that preserves biodiversity is highlighted [20].

Assam's tea gardens have been identified as biodiversity hotspots, providing habitat for a variety of species. Forest reserves border some tea estates in Assam, providing opportunities for the conservation of biodiversity. In addition to contributing to the overall biodiversity conservation efforts in the region, these reserves are located in tea gardens [21].

In addition, Assam's tea plantations contribute to the conservation of wildlife, particularly elephants. It has been suggested that tea estates may serve as sanctuary zones and respite halts for elephants, opening up migratory routes and reducing the possibility of conflict between humans and elephants. As a result, coexistence between humans and elephants is encouraged and biodiversity conservation is promoted [23].

It is possible that specific reviews of biodiversity conservation efforts in tea gardens in Assam are not available in the provided research results; however the information indicates that tea gardens play a significant role in supporting biodiversity and that sustainable management practices are essential. Tea gardens have the potential to contribute positively to biodiversity conservation efforts in the region, based on these findings.

# **B.** Water resource management

Due to the challenges associated with access to clean water in tea gardens in Assam, water resource management has been a topic of concern. Despite its reputation for high-quality black tea, Assam faces challenges when it comes to access to non-toxic drinking water. Less

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than one in fifteen families in the state has access to tap water. There is a need for better management of water resources in tea gardens and the surrounding communities as a result of this situation [24].

In tea gardens, efforts are being made to address water-related issues. Various water schemes are being discussed by stakeholders, as well as the implementation of the Jal Jeevan Mission (JJM) across all tea lands in Assam. The importance of implementing water schemes in tea plantation to ensure access to clean water for workers and the community is recognized in this statement [26].

During the COVID-19, the water crisis in Assam's tea estates has received increased attention. Workers in tea gardens frequently lack access to clean water for drinking and washing, resulting in chronic water shortages. The current crisis highlights the need for improved water resource management to address the water-related challenges facing tea garden communities [27].

It is important to address water resource management in tea gardens in Assam, even though specific reviews are not readily available. It is vital to guarantee the well-being of tea garden workforces and the communities surrounding tea gardens by improving access to clean water and effectively implementing water schemes.

# C. Soil conservation and organic farming practices

Sustainable and agro ecological tea plantations can support biodiversity, including native plants, wildlife, and microorganisms. Consequently, adopting such practices in tea gardens can contribute to the conservation of soil and the health of the ecosystem as a whole [29].

There has been a shift in Vietnamese tea farming from conventional to agro ecological practices. Due to soil dilapidation, low economic productivity, and ecological infection, conventional farming practices have been replaced by more sustainable methods [30].

Tea farming that is sustainable is concerned with preserving biodiversity, planting shade trees, encouraging wildlife movement, reducing pesticides, controlling agrochemical runoff, using organic fertilizers, reversing environmental degradation, and reducing soil

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erosion. Despite not being specific to Assam, these practices may be relevant to tea gardens throughout the region [31].

An example of soil conservation measures is the evaluation of soil compaction levels on the farm and the implementation of action plans for managing vulnerable areas as well as ensuring adequate organic matter levels and proper soil pH levels for tea establishment. In tea gardens, these practices can help maintain soil health and fertility [32].

Assam tea gardens are also transitioning to organic cultivation practices in an attempt to improve soil quality and minimize the use of synthetic inputs. It has been observed that certain tea gardens have adopted organic farming practices, such as Inhana Rational Farming (IRF) Technology, with evaluations conducted to assess the impact on soil and ecological components [33].

In spite of the fact that specific reviews on these practices in Assam tea gardens are not available, organic farming can contribute to soil conservation and environmental sustainability. But they indicate that agro ecological and sustainable practices can protect soils, preserve biodiversity, and protect the environment in tea gardens.

# IV. Socio-economic development in tea gardens

# A. Employment generation and labour rights

The rights and wages of tea plantation labours in Assam are subject to challenges. According to studies, tea labourers in Assam often receive wages that are lower than the recommended living wage, which affects their standard of living and ability to meet basic needs [34] [35]. The tea garden workers have been demanding higher wages in order to ensure a dignified and healthy life [35]. Furthermore, it is mentioned that the daily wages of tea plantation workforces in Assam are relatively lower than those in other parts of the country [38].

Research has been conducted on the socioeconomic status of women labourers in tea gardens in Assam. There were, however, no specific reviews that addressed employment generation or labour rights in tea gardens in Assam in the research results provided [36].

In terms of wages for tea garden workers, the Assam government has made certain decisions, including increasing wages and setting up wage fixation committees. This

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indicates that the government is making efforts to address labour-related issues in the tea garden industry [37].

In general, the information provided in the research indicates that there are challenges regarding wages and workplace conditions in the tea gardens in Assam, even though there are no specific reviews available.

# B. Education and healthcare facilities for tea garden workers

**Health care facilities:** According to a study, many tea garden workers use government healthcare facilities for their health care, while a smaller percentage utilize tea garden hospitals. Moreover, the study revealed that a large number of workers had health insurance, but had not used it previously [39].

**Education Facilities:** Based on the research results, it appears that there have been concerns regarding the provision of education facilities for tea plantation workforces in Assam. According to the article, tea garden owners and companies have historically been reluctant to support education due to their reliance on labour [40]. Another source noted the lack of adequate infrastructure and reluctance among tea planters to provide basic educational facilities and encourage education in tea gardens [51].

However, although specific reviews of the education and healthcare facilities provided to tea garden workers in Assam were not included in the provided research, the information suggests that there may be gaps and challenges in these areas. There is a need for improved healthcare services as a result of the excessive utilization of government healthcare facilities and the lack of access to health insurance. Education facilities are of concern to tea garden workers, so better infrastructure and supports are necessary for them to obtain an education.

# C. Empowerment of womenfolk in the tea business

The tea industry in Assam illustrates a significant gender disparity, with women facing inequalities in terms of employment flexibility, income rates, working status, and societal standing [42]. The gender norms continue to be unequal, and gender-equal employment practices should be prioritized, policies should be developed with a gender lens, and women

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should be better represented in all positions [43]. In the tea plantation business, womenfolk represent more than 50% of the workforce, but they remain marginalized in many areas [45].

Women's Status in Education: Assam has a lower educational status than other Indian states. The enrolment of females in primary and secondary education is relatively low, and fewer women complete ten or more years of education compared to men [44].

Women's Empowerment Initiatives: Assam's tea communities are actively working to improve the lives of women. A program such as Improving Lives, implemented by organizations such as IDH (International Data Harmonization) Sustainable Trade, aims to impact a significant number of tea gardens and beneficiaries, with a particular focus on women, children, and families [46].

Overall, the results of the study indicate that gender inequalities exist as well as a need for women's empowerment in the tea industry in Assam. There has been some progress made in addressing these issues, however, we still have a long way to go in achieving greater gender equality and improving the lives of tea farmers' women.

# V. Community development initiatives

# A. Infrastructure development in tea garden areas

**Tea Production in Assam:** Assam has the world's largest tea-growing area, constituting about one-seventh of the global production of tea. In addition to contributing significantly to India's total tea production, Assam is home to numerous tea gardens and industrial estates [47].

**Potential for Tourism:** In terms of potential for tea tourism, the tea gardens of Assam can be an attractive destination for both domestic as well as international travellers, offering lush greenery, iconic bungalows, ethnic culture, and rhythmic music and dance. The tea tourism industry presents an opportunity for the state to generate revenue [48]. Tea tourism in Assam is being revitalized and its role in community development is being explored [49].

**Development of infrastructure for the tea industry:** The Asian Development Bank (ADB) has stressed the need to rediscover and reorient Assam's tea plantations administration

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approach, particularly focusing on minor tea planters. By 2025, Assam is expected to become an outward-looking economy, according to the ADB report [50].

**Historical Significance:** Assam's tea industry dates back to 1823 when tea plants were discovered in the Brahmaputra Valley. Tea cultivation was initiated by the administration in 1833, and the industry has since played an important role in the national economy [51].

Despite the limited information provided by the research, they provide an indication of the importance of the tea production in Assam's economy and the potential for tea tourism in the state. It is recognized that the development and enhancement of infrastructure, especially for small tea growers, are essential to the growth and development of the tea industry.

# B. Skill development and entrepreneurship programs

**Efficacy of skill development programs on performance:** A study conducted in Assam examined the effectiveness of skill expansion programs on the enactment of minor tea garden. According to the research, skill improvement has a positive impact on workforce performance, making it one of the few studies to address this issue [52].

Youth's Role in Socio-Economic Development: The role of youth in Assam tea garden communities was explored in another study. The study examined a variety of factors, including youth behaviour, entrepreneurship, import-export, and socio-economic implications [53].

**Implications and factors affecting small tea growers:** Research conducted in Assam found that key factors affected the implementation of organic gardening by small tea planters. It emphasized the importance of policy interventions, training, income perception, and the creation of tea growers' owned factories in promoting organic cultivation [54].

Role of small tea growers: A remarkable ascent has occurred in the number of small tea growers in Assam over the past few decades. It is estimated that the sum of small tea plantations has increased significantly from 16 in 1978 to 84,577 in 2016. A wide range of individuals were involved in the tea cultivation industry, including entrepreneurs from middle-class Assamese families [55].

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**Skill Training Centres in Tea Gardens:** To enhance the employability of the youth in the tea gardens throughout Assam, the government has initiated the establishment of skill development centres across the state. Various skills are imparted to the youth in order to facilitate their professional and personal growth [56].

A limited number of detailed reviews of tea garden skill development and entrepreneurship programs are provided in the study. However, they emphasize that skills can improve performance, the role of youth in socioeconomic development, factors that influence small tea growers, and skill development centres.

# C. Corporate social responsibility initiatives by tea garden companies

**Human Rights Responsibilities:** Assam tea plantation workers' rights were explored by UK-based companies. The study examined corporate reports and documents to determine how companies communicate their potential human rights impacts [57] [58].

Corporate Social Responsibility Monitoring and Review: CSR initiatives are monitored and reviewed by Tata Consumer Products Ltd, formerly Tata Global Beverages Ltd. As part of this process, local reviews, steering committee meetings, and executive office reviews are conducted in order to assess progress and effectiveness [59][60].

**CSR Activities in Assam:** Assam has seen CSR activities in various sectors, including education, livelihood, health, poverty eradication, safe drinking water, sanitation, and rural development. Various companies operating within the state are taking part in these initiatives [61].

However, the research provides limited specifics on tea garden companies' CSR initiatives, but emphasized that companies' obligation to respect human rights, monitoring and review mechanisms for CSR initiatives, and the presence of CSR activities in Assam's tea garden industry.

# VI. Challenges and future prospects

# A. Changing Climate and its effect on tea gardens

Climate change and tea production in Assam: Erratic weather patterns caused by climate change have been adversely affecting tea production in Assam. In recent years, rising

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temperatures and changes in climate patterns have resulted in lower yields and alterations in the flavour of Assam tea, which is India's most popular beverage [62][64].

Impact of Climate Change on Tea Plants and Pests: Climate change may cause changes in sunlight exposure for tea plants in Assam and China, resulting in crop damage. Furthermore, these climate changes are also affecting the abundance of insect pests [63].

Climate Change and Historical Rainfall Data: Scientists are using historical rainfall records from Assam's tea gardens to investigate past rainfall changes in northeast India. In areas where historical rainfall data is limited, these records provide insight into the effects of climate change [65].

**Tea Industry Challenges:** The tea industry in Assam has identified climate change as one of its top five challenges. The impact of climate change on tea bushes has made irrigation increasingly difficult [66].

Although the study provides an overview of climate change's impact on Assam's tea gardens, it's important to note that more specific research and study may have been conducted on the topic.

# B. Fair trade and ethical considerations

**Ethics in the Tea Production:** The tea business has faced ethical issues related to sustainability and social justice. Due to the growing consumption of tea around the world, these issues must be addressed in order for the industry to remain sustainable [67].

**Social Justice and Certifications:** Rainforest Alliance, Ethical Tea Partnership, and Fair-trade certifications are part of a social justice movement in tea. In addition to attracting a premium price, these certifications create a market for goods produced in accordance with ethical and sustainable principles [68].

**Fair Trade and Small Tea Growers:** Fair Trade has the potential to regenerate and sustain marginalized groups in areas that grow tea. Small tea growers can benefit from it through the provision of support and fair wages [69].

**Poor condition in tea garden:** Poor working conditions have been reported in tea gardens, including low wages for workers. Due to this, workers and their families have been

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left unable to meet their basic need, which has resulted in unfortunate incidents such as the death of workers as a result of mushroom poisoning [70].

It is important to note that the situation in Assam might have evolved since the publication of these works, despite the research describing fair trade and ethical considerations

# C. Opportunities for diversification and value addition in the tea manufacturing

The concept of value addition in the tea manufacturing refers to the process of enhancing the value of tea products through a variety of methods. The process may include steps such as processing, packaging, branding, and marketing. Enhancing value adds to the creation of unique products, caters to specific market segments, and increases profitability [71].

A vital feature of diversification in the tea business is the expansion of the range of tea products and the exploration of new markets. There can be a variety of tea-based products such as flavoured teas, speciality teas, herbal teas, organic teas, and tea-infused beverages, cosmetics, and confectionery items. Diversification can assist in meeting the evolving preferences of consumers and facilitating access to new markets [72, 75].

A significant role is played by Assam in the Indian tea industry, accounting for a large portion of the country's tea production. The region is especially famous for its black tea, which has a strong and malty flavour. In Assam, the tea gardens provide a favourable environment for tea cultivation, making it an important region for value-added initiatives and diversification [73] [74].

Despite limited reviews, these general insights can give you a sense of the opportunities in the tea production in the state. It would be beneficial to consult industry reports, research articles, and publications specific to the Assam tea industry in order to gain more detailed and up-to-date information.

# VII. Policy recommendations for sustainable development

# A. Government initiatives and regulations

The following are some government initiatives and regulations relating to tea gardens in Assam:

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**Tea Tourism Fund Allocation:** The Assam government has allocated Rs 50 crore in the budget for 2022-23 to promote tea tourism in the state, with the objective of developing and marketing tourist resorts in tea-producing areas. Through this initiative, Assam's picturesque tea gardens will be promoted as a tourist destination [76] [80].

**Financial Assistance to Tea Gardens:** Assam gave financial incentives to 370 tea gardens in the state to mitigate the effects of the pandemic. Support was provided to the tea industry, which is considered the state's backbone [78].

**Tea Subsidy and Interest Subvention:** The state government of Assam announced several schemes to support tea gardens. An interest subvention of 3% per year is offered to tea gardens with working capital loans, up to a limit of Rs 20 lakh per year. A subsidy of Rs 7 per kilogram was provided by the state government for orthodox tea [79].

**Tea Land Administration:** The government of Assam has established a system for managing and regulating tea gardens in the state. The system facilitates land-related matters in the tea industry and ensures effective estate administration [77].

It is evident from these government initiatives and regulations that the Assam government has made significant efforts to support and regulate the tea gardens in its state. Assam Tea Gardens aims to promote tourism, provide financial assistance, and facilitate the management and development of tea gardens.

# B. Collaboration between stakeholders for long-term sustainability

The importance of stakeholders' collaboration: Collaboration with stakeholders is essential to the success of any industry, including the tea industry. It is possible for stakeholders to include tea garden owners, workers, local communities, government bodies, environmental organizations, and consumers. Collaboration with these stakeholders can lead to improved decision-making, improved practices, and more sustainable outcomes [81].

**Standards for sustainability reporting:** In order to ensure transparency and accountability in the tea industry, sustainability reporting standards should be implemented. Sustainability performance can be measured and reported based on these standards, allowing stakeholders to assess the progress and impact of sustainability initiatives [82].

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Research based on empirical evidence: Research in many industries, including sustainable neighbourhood projects, has demonstrated the importance of stakeholder collaboration in order to produce successful outcomes. A long-term perspective and taking into consideration the interests of all stakeholders are keys to minimizing unforeseen consequences and achieving sustainable outcomes [83].

**Self-interested Collaboration:** Collaboration among stakeholders should be based on "enlightened self-interest" in which all parties benefit. Collaborations should be beneficial to all parties, taking into account their commercial, environmental, and social interests. It is possible to achieve more sustainable outcomes and practices through such partnerships [84].

In Assam, stakeholder collaboration for long-term sustainability of tea gardens may be limited, but these general insights can be used to understand the importance of collaboration and sustainability practices in the tea industry and guide future efforts.

### **VIII. Conclusion**

# A. The role of tea gardens youth in sustainable development

Youth in Sustainable Development: Engaging young people in sustainable development efforts is critically important for the community's and society's well-being now and in the future. Youth involvement contributes to the resolution of environmental, social, and economic challenges by bringing fresh perspectives, innovative ideas, and energy [85].

**Tea Tribes Community in Assam:** The tea tribes' community plays a significant role in tea production, contributing significantly to the state's economy. Using the Directorate for Welfare of Tea and Ex-Tea Garden Tribes, the Assam government has implemented welfare schemes to help the tea tribes [86].

Illiteracy and Vulnerability: There is a high level of illiteracy and vulnerability among tea garden workers in Assam, particularly among women, which presents a challenge to sustainability. It is possible for illiteracy to contribute to vulnerability and to impede progress in addressing social and economic issues. Increasing literacy and education among tea garden workers can enhance their well-being and empower their communities [87].

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Despite the limited conclusions regarding the role of tea garden youth in sustainable development in Assam, these general insights provide an understanding of the importance of youth engagement and the challenges faced by tea garden workers when achieving sustainable development objectives. It is possible to contribute to the sustainable growth of tea gardens and communities in Assam if young individuals are actively involved and empowered along with issues such as illiteracy are addressed.

# B. Call to action for continued focus on sustainability

Tea producers in Assam, like any other business sector, can greatly benefit from a continuing focus on sustainability. Sustainability practices in the tea industry contribute to long-term business viability and growth as well as addressing pressing environmental concerns. Sustainable practices must be implemented by all stakeholders in the tea industry, including government agencies, owners of tea gardens, workers, and consumers.

As a result of sustainability strategies, companies can make long-term investments, which leads to a more competitive and resilient business environment [88]. By incorporating sustainability into its operations, the tea industry can reduce its ecological footprint, preserve natural assets, and alleviate the effects of changing climate. In adding to benefiting the environment, this enhances the reputation of tea brands and attracts environmentally conscious consumers.

There is a global shift toward sustainability, with businesses increasingly focusing on sustainable products, services, and supply chain practices [89]. By adopting sustainable business strategies, critical global issues such as climate change, income inequality, and resource depletion can be addressed [90]. The tea industry in Assam will be able to position itself as a responsible and forward-looking sector that contributes to the welfare of the environment, local communities, and the economy as a whole by aligning itself with these sustainability trends.

Finally, there is a clear call to action for the tea industry in Assam to continue to focus on sustainability. As a result of prioritizing sustainable practices, the industry can create a positive impact, enhance its resilience, and contribute to the long-term prosperity of both tea gardens and the region as a whole.

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#### **References:**

- [1] Wikipedia Contributors. (2023, March 28). *Assam tea*. Wikipedia; Wikimedia Foundation. https://en.wikipedia.org/wiki/Assam\_tea
- [2] Biraj, J., & Kalita. (2019). *Historical Background of the Tea Industry in Assam*. https://old.rrjournals.com/wp-content/uploads/2019/01/548-550\_RRIJM190401115.pdf
- [3] Singh, J. (2022, December 16). Assam tea: Origin and History, Evolution of Assam Tea Industry. Healthyandhygiene; Healthy and Hygiene. https://healthyandhygiene.com/blogs/news/assam-tea-origin-and-history-evolution-of-assam-tea-industry
- [4] *About tea industries | Industries & Commerce | Government Of Assam, India.* (2023). Assam.gov.in. https://industries.assam.gov.in/portlet-innerpage/about-tea-industries
- [5] Sentinel Digital Desk. (2022, November 3). *Tea industry of Assam: At a glance Sentinelassam*. Sentinelassam.com; The Sentinel Assam. https://www.sentinelassam.com/editorial/tea-industry-of-assam-at-a-glance-621346
- [6] Rogers, K. (2018, November 6). *In rural India, tea is gaining sustainable development ground*. Devex; Devex. https://www.devex.com/news/in-rural-india-tea-is-gaining-sustainable-development-ground-93780
- [7] and, G. (2023). Sustainable Development Goals and Small Tea Growers of North-east Assam. *Economic and Political Weekly*, *58*(5). https://www.epw.in/journal/2023/5/commentary/sustainable-development-goals-and-small-tea.html
- [8] Saha, A. (2021, March 3). *Explained: The political significance of Assam's tea garden workers*. The Indian Express; The Indian Express. https://indianexpress.com/article/explained/explained-the-political-significance-of-assams-tea-workers-7212743/
- [9] Wikipedia Contributors. (2023, April 28). *Tea-garden community of Assam*. Wikipedia; Wikimedia Foundation. https://en.wikipedia.org/wiki/Tea-garden\_community\_of\_Assam
- [10] *Assam State Presentation and Economic Growth Report | IBEF*. (2022). India Brand Equity Foundation. https://www.ibef.org/states/assam-presentation
- [11] (6) (PDF) Status of Tea Production in Assam: Past Trends and its Future Projections. (2018).

  ResearchGate; ResearchGate.

  https://www.researchgate.net/publication/324831193\_Status\_of\_Tea\_Production\_in\_Assam\_Past\_Trends\_and\_its\_Future\_Projections
- [12] (6) (PDF) An analytical study of Tea production in Assam with reference to Export and Auction of Tea. (2018). ResearchGate; ResearchGate. https://www.researchgate.net/publication/340265034\_An\_analytical\_study\_of\_Tea\_production\_in\_Assa m\_with\_reference\_to\_Export\_and\_Auction\_of\_Tea
- [13] Biraj, J., & Kalita. (2019). *Historical Background of the Tea Industry in Assam*. https://old.rrjournals.com/wp-content/uploads/2019/01/548-550\_RRIJM190401115.pdf
- [14] A REVIEW ON THE ROLE OF YOUTH IN THE SOCIO-ECONOMIC DEVELOPMENT OF TEA GARDEN COMMUNITY IN ASSAM | International Educational Scientific Research Journal IESRJ (Peer-Reviewed Monthly Research Journal and International Indexed Journal). (2015). Iesrj.com. https://www.iesrj.com/archive-

Research paper

- sub?detail=A\_REVIEW\_ON\_THE\_ROLE\_OF\_YOUTH\_IN\_THE\_SOCIOECONOMIC\_DEVELOPM ENT OF TEA GARDEN COMMUNITY IN ASSAM
- [15] Stuti Chakraborti, & Dr. Ramchandra. (2022). An assessment of socio-economic conditions of tea garden workers in Jalpaiguri district of West Bengal. *The Pharma Innovation Journal*, 11(6S), 01–03. https://www.thepharmajournal.com/special-issue?year=2022&vol=11&issue=6S&ArticleId=12890
- [16] Saha, A. (2021, March 3). *Explained: The political significance of Assam's tea garden workers*. The Indian Express; The Indian Express. https://indianexpress.com/article/explained/explained-the-political-significance-of-assams-tea-workers-7212743/
- [17] Ekka, B., Dr, & Joseph, G. (n.d.). A REVIEW ON THE ROLE OF YOUTH IN THE SOCIO-ECONOMIC DEVELOPMENT OF TEA GARDEN COMMUNITY IN ASSAM KEYWORDS: TEA GARDEN COMMUNITY OF INDIA AND ASSAM, YOUTH, BEHAVIOUR, ENTREPRENEURSHIP, IMPORT-EXPORT SOCIO-ECONOMIC DEVELOPMENT OPPORTUNITIES. https://www.iesrj.com/upload/5.%20Bosco%20Ekka%20-%20Online.pdf
- [18] Dr Mintu Gogoi. (2020). Socio-Economic Condition of Tea Garden Workers in India: Research Indication for the period from 2000 to 2020. South Eastern Book Agency. https://www.academia.edu/50616181/Socio Economic Condition of Tea Garden Workers in
- [19] sahana. (2020, February 14). Looking beyond protected areas to conserve species in tea-garden terrains. Mongabay-India. https://india.mongabay.com/2020/02/looking-beyond-protected-areas-to-conserve-species-in-tea-garden-terrains/
- [20] sahana. (2021, November). *Tea plantations support biodiversity when managed agroecologically*. Mongabay-India. https://india.mongabay.com/2021/11/tea-plantations-support-biodiversity-when-managed-agroecologically/
- [21] (6) (PDF) Tea gardens of Assam A biodiversity hotspot. (2021). ResearchGate; ResearchGate. https://www.researchgate.net/publication/366482841\_Tea\_gardens\_of\_Assam\_-\_\_A\_biodiversity\_hotspot
- [22] Baruah, P. (2019). Tea: An Important Constituent of Biodiversity of Assam. International Journal of Agriculture Sciences Citation: Pradip Baruah, 11(17), 8986–8989. https://elephantfriendlytea.files.wordpress.com/2019/09/tea-an-important-constituent-of-biodiversity-of-assam.pdf
- [23] Tandon, A. (2019). Stories of positive actions towards biodiversity conservation in 2018. Mongabay-India. https://india.mongabay.com/2019/01/stories-of-positive-actions-towards-biodiversity-conservation-in-2018/
- [24] Pacheco, K. (2017, January 31). *Taking steps toward clean water in an Assam tea garden Womens Earth Alliance*. Womens Earth Alliance. https://womensearthalliance.org/updates/taking-steps-steps-toward-clean-water-assam-tea-garden/
- [25] (6) (PDF) The tea landscape of Assam: Multi-stakeholder insights into sustainable livelihoods under a changing climate. (2018). *ResearchGate*. https://doi.org/10.1016//j.envsci.2018.01.003
- [26] B Sadanand. (2023, March 22). Assam: Tea garden management urged to effectively execute water scheme. EastMojo; EastMojo. https://www.eastmojo.com/assam/2023/03/22/tea-garden-management-urged-to-effectively-implement-water-scheme/
- [27] The Third Pole. (2021, May 21). *In Assam's tea gardens, a silent water crisis is making workers ill.* The Third Pole. https://www.thethirdpole.net/en/pollution/tea-gardens-assam-silent-water-crisis/

Research paper

- [28] Bharadwaj, S. (2021, June). *In Assam, a Water Crisis Brews Behind India's Most Precious Tea The Wire Science*. Thewire.in. https://science.thewire.in/environment/in-assam-a-water-crisis-brews-quietly-behind-indias-most-precious-tea/
- [29] Sahana. (2021, November). *Tea plantations support biodiversity when managed agroecologically*. Mongabay-India. https://india.mongabay.com/2021/11/tea-plantations-support-biodiversity-when-managed-agroecologically/
- [30] Viet San Le, Lesueur, D., Herrmann, L., Hudek, L., Luu Ngoc Quyen, & Lambert Bräu. (2021). Sustainable tea production through agroecological management practices in Vietnam: a review. *Environmental Sustainability*, 4(4), 589–604. https://doi.org/10.1007/s42398-021-00182-w
- [31] Chowdhury, A., Abhishek Samrat, & M. Soubadra Devy. (2021). Can tea support biodiversity with a few "nudges" in management: Evidence from tea growing landscapes around the world. *Global Ecology and Conservation*, *31*, e01801–e01801. https://doi.org/10.1016/j.gecco.2021.e01801
- [32] SUSTAINABLE TEA Good Agricultural Practice Guidelines. (n.d.). https://www.unilever.com/files/origin/d368a0ad88f49f85ca99dc299044b63d6f461ebb.pdf/es-2003-sustainable-tea-good-agricultural-practice-guidelines-for-large-tea-estates.pdf
- [33] (6) (PDF) Biodiversity Monitoring Study to Assess the Impact of a Comprehensive Organic Farming Practice namely Inhana Rational Farming (IRF) Technology on the Ecological Components of India's Largest Organic Tea Estate of Barak Valley, Assam, India. (2019). ResearchGate; ResearchGate. https://www.researchgate.net/publication/333566671\_Biodiversity\_Monitoring\_Study\_to\_Assess\_the\_I mpact\_of\_a\_Comprehensive\_Organic\_Farming\_Practice\_namely\_Inhana\_Rational\_Farming\_IRF\_Tech nology\_on\_the\_Ecological\_Components\_of\_India%27s\_Largest\_Organic\_Tea
- [34] Rahul Karmakar. (2021, July 14). Assam tea workers get a fourth of "living wage": study. Thehindu.com. https://www.thehindu.com/news/national/other-states/assam-tea-workers-get-a-fourth-of-living-wage-study/article35315619.ece
- [35] In Assam's Tea Gardens, Low-Wage Women Workers Struggle to Access Maternity Care Women's Media Center. (2021). Womensmediacenter.com. https://womensmediacenter.com/women-undersiege/in-assams-tea-gardens-low-wage-women-workers-struggle-to-access-maternity-care
- [36] (6) (PDF) Does working in tea garden ensure a better socio-economic status among the women? An empirical study in Tinsukia district of Assam. (2018). ResearchGate; ResearchGate. https://www.researchgate.net/publication/331744872\_Does\_working\_in\_tea\_garden\_ensure\_a\_better\_socio-economic\_status\_among\_the\_women\_An\_empirical\_study\_in\_Tinsukia\_district\_of\_Assam
- [37] Singh, B. (2021, July 14). *Assam government decides to provide tea garden labourers employment under MGNREGA*. The Economic Times; Economic Times. https://economictimes.indiatimes.com/news/politics-and-nation/assam-government-decides-to-provide-tea-garden-labourers-employment-under-mgnrega/articleshow/84417707.cms
- [38] Sarkar, N. (2023, January 24). *Bitter Brew: Darjeeling's Tea Garden Workers Are Paid Poorly, Have No Land Rights*. IndiaSpend; Indiaspend. https://www.indiaspend.com/assam/bitter-brew-darjeelings-tea-garden-workers-are-paid-poorly-have-no-land-rights-850456
- [39] Healthcare utilisation: a mixed-method study among tea garden workers in Indian context | Emerald Insight. (2021). *Journal of Health Research*, *36*(6), 1007–1017. https://doi.org/10.1108//JHR
- [40] Zaman, R. (2022, May 14). Assam's tea gardens will have high schools for the first time. But tea workers have one concern. Scroll.in; Scroll.in. https://scroll.in/article/1023862/assams-tea-gardens-will-have-high-schools-for-the-first-time-but-tea-workers-have-one-concern

Research paper

- [41] Nath, D., & Dipak, N. (2014). Educational Vulnerability and Risk Factors of Tea Garden Workers with Special Reference to Dewan Tea Garden Village, Cachar, Assam, India. *International Research Journal of Social Sciences*, 3(9), 14–21. http://www.isca.in/IJSS/Archive/v3/i9/3.ISCA-IRJSS-2014-155.pdf
- [42] Das, S., Ratan, N., Associate, R., & Head, P. (n.d.). Sustainable Women Empowerment among the Tea Garden Women Workers in Assam: A Stepping Stone For Holistic Development. Retrieved May 3, 2023, from https://www.researchguru.net/volume/Volume%2013/Issue%201/RG105.pdf
- [43] Rajeev Anand Kushwah, & Rajeev Anand Kushwah. (2022, July 26). Women In The Tea Industry: Gender Roles, Unequal Pay, And Feudal Structures Disadvantage Female Labourers. Feminism in India. https://feminisminindia.com/2022/07/27/women-in-the-tea-industry-gender-roles-unequal-pay-female-labourers/
- [44] Verrinder, L. (2022, March). *Women in Assam factsheet Ethical Tea Partnership*. Ethical Tea Partnership. https://ethicalteapartnership.org/women-in-assam-india-factsheet/
- [45] (6) (PDF) Women Workers and Industrial Relations in Tea Estates of Assam. (2019). ResearchGate; ResearchGate. https://www.researchgate.net/publication/333892562\_Women\_Workers\_and\_Industrial\_Relations\_in\_T ea Estates of Assam
- [46] Improving the lives of women and children in Assam's tea communities IDH the Sustainable Trade Initiative. (2019, March 8). IDH the Sustainable Trade Initiative. https://www.idhsustainabletrade.com/project/improving-the-lives-of-women-and-children-in-assams-tea-communities/
- [47] Assam State Presentation and Economic Growth Report / IBEF. (2022). India Brand Equity Foundation. https://www.ibef.org/states/assam-presentation
- [48] Promotion And Development Of Tea Tourism Infrastructure In Assam. (2023). MyScheme One-Stop Search and Discovery Platform of the Government Schemes. https://www.myscheme.gov.in/schemes/pdtti-assam
- [49] (6) (PDF) REVITALIZING TEA TOURISM: A SUSTAINABLE APPROACH ON COMMUNITY DEVELOPMENT AMONG TEA-GARDEN WORKERS OF ASSAM. (2023). ResearchGate; ResearchGate. https://www.researchgate.net/publication/369229493\_REVITALIZING\_TEA\_TOURISM\_A\_SUSTAIN ABLE\_APPROACH\_ON\_COMMUNITY\_DEVELOPMENT\_AMONG\_TEA-GARDEN\_WORKERS\_OF\_ASSAM
- [50] Goswami, R. (2022, April 26). Focus on Assam small tea growers crucial for industry: ADB report. EastMojo; EastMojo. https://www.eastmojo.com/assam/2022/04/26/focus-on-assam-small-tea-growers-crucial-for-industry-adb-report/
- [51] About tea industries | Industries & Commerce | Government Of Assam, India. (2023). Assam.gov.in. https://industries.assam.gov.in/portlet-innerpage/about-tea-industries
- [52] Sinha, S. (2022). Impact Analysis of Skill Development on the Performance of Small Tea Growers of Assam. *Pacific Business Review (International)*, 14. http://www.pbr.co.in/2022/2022\_month/January/9.pdf
- [53] (6) (PDF) A REVIEW ON THE ROLE OF YOUTH IN THE SOCIO-ECONOMIC DEVELOPMENT OF TEA GARDEN COMMUNITY IN ASSAM KEYWORDS: TEA GARDEN COMMUNITY OF INDIA AND ASSAM, YOUTH, BEHAVIOUR, ENTREPRENEURSHIP, IMPORT-EXPORT SOCIO-ECONOMIC DEVELOPMENT OPPORTUNITIES. (2021). ResearchGate; ResearchGate. https://www.researchgate.net/publication/362546753\_A\_REVIEW\_ON\_THE\_ROLE\_OF\_YOUTH\_IN \_THE\_SOCIO-

Research paper

- ECONOMIC\_DEVELOPMENT\_OF\_TEA\_GARDEN\_COMMUNITY\_IN\_ASSAM\_KEYWORDS\_T EA\_GARDEN\_COMMUNITY\_OF\_INDIA\_AND\_ASSAM\_YOUTH\_BEHAVIOUR\_ENTREPRENE URSHIP\_IMPORT-EXPORT\_SOCIO-E
- [54] What will drive the small tea growers towards environment-friendly cultivation? Implications from the tea sector in Assam, India. (2022). Climate and Development. https://www.tandfonline.com/doi/full/10.1080/17565529.2021.1930988
- [55] Das, K., & Das, D. (2020). Technical Efficiency in Small Tea Gardens of Assam. *Review of Development and Change*, 25(1), 112–130. https://doi.org/10.1177/0972266120916318
- [56] Dey, S. (2016, December 20). Assam to set up 71 skill development centres in tea garden areas to increase employability. @Bsindia; Business Standard. https://www.business-standard.com/article/current-affairs/assam-to-set-up-71-skill-development-centres-in-tea-garden-areas-to-increase-employability-116122000878\_1.html
- [57] Rao, M., & Bernaz, N. (2020). Corporate Responsibility for Human Rights in Assam Tea Plantations: A Business and Human Rights Approach. Sustainability, 12(18), 7409–7409. https://doi.org/10.3390/su12187409
- [58] (6) (PDF) Corporate Responsibility for Human Rights in Assam Tea Plantations: A Business and Human Rights Approach. (2020). *ResearchGate*. https://doi.org/10.3390//su12187409
- [59] TATA CONSUMER PRODUCTS LIMITED Corporate Social Responsibility Policy. (2020). https://www.tataconsumer.com/sites/g/files/gfwrlq316/files/2022-06/Corporate%20Social%20Responsibility%20Policy.pdf
- [60] TATA CONSUMER PRODUCTS LIMITED (formerly known as Tata Global Beverages Limited) Corporate Social Responsibility Policy. (2020). https://www.tataconsumer.com/sites/g/files/gfwrlq316/files/2021-06/corporate-social-responsibility-policy.pdf
- [61] The CSR Journal. (2022, October 3). *Top Companies for CSR in Assam The CSR Journal*. The CSR Journal. https://thecsrjournal.in/top-csr-assam-corporate-social-responsibility-india/
- [62] The Weather Channel. (2022). Climate Change Continues to Impact Assam's Tea Production | Weather.com. The Weather Channel; The Weather Channel. https://weather.com/en-IN/india/climate-change/news/2022-12-29-climate-change-continues-to-impact-assam-tea-production
- [63] Nowogrodzki, A. (2019). How climate change might affect tea. *Nature*, *566*(7742), S10–S11. https://doi.org/10.1038/d41586-019-00399-0
- [64] Guardian staff reporter. (2010, December 26). *Climate change leaves Assam tea growers in hot water*. The Guardian; The Guardian. https://www.theguardian.com/environment/2010/dec/26/climate-change-assam-tea
- [65] Ghosh, S. (2022, September 11). *Using old tea garden records, scientists are piecing together the picture of climate change*. Scroll.in; Scroll.in. https://scroll.in/article/1032375/using-old-tea-garden-records-scientists-are-piecing-together-the-picture-of-climate-change
- [66] Singh, B. (2021, November 22). *Assam: Tea planters say climate change affecting the sector.* The Economic Times; Economic Times. https://economictimes.indiatimes.com/news/india/assam-tea-planters-say-climate-change-affecting-the-sector/articleshow/87853419.cms
- [67] Guardian staff reporter. (2013, June 28). *Is the tea industry really taking steps to be more ethical and sustainable?* The Guardian; The Guardian. https://www.theguardian.com/sustainable-business/tea-industry-ethical-sustainable

Research paper

- [68] (6) Can a Plantation Be Fair? Paradoxes and Possibilities in Fair Trade Darjeeling Tea Certification. (2023). *ResearchGate*. https://doi.org/10.1111/j.1548-1417.2008.00006.x
- [69] (6) (PDF) Relevance of Fair Trade and Sustainability of Small Tea Growers in the Nilgiris. (2023). *ResearchGate*. https://doi.org/10.1177//0972266120080205
- [70] *India's tea gardens: poor conditions persist* |. (2022, September 12). Britsafe.in. https://www.britsafe.in/publications-and-blogs/safety-management-magazine/safety-management-magazine/2022/india-s-tea-gardens-poor-conditions-persist/
- [71] Pachoni, P., Deendayal Upadhyaya, P., & Mahavidyalaya, A. (2022). Tea Marketing and Value Chain System in Indian Tea Industry. *Pacific Business Review (International)*, 14. http://www.pbr.co.in/2022/2022\_month/June/10.pdf
- [72] (6) (PDF) Tea and Tea Product Diversification: A Review. (2022). *ResearchGate*. https://doi.org/10.24925//turjaf.v10i12.2334-2353.5280
- [73] *The Tea Industry in India | IBEF*. (2022). India Brand Equity Foundation. https://www.ibef.org/blogs/the-tea-industry-in-india
- [74] Challenges and Opportunities for the Indian Tea Industry. (2021). Linkedin.com. https://www.linkedin.com/pulse/challenges-opportunities-indian-tea-industry-vinod-sinandi
- [75] De, B., Bhandari, K., Tridib Kumar Goswami, & Hermann, A. (2019). Tea Diversification Products and Value Addition. *Tea Diversification Products and Value Addition*, 7(2), 1–3. https://doi.org/10.19080/GJPPS.2019.06.555714
- [76] Goswami, R. (2022, March 17). *Tea tourism gets major push in Assam, Rs 50 crore allocated in state budget*. EastMojo; EastMojo. https://www.eastmojo.com/assam/2022/03/17/tea-tourism-gets-major-push-in-assam-rs-50-crore-allocated-in-state-budget/
- [77] Tea Land Administration in Assam | Revenue & Disaster Management | Government Of Assam, India. (2018). Assam.gov.in. https://landrevenue.assam.gov.in/information-services/tea-land-administration-in-assam
- [78] PTI. (2023, March 31). Assam tea gardens get Rs 63 crore govt assistance to tackle pandemic losses. Assamtribune.com; The Assam Tribune. https://assamtribune.com/guwahati/assam-tea-gardens-get-rs-63-crore-govt-assistance-to-tackle-pandemic-losses-1469661
- [79] Saha, A. (2020, September 25). Assam govt announces four new schemes for tea gardens. The Indian Express; The Indian Express. https://indianexpress.com/article/north-east-india/assam/assam-govt-announces-four-new-schemes-for-tea-gardens-6610786/
- [80] North East Today. (2022, February 3). Assam Government Will Support 40 Tea Gardens To Develop Resorts For Promoting Tea Tourism: CM Sarma. Northeast Today. https://www.northeasttoday.in/2022/02/03/assam-government-plans-to-set-up-tourist-resorts-for-promoting-tea-tourism/
- [81] Shook, E., Lacy, P., Suntook, C., Rademacher, J., & World Economic Forum. (2022, February). *Stakeholder alignment on sustainability for competitive advantage*. World Economic Forum. https://www.weforum.org/agenda/2022/02/how-to-strengthen-sustainability-by-engaging-with-stakeholders/
- [82] King, M. (2021, May 24). Stakeholder collaboration will help companies and society thrive.
  @FinancialTimes; Financial Times. https://www.ft.com/content/8f6f9bc8-2e81-43d0-ad2a-b387de41e0f5

#### IJFANS International Journal of Food and Nutritional Sciences

## ISSN PRINT 2319 1775 Online 2320 7876

Research paper

- [83] Hasan A.M. Hamdan, Poul Houman Andersen, & Luitzen de Boer. (2021). Stakeholder collaboration in sustainable neighborhood projects—A review and research agenda. *Sustainable Cities and Society*, 68, 102776–102776. https://doi.org/10.1016/j.scs.2021.102776
- [84] Albani, M., & Henderson, K. (2014, July). *Creating partnerships for sustainability*. McKinsey & Company; McKinsey & Company. https://www.mckinsey.com/capabilities/sustainability/our-insights/creating-partnerships-for-sustainability
- [85] Youth and the 2030 Agenda for Sustainable Development / United Nations For Youth. (2016). Un.org. https://www.un.org/development/desa/youth/world-youth-report/wyr2018.html
- [86] *Tea Tribes Community | Tea Tribes | Government Of Assam, India.* (2023). Assam.gov.in. https://teatribes.assam.gov.in/information-services/tea-tribes-community
- [87] Nath, D., & Dipak, N. (2014). Educational Vulnerability and Risk Factors of Tea Garden Workers with Special Reference to Dewan Tea Garden Village, Cachar, Assam, India. *International Research Journal of Social Sciences*, 3(9), 14–21. http://www.isca.in/IJSS/Archive/v3/i9/3.ISCA-IRJSS-2014-155.pdf
- [88] Rafi, T. (2022, November 9). Council Post: Why Corporate Strategies Should Be Focused On Sustainability. *Forbes*. https://www.forbes.com/sites/forbesbusinesscouncil/2021/02/10/why-corporate-strategies-should-be-focused-on-sustainability/?sh=46a142887e9f
- [89] *13 sustainability trends driving business in 2023 I by IMD*. (2023, January 2). I by IMD. https://www.imd.org/ibyimd/sustainability/13-sustainability-trends-driving-business-in-2023/
- [90] *The Importance of Sustainability in Business | HBS Online*. (2019, November 6). Business Insights Blog. https://online.hbs.edu/blog/post/business-sustainability-strategies