

PROBLEMS AND PROSPECTS OF THE SMALL TEA GROWERS IN JORHAT DISTRICT-A CASE STUDY

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Abstract

The small tea growers are a crucial and essential component of Assam's tea economy. Some of the factors that encouraged small and marginal farmers as well as the unemployed to start a tea plantation in Assam included the prevalence of lot of high land with good drainage, the availability of proven agro-technologically skilled labor, existence of the established and assured green leaf market, the advantages of a perennial plantation crop in comparison to the other seasonal, annual or biennial agricultural crops, the blessings of favorable climatic and soil conditions. This industry had extraordinary growth because it quickly took on the characteristics of a socio-economic revolution and served as a catalyst for social change in the state.

It resulted in the construction of numerous tea factories in the small-scale industrial sector, creating job possibilities on the region's tea estates. The Jorhat district's small tea growing industry has enormous potential in terms of creating jobs, making money, and raising social standing. It can be a rewarding career and be extremely important in enhancing the socioeconomic standing of the economically underdeveloped region. The study's findings show that small tea growers encounter a variety of issues with regard to receiving support from organizations, having access to financing, maintaining production, processing and marketing tea leaves, etc. Therefore, the topic titled as the Problems and Prospects of the small tea growers in Jorhat district has taken up for the study and further investigation.

Introduction

Origin of tea in Assam

The Scottish explorer Robert Bruce found tea in Assam in 1823. Maniram Dewan, the first Assamese tea farmer, also helped him with this task. And thus Assamese tea plantations, led by Robert Bruce, got underway.

China was the first country to adopt tea cultivation. Following China, tea was progressively introduced to many other nations, including Japan, Sri Lanka, India, and so on.

The finding of tea trees in Assam allowed the East India Company to expand an industry that it had previously been under Chinese control. In 1835, the Arunachal Singpho tribe transported twelve cartons of tea to London from Calcutta. Charles Bruce was eventually appointed by the British government to oversee the tea estates, and 46 boxes of Assam tea were shipped to the Tea Commission in 1837.

After water, tea is now the most consumed beverage worldwide (Ansley Hill, 2020).

The first company to be founded to grow and produce this tea was the Assam Tea Company, which was founded in 1839. The demand for Assam tea continued to rise, and by 1862 the industry was

home to over 160 estates run by 57 private companies and five government agencies. The administration then decided to set up a special committee to examine all aspects of this event.

There are an estimated 800 or more organized medium-to-large-sized tea plantations in Assam, according to another estimate. There are also luxury tea estates and over 100,000 small cooperatives. The state of Assam is one of the leading producers of tea in the world, with an average annual production of over 600 million tonnes.

The tea industry in Assam contributes significantly to the state's GDP both in terms of jobs and income. Assam tea has a unique flavor and set of characteristics that make it stand out in the tea industry.

Assam tea is one of the most popular teas in the country right now and brings in a lot of money. Situated in Jorhat, the Tocklai Tea Research Institute is the biggest tea research center globally.

Small Tea Producers: An Idea

When Kenya chose to manufacture tea for export in the 1950s, the concept of agri-business entrepreneurship—growing tea on tiny parcels of land—was conceived for the first time globally. After that, there is a gradual shift in tea plantation from big to small segment throughout the world. (Hannan, 2006). The whole tea production in Japan is produced by tiny tea growers, typically measuring between 0.01 and 2 hectares. Small-scale tea cultivation is also practiced in some other nations, including Malawi, Turkey, Vietnam, Tanzania, Bangladesh, Pakistan, Nepal, and so on. In the Nilgiri District of India, small tea growers first appeared around 1920s. Small farmers in the area were then inspired to start growing tea by the nearby major tea estates who purchased the green leaves (Reddy and Bhowmik, 2023) from them. However, official records indicate that the trend of small tea plantations began in India in the early 1960s, first limited to the states of Tamil Nadu, Kerala, and Karnataka in South India.

A few other unconventional states, such as Himachal Pradesh, Uttarakhand, and Bihar, have also joined the nation's small-scale tea-growing movement. In six states—Arunachal Pradesh, Nagaland, Bihar, West Bengal, Himachal Pradesh, and Tamil Nadu—the unorganized sector has outperformed the production of tea. (Hannan, 2023)

Small tea plantations first appeared in the Northeastern States in the late 1980s, and by the 1990s, they had quickly spread to West Bengal (*Small-Tea-Growers-in-Other-States-of-India : Tea World - An Initiative of KKHSOU*, 2018).

Emergence of small tea growers in Assam

As previously mentioned, Assamese peasants have been involved in tea cultivation since the colonial era, although their involvement was very small-scale and informal. But as the 1960s and 1970s approached, Assamese peasants were being encouraged to establish small tea plantations by local estate planters. Following the gradual departure of the British planters following Indian Independence in 1947, many of these estate plantations were acquired by Indian planters (from

outside Assam). In the later part of the 1970s, some middle-class peasants from the Golaghat area in upper Assam reportedly began planting tea in their homesteads as a result of such nudging. Golaghat-born Assam's Minister of Agriculture and Cooperatives late Soneswar Bora took the lead in 1978 and urged the state's rural youths to pursue STPs. (Bora, 2008) .Positive results were seen, with many young people from rural areas in upper and central Assam adopting small-scale tea farming. The Tea Board of India's major effort in the 1990s came after this. Since then, the movement has expanded significantly, and the tiny tea industry now accounts for almost 50.29% of the state's entire tea production(Designation, 2023)

Assam has around 1.30 lakh small tea growers producing around 50 percent of the total tea production in the state. (<https://www.sentinelassam.com/topheadlines/assam-government-to-spend-rs-180-crore-for-small-tea-growers-development-607819>)

According to Tea Board of India, Assam's total tea production in the year 2022 was 696.06 tonnes out of which small tea grower's share was 333.41 tonnes which is 47% (TBI, 2023).

Statement of the problem: The Jorhat Small Tea Growing Industry holds great potential in terms of job creation and income generation. It has the potential to be a very successful career and significantly impact the socioeconomic situation of the economically disadvantaged state. However, the availability of funding, the processing of tea leaves, and other issues are major challenges for small-scale tea growers. Lacking their own tea factory, they are compelled to sell their tea leaves to large tea gardens at deeply discounted prices. Therefore, the purpose of this study is to determine the limitations and variables that affect small-scale tea growers.

Objective of the Paper

The objectives of this research paper are the following:

- I. To find out the prospects of small tea plantation sector in Jorhat district of Assam.
- II. To determine the obstacles that is being faced by the small tea growers of Jorhat district of Assam.

Methodology of the study

The primary and secondary data sources used in this paper's compilation were gathered through in-depth surveys conducted in various bought leaf factories and small tea gardens. The majority of the primary data were gathered through direct communication with the various mini tea garden authorities and garden laborers in Jorhat, Assam. To conduct the entire investigation, questionnaires and interview schedules have been collected. Secondary data were gathered from a variety of literary sources, including books, periodicals, magazines, newspapers, and reports issued by governmental organizations. The most well-known small growers and their gardens are frequently visited, and different facts are periodically recorded.

Research gap: From the literature review that was done previously, it is clear that while numerous studies have been done on various facets of the issues faced by small tea growers in Assam and even abroad, there hasn't been any research done expressly on the issues and future prospects facing small tea growers in Assam's Jorhat district. Therefore, the current study looks critically at

the crucial problems that the small tea growers in Assam's Jorhat District are facing and makes recommendations on how to help them contribute more effectively to the district's small growers' productivity and prosperity.

Study Location: Jorhat is situated at about 116 meters height above the mean sea level having a location within 94° 23' E -94° 09' E and 26° 52' N -26° 57' N. Present study is conducted among the small tea growers in Jorhat district of Assam, India. The region has 5 revenue circles namely Jorhat East, Jorhat West, Titabar, Teok and Mariani. Six development blocks constitute the district and these are Baghchung, Dhekorgarah, Selenghat, Kaliapani, Titabar and Chipahikhola. There are around 12,000 Small tea growers in and around the Jorhat district.

Limitations of the study:

- The report only discusses the Jorhat district.
- The respondent's expressions form the basis of the study.
- The research is focused on the years 2021–2022.

Major problems of small tea growers

Small tea growers of Jorhat region are facing some internal as well as external hurdles such as:-

1. Unorganized growth: In Jorhat district, the small tea growers functions in a way akin to outsourcing. In addition to family labor, the farm, factory, and marketing all operate independently in this area. The growth is absolutely unorganized.

Naha (2018) while conducting a study on the sustainability of small tea growers in North Bengal region, found that while the quantity and quality of small-scale tea growers in the region are increasing, their overall production remains relatively low, and they are primarily an unorganized sector (Mahabidyalaya & Bengal, 2018).

Hannan (2023) also found the same result and concluded that small tea growers fall in unorganized sector(Hannan, 2023).

2. Land patta and title: In a study conducted by the Tea Board of India it was discovered that the majority of Dibrugarh district's tiny tea growers lacked patta land. Moreover, unclear titles were frequently present, which made it difficult to get a loan.

The majority of small tea growers in Jorhat district are not registered with the Tea Board because they lack land patta, which prevents them from being eligible for bank loans and subsidy programs. Even so, small tea growers having annual patta, standard land-based certificates for tea plantations, are eligible to receive provisional registration.

The then Chief Minister of Assam, Mr, Sarbananda Sonowal stated that the small tea growers, who were growing by taking over government property and charging a premium of Rs 1,000 per bigha—a maximum of 30 bighas could be given to a single grower—would soon begin receiving land pattas from the government.

3. Low price of green leaves: Small growers do encounter several challenges in marketing and price fluctuations and no consistency in buying from processors are the common problems(Raj, 2020).

However, the small tea industry is dealing with a number of issues, the main one being price fluctuation, which has prompted concerns about the industry's viability (Sharma, 2020).

The lack of a fair price for the green leaves grown by small producers is currently the biggest issue facing

the small tea growers of Jorhat because the STGs lack a processing facility of their own, they must sell

their products to major tea estates or BLFs, whose pricing is set by the latter.

4. Technological gap: It is found that most of the small tea growers are not technically sound and having lack of proper knowledge in the field of tea cultivation. The Trained and unskilled small tea growers differ greatly in terms of technology. In specific situations, such as those involving drainage, manuring, weed/pest management, pruning, etc., small tea growers should receive scientific training (Bengal & Bengal, 2016).

5. Ecological balance: Due to the removal of village wood lots, the expansion of small tea plantations has been linked to significant ecological issues. Commercial forestry, including bamboo plantations, has disappeared, and tea has replaced crops including oranges, pineapples, sugarcane, and horticultural crops.

6. Climate change: Jorhat district has witnessed a rapid climate change in the last few years. Duncan et

al. (2016) suggested that all other things being equal, these tea farms will be less productive in warmer

regions. They demonstrated that tea yield was negatively impacted by precipitation variability as assessed by indicators such as precipitation intensity and rain-free days.

This climate change will undoubtedly have a significant effect on production behavior of the small growers in Jorhat district. The elements that are lowering yields and changing the distinctive flavor of the most well-liked beverage include rising temperatures, floods, droughts, and minimum temperatures.

7. Highly perishable: Processing of green leaf must be done no later than twelve hours after it is plucked. Consequently, the situation forces the growers to accept the price that the factory owners provide.

8. Low access to finance: Any expansion of the mini tea plantation is solely dependent on the individual producers' private initiative. There is hardly any institutional financing in this industry. The promoter's equity, which takes the form of cash and land, loans from commercial banks, support from the Tea Board, and NABARD comprise the funding sources for the tea sector (Ahmed, 2015). Since, all those items are absent in case of small growers, they can't access to any sort of finance.

9. Lack of proper marketing system of green Leaf: The small tea industry in the study area is dependent on consumers, such as major tea garden owners, BLFs, etc. The price of green leaf eventually decreases due to factors like poor transportation, inadequate storage facilities, and a lack of market knowledge.

10. Unregulated growth of small tea growers: The issue of green leaf price fluctuations in the tea market has been brought about by the unchecked expansion of tea gardens in Jorhat. Many small tea growers began cultivating tea in the isolated regions of Jorhat without first going through the marketing and commercial holding process, which ultimately led to the uneven development of this sector.

11. Severe Pest/Disease/Weed problem: Biswas and Roy (2021) conducted a study on the problems and prospects of the small tea growers in North Bengal region and found that severe pest and disease attack were faced by 100% of the respondents, the problem of lack of knowledge of about the symptoms of insects-pests and diseases was faced by 56.66% of the respondents and lack of knowledge about the right use of the chemicals for control of the insects-pests and diseases was faced by the 48% of the respondents(Debasish & Chandra, 2021). This is same with the Jorhat growers also. The severe attacks of numerous pests, and others, are one of the most destructive issues facing small-scale tea growers. Small tea growers lack the necessary scientific understanding to effectively manage the pest.

12. Lack of Irrigation Facility: The absence of irrigation facilities is an issue for Jorhat small-scale tea growers. Because of the recent unpredictable weather, especially outside of the monsoon season, growers are forced to plan for irrigation infrastructure. Water from the adjacent rivers and bodies of water, as well as extracting water is costly affair for the small growers.

13. Labor issues: The results of study conducted by Rymbai et al (2013) showed that, as described by survey respondents, the lack of labor in tea gardens lowers productivity and production(Rymbai et al., 2013). The growers are unable to pay wages like the big plantation, so they suffer more from acute worker shortage.

14 Lack of co-ordination between producer and the buyers of green Leaf: Since there are many small tea growers, the quantity and quality of the production vary. Establishing a standard pricing for the production of tiny tea gardens becomes exceedingly challenging.

15. Gap of collaborative research: Furthermore, no cooperative research project has been undertaken to date on any topic to address the issues facing the study area's small tea growers. Therefore, the current study recommends conducting cooperative research to increase the production and prosperity of Jorhat district's small tea gardens.

Potency of small tea cultivation:

The jorhat district's small tea growers have a number of prospects and potential for future growth and development. These include

1. Scope for entrepreneurship: In recent times, small-scale tea growers have emerged as a significant force in the Assamese tea industry, accounting for 42.17% of the state's total production and 21.53% of India's total in 2017–18. Their contributions foster the growth of entrepreneurship and generate employment opportunities, both directly and indirectly (Dutta, 2020).

2. Sources of income generation: The generation of income is significantly influenced by small scale tea planting. Dutta (2022) conducted a socio economic study on the status of the small tea growers of Charaideo district of Assam. He concluded that Charaideo district having maximum

small tea growers which have immense potential from the point of providing both employment and generating revenue. It can be a lucrative profession and can play a vital role in improving the socio-economic condition of the economically backward district(Sanjib & Dutta, 2022).

It has been observed that as a self-employment and income generating activity, small tea gardening has tremendous scope and opportunity to provide more employment opportunities in the North Lakhimpur district(Saikia & Bhuyan, 2021).

Bhuyan (2022) concluded that tea farming is the main source of income for the farmers of the Jorhat district (Utilization, 2022).

3. Employment to the rural people: For young, educated, unemployed people in rural areas, small- scale tea growing offers several opportunities for self-employment (Baruah, 2008). The process of cultivation alone generates a lot of jobs in the manufacturing, gardening supply, and green leaf transportation industries, among other fields.

4. Utilization of unused land: A government survey showed less than 10 percent of 68,500 small growers in Assam, the world's largest tea growing area, had valid documents to prove ownership or lease agreements of the land they use(Thomson Reuters Foundation, 2017).

So it is validated that the majority of small tea growers land in Assam including Jorhat might be regarded as second-rate tea-growing land. Some of them cultivate tea on government-owned vested land, waste land, pasture land, and ceiling surplus land that was either underutilized or unutilized.

5. Scope for organic farming: Conversion to organic production may seem highly desirable for small growers. Organic is viable because it reduces costs, and improves the quality of green leaf and makes it more acceptable in foreign markets. By switching, farmers can hope to make a profit. When considering small-scale tea growers over a ten-year period, organic cultivation is determined to be an economically feasible choice as long as the growers obtain a good and stable yield following organic conversion. If growers use the best farming practices, make the most use of their resources, and offer an organic premium for green leaves, organic tea revenue might rise even more(Deka & Goswami, 2019).

6. Chances of establishment of bought leaf factory by the small tea growers: The teas from the smallholder sub-sector may be exported at competitive prices if the producers could advance up the value chain as manufacturers and marketers of their teas through collectivization, in a branded and value-added form(*Contribution of Tea Production and Exports to Food Security, Rural Development and Smallholder Welfare in Selected Producing Countries*, n.d.)

In order to prevent the monopoly of any intermediaries, Bhowmik (1997) emphasizes the effective management of the cooperative factories of small tea growers in the Nilgiri region of South India. The small growers of Jorhat district can easily establish their own processing units in collaboration by forming groups since they have the necessary resources and expertise.

7. Decline in the large scale outmigration of rural poor youth: Sharma (2020) pointed out that, since the establishment of the small tea growers, there has been a dramatic decrease in the large-scale emigration of impoverished rural youth from Assam to different Indian cities in search of

employment. On their small family plots, the migrants' families occasionally use the money they employment(Sharma, 2020).

8. Contribution to women empowerment: Gurung and Mukherjee (2018) stated that the backbone and asset of the tea industry are women employees.

We also have got the same result in our study. Many women from economically disadvantaged families of Jorhat district worked as daily wage earners during paddy transplantation and under other MGNREGA initiatives prior to the introduction of STPs on such a large scale. They did not, however, have access to a year-round source of income because they were seasonal activities, with the exception of domestic help. Many of these women are now employed permanently in the STPs and are making more money than they did previously.

There was a report captioned *“Improving livelihoods of women tea small holders through sustainable land management practices”* published in UN Sri Lanka in 21st may, 2021. It was mentioned in the report that about 75% of Sri Lanka’s tea comes from small growers. Women’s responsibility in the tea small holding is much greater. In tea small holding, not only the tea plucking but all the responsibilities of maintaining small tea plots in Sri Lanka rests on the shoulders of women on the shoulders of women

9. Add to the bargaining power of landless worker: A significant portion of the small tea farmers in the study areas, who own relatively large tracts of land, rent out their paddy fields on a share cropping (adhi) basis to others, including wage earners without land.

Employment in agriculture is seasonal; employment in the planting industry is year-round As a result, landowners are frequently forced to accept settlement offers that are significantly lower than the customary 50% of the crop that sharecroppers provide to the former. Indeed, the sharecroppers are now only paying the landowners a third of the produce. All of these demonstrate how the arrival of the small tea grower has significantly enhanced the bargaining strength of daily wage workers of Jorhat district.

10. Access to some of the established and age old tea estates: Jorhat is often referred to as the ‘Tea Capital of the World’ (Nigam, 2021).

The district is home to some of the largest and most beautiful tea gardens in the world like Chinnamora, Hunwal, Gotoonga etc. With a whopping 135 tea gardens, it is a hub for tea production and is renowned for its high-quality tea leaves.

Villagers who became small tea growers in the district frequently stated that one of the main reasons they chose to become small-scale growers was that they were familiar with the process of growing tea because there were estate plantations close by (Sharma, 2020)

11. Reduced cost of production: Being small tea grower enables them to avoid the Plantation Labour Act's (PLA) regulations, which are applicable to larger plantations, and to take use of the services offered by the Tea Board of India to small tea growers.

Due to their exemption from plantation regulations, bought leaf factories and smallholders are able to produce tea at a reduced cost(*Challenges , Opportunities , and Ways Forward for the Indian Tea Industry*, n.d.)

12. Help to recover lost glory of Indian tea: Indian tea sector saw a dramatic drop in production between 1985 and 1990 due the presence of aged tea bushes and the careless use of pesticides, fertilizers, and other chemicals were contributing to the drop in tea quality along with the output decline. This decreased the demand for Indian tea on the global market.

The largest and oldest state in India that produces tea, Assam, was severely impacted by the Indian tea industry's crisis. In this case, the expansion of the small tea industry helped estate plantations meet the challenge posed by the drop in both the quantity and quality of tea production by producing new tea leaves. The small tea growers in Assam, especially in the Jorhat district, have gained significant traction over the past fifty years and are frequently seen as signs of a "green revolution".(Assamica Agro, The Biggest Contribution for Assam Small Tea growers, September, 03,2019).

13. New enterprise potential-Tea Tourism: Over the last decade, among the new niches of tourism emerging in India including Assam is tea tourism. Despite being relatively recent phenomena, tea tourism has a lot of potential (Thomas, 2023). These tours include lodging on small tea estates, a visit to a tea factory where guests can witness the process of rolling, drying, shifting, grading, and packaging fresh green leaves into a dried form, and a tea tasting where guests can sample some of the best tea grown in the region. The government of Assam launched the "Promotion and Development of Tea Tourism Infrastructure in Assam" scheme in response to the enormous potential for tea tourism in the state. The small tea growers of Jorhat district can enhance their income potential by venturing in this new concept.

14. Technological progress: With the potential to rejuvenate Assam's tea economy and its array of benefits for both producers and consumers, the technological innovation makes a significant stride towards a more accessible, convenient and prosperous tea industry. It will certainly benefit our small tea growers immensely. The *Smart Agri app*, which gives farmers satellite-based data on rainfall, temperature, humidity, and other weather-related information via their mobile phones, has helped the STGs of Assam counteract the catastrophic effects of climate change. ("Assam Small Tea Cultivators Attain Technological Boost to Combat Grave Impacts of Climate Change," 2022). Another important breakthrough in the Indian tea ecosystem is the creation of the *Chai Sahyog app* (Luthra, 2022). It is anticipated that the introduction of mechanical harvesting machines will lower the cost of production of green leaf and increase the production of Assamese small tea growers Kakati, 2017).

Suggestions

In order to regulate the appropriate price of green leaf, all small tea growers should collaborate with the Tea Board of India. The government can help small tea growers by providing a minimum support price (MSP) concept, which is also applicable to other agricultural products. The All Assam Small Tea Growers Association (AASIGA) can establish cooperatives for cultivation and set standards for the production of green tea at a proper price.

The marketing features of small tea growers do not meet international standards. The best way to promote tea is through an auction system. One point of contact for controlling the quantity, quality,

and prices is an auction center. However, the Indian government must make sure that the auction system is strengthened even further for the small tea sector.

In order to assure fair prices for growers and high-quality leaves, self-help groups, cooperatives, and farmer-producer organizations might be established in each region to lessen reliance on leaf agents.

Licensing leaf agents in the area would also help to stabilize the price of green leaves and enhance their quality.

With the help of neighborhood government organizations, development organizations, and other interested parties, we can create a system that will ensure that leaves are of a reasonable quality and are priced fairly at the garden level.

Bolster and expand small growers' involvement in quality improvement programs at different production levels by utilizing a range of organizations and agencies.

Establish connections and encourage involvement from a range of stakeholders, such as the Tea Board, civil societies, and other international organizations. Additionally, this would make it easier to get reasonable financial aid having a straightforward loan application process and minimum loan interest from other organizations and government establishments.

Expand subsidies to particular production and marketing processes and apply efficient, sustainable use of them. Farmers would therefore be in a position to add value to their green leaves straight from the garden.

The government ought to grant small farmers "right over the land." This would expand the Tea Board's beneficiary base, which is essential for the production's sustainability, quality, and ability to provide small producers with a platform.

To improve the technical knowledge of the growers on tea husbandry and technology, the Tea Board, Assam Agricultural University, Tea Research association and other organizations should set up frequent training program and advisory workshops.

The unchecked expansion of small tea growers ought to be required approval of regulatory bodies like Tea Board of India.

It is important to construct irrigation facilities so that small tea growers do not suffer from erratic weather condition that includes severe drought.

It is also equally important to upgrade the transportation infrastructure to enable the growers to benefit from affordable system for transportation of green leaf and marketing of tea.

To reduce risk, an insurance plan should be implemented at the field level.

Fertilizer ought to be inexpensive and widely accessible. There should be instructions on the fertilizer packet on the proper dosage and application technique. Chemicals and other fertilizers ought to adhere to the highest standards of quality.

The area-wise integration of small-scale tea growers under a unified management to align farming practices with market demands

To develop disease resistant cultivars and high quality plant variations, more research needs to be done.

The small tea growers may eventually transition to organic tea production once they have gained years of expertise growing tea.

It should be mandatory for small-scale tea growers to compete in both domestic and international Tea Conferences, Expos, buyer-seller meets and trade fairs.

It has been proposed that the growers establish grievance cells to handle complaints and determine the best course of action.

Small tea growers should regularly hold medical camps to ensure the health of their labor force.

To combat with the vagaries of erratic weather, finding practical and economical ways to lessen the sensitivity of tea productivity to temperature increases and moisture fluctuations would pay off right away and provide benefits for climate change adaptation.

Conclusion

The distinct expansion of small tea growers in Jorhat district can be attributed to a number of factors, including favorable soil and climate conditions, infrastructures including labor, markets, and government backing. Farmers have chosen to grow tea because it has a lower risk of crop failure, market scarcity, and other issues like climate change. The creation of small industrial units would give district youngsters profitable options for independent work. The issue of unemployment has been mitigated in part by the quiet economic revolution carried out by small-scale tea growers in the rural parts of the study areas. Therefore, in order to maintain this socioeconomic revolution, support should come from everywhere.

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20. The multifarious problems faced by the small tea growers were studied under different heads such as agro-technical, financial, transportation and marketing problems. The information so collected has been placed in table 3. It was also observed that under agro-technical problems; attacks of leaf rollers as well as sucking insects like aphids and thrips, leaf folding caterpillar such as flush worms etc. were faced by 100% of the respondents, the problem of lack of knowledge of about the symptoms of insects-pests and diseases was faced by 56.66% of the respondents and lack of knowledge about the right use of the chemicals for control of the insects-pests and diseases was faced by the 48% of the respondents. On the other hand, technical problems include irrigation, availability of fertilizers and their cost, chemical weed control, availability of chem The multifarious problems faced by the small tea growers were studied under different heads such as agro-technical, financial, transportation and marketing problems. The information so collected has been placed in table 3. It was also observed that under agro-technical problems; attacks of leaf rollers as well as sucking insects like aphids and thrips, leaf folding caterpillar such as flush worms etc. were faced by 100% of the respondents, the problem of lack of knowledge of about the symptoms of insects-pests and diseases was faced by 56.66% of the respondents and lack of knowledge about the right use of the chemicals for control of the insects-pests and diseases was faced by the 48% of the respondents. On the other hand, technical problems include irrigation, availability of fertilizers and their cost, chemical weed control, availability of chem Assam Small Tea Cultivators Attain Technological Boost to Combat Grave Impacts of Climate Change. (2022, May 28). *Northeast Today*. <https://www.northeasttoday.in/2022/05/28/assam-small-tea-cultivators-attain-technological-boost-to-combat-grave-impacts-of-climate-change/>
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