

Tea Industry of Assam: The Past Glory, Present Challenges, and Future Prospects

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ABSTRACT:

Tea has become one of the cheapest and most widely used beverages all around the world. India alone contributes around 1 billion kg of tea out of 4 billion kg of total world production. In India, tea is mostly produced in the North-East region accounting 3/4th of the country's total tea production, with Assam contributing around 52.0 % of the nation's total tea production and 15.6 % of world's total tea production. The performance of the Assam Tea Industry was quite commendable. The Tea Industry of Assam plays a very important role in the State as well as the National Economy in terms of revenue and employment and also occupies a vital position in the global economy, however, the average yield of tea per hectare in Assam has reduced from 1,680 kg in 1990 to 1593 kg per hectare in 2007 which is due to financial constraints, unskilled workers, the heavy cost of production etc. Amidst all these continued problems, there is still optimism for the future and a chance and potential for primary sector to uplift the economy of the state. In this paper, an attempt has been made to discuss the role, problems and prospects of the tea industry of Assam.

Keywords: Tea industry, problems, prospects, role of tea industry, govern intervention

INTRODUCTION:

Tea has become one of the cheapest and most widely used beverages all around the world. At present, tea is commercially cultivated in more than 65 countries with India, Sri Lanka, Kenya, Turkey, and Vietnam as the major tea producing countries (Shah, 2013). India alone contributes around 1 billion kg of tea out of 4 billion kg of total world production. In India, tea is commercially cultivated in 16 states. However, it is mostly produced in the North-East region accounting 3/4th of the country's total tea production, with Assam contributing around 52.0 % of the nation's total tea production and 15.6 % of world's total tea production. Assam is mainly an agricultural based economy producing rice, potatoes, pulses, jute, sugarcane; various fruits like bananas, jackfruits, pineapples, mangoes, guavas etc. It also has a few major industries such as petroleum, natural gas, coal, tourism, tea, granite, fertilizers, sugar, paper, brass metals, bamboo, cane work, Muga silk, pat silk, potter etc. However, it is mostly famous for its tea all over the world. Assam produces over 600 million kilograms of tea per

year, making it the second commercial tea producing region after Southern China. (www.teaorb.com)

The tropical climate of Assam and the fertile valley offering a rich loamy soil to the region creates a perfect natural setting for the production of tea. Tea is grown in the Brahmaputra and Barak Valley of the region. Though Assam mainly produces the distinctive Black tea, it also produces a smaller quantity of green tea and white tea. There are around 950 tea estates in Assam situated in Karimganj, Hailakandi, Cachar, Lakhimpur, Darrang, Golaghat, Sonitpur, Udalguri, Nogoan and various other districts of Assam employing around seven lakhs ninety-five thousands eight hundred fifty (7,95,850) tea laborers representing 20 percent of the total population of the state.(Bhattacharjee,2015) In fact, Tea has been declared the "State Drink" of Assam by the then Chief Minister of Assam, Tarun Gogoi, at the World Tea Science Congress held in Jorhat on the occasion of 100 years celebration of Tocklai Tea Research Institute, the biggest tea research center in the world.(www.teaorb.com)

PAST GLORY OF ASSAM TEA INDUSTRY:

The Assam Tea Industry has a history of 195 years. Tea was first discovered around 5000 years ago in ancient China by Emperor Shen Nong. (Varunsean, 2015)The Assam Tea, however, owes its discovery to the Bruce brothers. Way back in 1823, Robert Bruce, a Scottish explorer, on his visit to Assam for a trading purpose, discovered a native plant growing wildly near Rangpur in the Upper Brahmaputra valley. Bruce was reportedly directed by Maniram Dutta Barbhandari Baruah (popularly known as Maniram Dewan) to Bessa Gam, a local singpho chief, who showed Bruce how the local tribesmen (Shingphos) brew tea from those leaves. In order to scientifically examine the leaves, Bruce sent some samples of the leaves for laboratory testing. However, Bruce died before he could get the plant officially classified. But his brother Charles Alexander Bruce, in early 1830, dispatched the tea samples to the Botanical Garden at Calcutta (Acharya Jagdish Chandra Bose Indian Botanical Garden, Kolkata) which were, later, officially classified as a variation of the Chinese tea plant. This plant was named *Camellia Sinensis* var *Assamica* (Masters)

Maniram Dewan was the first Indian to start planting tea in Assam. In 1835, the first tea garden was set up in Lakhimpur district. In 1838, the first twelve chests of Assam tea were sent to the United Kingdom for public sale. It was in 1839 when the first company for growing and making tea was set up in India i.e. the Assam Tea Company was set up. Subsequently, Assam plantation was extended to the other parts of the country between 50's and 60's. By 1853, India's tea exports had reached 183.4 tons – and soared to 6700 tons by 1870 and 35,274 tons by 1885. (www.IBEF.org). In 1970 the Guwahati Tea Auction Centre was established for better marketing of tea produced in the region. Today it is the world's largest CTC tea auction center after Colombo and Malaysia and the world's second largest in terms of total area.

PERFORMANCE OF THE ASSAM TEA INDUSTRY:

The performance of the Assam Tea Industry was quite commendable during the British period. Production and cultivation of Assam tea was dominated by the Assam tea Company for the first two decades (from 1840 to 1860) which operated from districts in Upper Assam. The company's success along with the changes in the colonial policies of offering plots to the tea planters led to the expansion and boom in Assam tea industry during the early 1860s (Varunsean,2015). The infrastructure had reached snooty heights and the employment prospects were also rising day by day. It also boasted a relatively better workforce due to its majestic position during those days. Even the freedom movement didn't affect the tea trade. However, after Independence, the entire scenario of the Assam tea industry changed as most of the tea estates came under the control of some of the Indians who had little knowledge about tea plantation. They mainly wanted to make quick money. They appointed unskilled laborers and also didn't give due importance to improve the tea gardens. All these resulted in the deterioration of tea quality which in turn resulted in a fall in the demand for Indian Tea in the International market. Consequently, lesser known tea producing countries like Sri Lanka, Indonesia and Japan began blowing up in the International market. (Phukan, 2015)

In 1862, the Assam Tea industry comprised of 160 gardens, which were owned by the 5 public and 57 private companies. But with time the number of tea garden has been increasing. Now it increased to 752. The tea area under cultivation in Assam accounts for more than half of the country's total area under tea. There has also been an increase in the tea plantation areas for almost all the states except one or two where the area under tea plantation either remained stagnant or declined. Assam alone produces more than half of India's tea production. However, the average yield of tea per hectare in Assam has reduced from 1,680 kg in 1990 to 1593 kg per hectare in 2007 which is due to financial constraints, unskilled workers, the heavy cost of production etc.

The development of the Assam Tea industry in terms of production and Growth of area under tea production for the last 18 years (1989-2007) can be shown as below-

Tea statistics of Assam and India

Year	Year No of Tea Gardens	The area under Tea in India (in '000 hectares)	Total Tea Production (in 000 kg.)	Average yield (kg /hectare)
1990	848	13860	231	388181
1991	848	13873	233	400554
1995	1196	37319	227	399133
1999	30942	98867	258	437324
2000	39139	111996	267	451236

2001	40795	116659	269	453587
2002	43272	127801	271	433327
2003	43293	129027	272	434759
2004	43293	129027	272	435649
2005	49102	140712	301	487487
2006	NA	NA	312	502041
2007	NA	NA	321	511885

Source: Economic Survey Assam 2009- Tea statistics, Tea Board of India

ROLE OF TEA INDUSTRY:

The Tea Industry of Assam plays a very important role in the State as well as the National Economy in terms of revenue and employment and also occupies a vital position in the global economy. The setting up of the Tea Industry in Assam not only changed the demography of the state but also the economic, social and political life of the people of the region.

➤ Contribution towards the nation:

The Indian Tea is demanded in almost every tea drinking country of the world making it one of the largest tea exporters of the world. It mostly exports its tea to Europe and Middle East countries and also to Pakistan, Egypt, Japan, and Israel. The rate of growth of tea production in Assam plays a very important role in the tea export of the country. As the tea production of Assam increases the trend of exports from the country shows a positive trend and vice versa. The tea export from India during 2010-2011 was estimated to be 213.79 million kg valued at 2995.79 crores, thereby contributing to the nation's revenue earning.

➤ Contribution towards the state:

The tea industry in Assam contributes significantly towards the development of the state. The state has been earning revenue of more than 5000 crores annually as agricultural income and the figure is expected to grow up as the state also receives a share of income tax and export duties from the center.

➤ Employment Generation:

The Assam tea industry has also been generating huge employment opportunities even in the remote area since the tea industry is mostly labor intensive. After the departure of the Europeans, the supplies of tea chest were being looked after by various Plywood industries of Assam which provided vast employment to a vast majority of people. The Assam tea industry provides a daily employment to 6 lakh persons in the state which accounts for around 50% of the average number of workers employed by the tea industry in India daily. About 20 lakh

people are estimated to be directly or indirectly dependent on the Tea industry of Assam. (Barooah, 2007)

The Assam tea industry also emphasizes on employment of women as plucking of tea leaves(two leaves and one bud) is a highly skilled work (Shah,2013) It provides direct employment to more than half a million workers in Assam of which 50% are female workers. (Arya, 2013)

PRESENT CHALLENGES:

The Assam Tea Industry has seen many ups and downs in the recent years. Though it plays a very important role in the economy, it is facing a crisis. As the tea gardens are becoming old, the productivity of the garden is declining. Due to lack of modernization and efficient management, the tea estates are falling sick. The tea industry of Assam is encircled by various problems including the issue of rising production costs and stagnant, if not declining international prices, all these resulting in falling profit. Some of the major challenges of the Assam Tea Industry can be discussed as follows:

1. The total area under tea cultivation in Assam accounts for more than half of the country's total area under tea. With more and more Tea gardens in the state, the need for more and more tea workers to operate these tea industries has been increasing. These tea labors are considered as the backbone of the tea industry and they form a very integral part of the economy of the state. However, the condition of these tea laborers is very pathetic. "The tea tribe of Assam is among the backward and most exploited tribes in India" (Bhattacharjee and Nirmolia, 2015). The tea laborers are deprived of the basic amenities of life like proper education, health care facilities, proper nutrition, proper sanitation, proper hygiene and so on.

"Illiteracy, poverty, addiction to country beer by male and to some extent even female, poor standard of living and health facilities is the immutable problems in their lives. In some stray cases, it is seen that tea planters do not even supply life-saving drugs when workers are dying out of epidemics". (Bhattacharjee and Nirmolia, 2015)

2. The tea laborers are paid less than the average wage paid to the agricultural workers. There has been no facility for skill development programme, health or general awareness programme for the tea workers. Insurance system as well as the social security system for the tea workers is almost non-existent. There is also the absence of implementation of micro-insurance schemes. Moreover, the tea workers belong to the coolie line i.e. they belong neither to the rural area nor to the urban area and so despite being in poverty these tea workers do not enjoy the BPL status and also couldn't avail the ration card and other such BPL facilities.

3. In recent times, the tea export from Assam has been declining due to the tough competition from Kenyan and Sri Lankan tea which is cheaper than the Assam tea and is at par with the quality of the Assam Tea.
4. Changing climatic conditions owing to scanty or heavy rainfall have severely affected the production of tea. (Upetry, 2017). Assam has already recorded 125% of its normal rainfall and 25% above abnormal this year. Secretary of Tea Association, Dipanjal Deka, said that there was a continuous downpour in the month of April and it will definitely affect the tea production. The June Tea production also went down due to heavy rainfall. (Singh, 2018). Not only the production but the quality of tea also gets affected due to climatic condition. (Shah, 2013)
5. There has been injudicious nutrient management. Most of the tea gardens use blanket application of fertilizers without any proper knowledge of the soil nutrient status, drainage conditions, age and species of the tea bushes. Use of a large amount of ammonia containing fertilizer causes faster soil acidification and deteriorates soil's microbial activity and root activity.
6. The use of pesticides, for the last 40 years, has undoubtedly increased the tea yield but it also had various undesirable impacts like immunity to pesticides, accumulation of residues in the leaves and environmental contamination, resulting in fall in 10 to 15% of production because of pest and diseases.
7. It has been seen that the laborers are finding the job schemes under Mahatma Gandhi National Rural Employment Guarantee Act, more lucrative than the daily wages at the gardens. This has resulted in a shortage of laborers in the tea gardens.
8. Tea estates in Assam's Barak valley are facing erratic supply of power. They mostly have to depend on captive power through diesel which has increased the cost of production. It has been highlighted that when power unavailability varies from 11 hours to 12 hours per day, the cost of production increases from Rs 13 per kg to Rs 25 per kg. P.K. Bhattacharjee, Secretary-General, Tea Association of India said, "The non-availability of grid supply during the critical period of manufacturing is posing a grave challenge to the viability of the tea estates in general of Barak Valley".
9. Another challenge faced by the Assam Tea industry is that it is fund-starved. Adviser of North Eastern tea association (NETA), Bidyananda Barkakoty said "it is a matter of great concern that even after achieving a record export of 241 million kg in 2017, the prices of tea at the farm gate level has not increased. There is a mismatch in demand and Supply. Therefore it is the need of the hour to pull efforts to increase the demand".
10. Another threat to the Assam tea industry is the proposal of reduction in import tariffs from 110% to 50% under the ASEAN free trade agreement by the year 2019. Planters fear that this step will result in the flow of cheap tea into the Indian market and the

Indian tea will not be able to withstand the completion owing to higher labor cost, low productivity of labors and land and ever-increasing input cost. So the Assam tea planters have decided to move the Union Ministry for Industry and Commerce and the Tea Board of India against the ASEAN free trade agreement.

11. Due to different causes, the tea price of the tea has seen a steady decline over the years. All the profits from the tea gardens were siphoned off and there was no real or proper reinvestment in improving the quality of tea. This has been a major crisis in the Assam tea industry, which resulted in closing down of the tea gardens. (Upetry,2017)
12. The 'Bandh' culture of Assam has emerged as a threat to the 195 years old Tea Industry of the state. Tea leaf is a perishable commodity. It must be processed on time for better quality. The loss of one day's harvest due to bandhs is very uneconomical for the tea planters and can't be made up the other day. "Calling of frequent bandhs is causing direct economic loss to the workforce and the management of the Tea Industry is unbearable and unacceptable. It seems some forces are hell-bent on destroying the tea industry. The tea industry is sure to have a slow and painful death if this menace of bandh is not stopped immediately", said Nepul Saikia, Chairman of North Eastern Tea Association (NETA). Bidyananda Barkakoty, Adviser NETA said, "We hereby appeal to the Government of Assam to take necessary measures so that tea gardens can function normally and is not affected by any kind of 'bandh' in future. We also appeal to all organizations to consider tea gardens under essential commodities and keep out of the purview of bandh." (Singh, 2018)
13. As per an order by the governor of Assam dated July 3, 2018, it has been decided that the state government will notify an interim enhancement of wage rates of the tea workers by a minimum amount of Rs 30 per day. ICRA feels that this steep hike in wage rates of the tea estate workers will result in higher cost pressure for tea trade.
14. Most of the small tea planters do not have land patta and they are deprived of being registered with Tea Board. As a result, they could not avail the benefit of plantation subsidy scheme and bank loan. (Arya,2013)
15. Field study reveals that there is a lack of technically sound and proper knowledge in the field of tea plantation. These unskilled tea planters are facing problem in certain areas like – pest control, manuring, drainage system etc which are most essential for the growth of tea plants. (Pachoni,2018)
16. Since the latter half of the 1990s there has been a sudden rise in the number of tea gardens and its area under tea which is mainly because unemployed youths are up tea production as their profession. This is a welcoming change but since they grow in small scale they can't go for factory manufacturing and hence need to sell their product to the large estates which often subjects them to exploitation.

FUTURE PROSPECTS:

We may say that amidst all these continued problems, there is still optimism for the future and a chance and potential for primary sector to uplift the economy of the state. (Upetry, 2017) Besides existing tea gardens owned by big and reputed Indian and multinational companies, the tea plantation as a profession is taken up by various youths of the state which is a welcoming change. The Assam tea, though for the last few years, has witnessed a declining trend in the production and in the quality of tea, has once again crossed the 500 million kg mark. Over the last 11 years, it is the 3rd time Assam tea has crossed the 500 million kg mark and it has also witnessed the highest yield of 988.32 million kg during the same period. (Arya, 2013). The Assam Tea Industry has enormous potential and in order to advance it, various steps has been taken and that has to be taken--

1. In order to improve the pathetic condition of the plantation workers, various NGOs and other organizations are at work. The Parliament of India passed the Plantation Labour Act 1951 which aims at providing basic facilities of life like health care, drinking water, sanitation, recreational facilities and housing facilities to the tea workers. Again, since illiteracy is one of the main causes behind the glaring poverty of the tea workers so primary schools for the children of the tea workers should be established. Besides, various skill development programmes as well as general awareness programmes should be organized, women workers should be empowered, proper health care facilities should be given to them during pregnancy and during post-pregnancy, the tea workers should be informed about the ill effect of early marriage and a large family, children should be encouraged for higher studies etc. Bhattacharjee and Nirmolia (2015)
2. In order to improve the quality of tea, soil nutrient testing (soil pH should be between 5.0 and 5.5), poor soil management, bush management and determination of drainage status is a must. For low fertility inherent soil, Integrated Nutrient Management (INM) must be followed.
3. In order to reduce the fall in tea yield due to pests and diseases, the pesticide usage should be brought under the control of Integrated Pest Management(IPM)
4. To meet out the shortage of labour and also since tea plucking is a time consuming and slow process, the tea gardens should adopt mechanical plucking methods which will reduce the dependence on labor by 1/3rd and will also improve both the quality and quantity of tea and it is also very cost effective.
5. Assam Tea industry has a huge opportunity in the marketing power of Patanjali Ayurveda especially after yoga guru Baba Ramdev announced that he is doing a research in green tea because more than 100 small tea growers in Assam are mostly producing teas like green tea, white tea, organic tea, traditional tea etc. Assam produces 90% of Black Tea so the NETA adviser said that they would interact with Baba Ramdev and will

explain them the health benefits of black tea too. This will also enhance their Marketing opportunity.(Singh,2016)

6. Goodricke Group plans to spend Rs. 40 crore to acquire tea estates in Assam that can produce a million kg of tea annually. "Prices of tea have dropped as the availability is more in the market. This is the right time to acquire gardens in Assam as prices of tea estates will not be too high. We are only keen to expand our production in Assam as the teas from this region are of premium quality and buyers, both in India and abroad, are keen to buy these teas" said Arun Narain Singh, managing director at the West Bengal based tea producer. (Goshal,2017)
7. The policymakers should aim at providing long-term low-interest loans to the closed gardens to give them a face-lift. The tea plantation in non-traditional areas should be emphasized.
8. Another very important aspect of the tea industry is tea tourism. The famous tea producing regions like Upper Assam, Cachar, Golaghat etc. should be developed and could be promoted for tea tourism. Besides giving large revenues to the tea gardens it will also set a brand image for the consumers thereby fetching a higher price and higher return.
9. The taste and preferences of the people are changing every day. At present times consumers are always in search of something new and something different and unique. It will be highly beneficial to the tea industry if it can put forward any new flavor of the tea. Recently the Assam Tea has introduced us to a unique variant of tea called "Purple Tea" adding to the aroma of the Assam tea industry.(Singh,2018)
10. The beneficiaries of catechins are now known by the whole world. This can be a great potential for the Assam tea industry if it can think of producing catechine commercially. Assam tea industry can also think of commercializing various by-products of tea like tea oil and such which will be of great benefit.
11. To improve the quality of tea, the microclimate can be improved by maintaining proper shades, correcting faulty drainage and improving the soil pH in the acidic range (5-5.5) by suggested methods. This will reduce various tea diseases and the industry will save revenue.
12. The tea industry is almost out of internal competition due to its poor quality, high costs and changing consumer preferences. In such a situation along with improving the quality of its product, the Assam tea industry can make use of its domestic market because India is the biggest consumer of tea.
13. NETA adviser Bidyananda Barkakoty said, "India has a huge domestic market for tea. 85% of India's production is consumed domestically. But the per capita consumption of

tea in India is very low compared to other tea-drinking nations. It is very likely that the generic promotion of tea in the domestic market will increase the per capita consumption of tea. Tea planters in Assam have been seeking funds from the 15th finance commission for the generic promotion of tea. (Singh, 2018)

14. The Tea Board is also planning to do a campaign to promote tea and to increase its consumption. In 2013, the Tea Board has launched a campaign called "Chai Pio, Mast Jio"(Have tea remain healthy) Currently, In India, tea consumption is growing at an annual rate of 3%. The per-capita tea consumption in the country is around 650 grams and with efforts from industry and government, it can cross 800 grams.
15. In order to assist the small tea growers, the ministry of commerce and industry has allowed the small tea planters to set up mini-factories. This will propel the growth of tea in the small-scale industry segment. Small growers are a part of the production value chain. Assam has over one lakh small tea grower which contributes about 30% of tea production in the state.
16. The potentiality of Assam tea industry will increase if it goes for 'niche marketing' i.e. it must establish an identity of its own by developing itself into a brand. (Hussain and Hazarika,2010)

GOVERNMENT ROLE:

1. "The Government of Assam levies a Green Leaf Cess of 0.40 paisa per kg of green leaf for big plantations under the Assam Taxation on Specified Land Act. According to the latest statistics of Tea Board, Small growers produce 40% of Assam green leaf. In the recent State Budget, cess on the green leaf for small growers has been withdrawn. This green leaf cess is only applicable on 60% of the total green leaf produced in the state," NETA adviser said.
2. GST implementation has been smooth for the tea industry and it has really helped us in case of doing business(Singh,2018)
3. The Assam State Budget 2018-19 provided relief to the small tea planters by proposing to exempt specified landless on green tea leaves. The state budget has also come with a loan waiver. The government will calculate the farmer's dues, both principal and interest to the banks and will deposit 25% of such outstanding dues subject to a maximum limit of 25000 in such loan account. (Singh,2018)
4. In order to promote digital literacy and usage, each head of the tea garden will be provided with a smartphone of around Rs 3000. This initiative will benefit around 20,000 tea gardens heads across the state. A budget provision of Rs. 7 crore has been made for it. (Singh,2018)

5. Assam government will provide micro and small industries with special benefits in state industrial policy. The government is drafting revised industrial policy. Ravi Kapoor, Additional Chief Secretary, Industries and Commerce acknowledged the silent revolution of small tea growers of the state whose 45% contribution in the total green leaf production has changed the scenario of the entire tea industry in the last 15 years. P.K. Bezbaruah, Chairman, Tea Board, said that the primary market turnover of tea is Rs. 15,000 crore and small tea growers play a very pivotal role in it. He called upon the small industries to adopt best packaging practices for bringing in growth in the tea market. (Singh,2017)
6. Assam government's move to regularize land holdings can improve the fortunes of small tea growers.
7. In order to support the various endeavors of the small tea growers, the Tea Board has taken up various schemes under which it provides a subsidy of Rs 38,000 per hectare for the development of plantations in the traditional areas. The small growers are provided subsidy in the form of reimbursements in installments.
8. Chah Bagicha Dhan Puraskar Aru Jeevan Suraksha Yojana- "To incentivize the digitization of the economy of the Tea Garden employees, and as part of the initiative of financial inclusion the State Government announced that Rs.5000 will be credited to the bank accounts of each Tea Garden employee who had opened their Bank Accounts immediately post-demonetization. 'Chah Bagicha Dhan Puraskar Mela' was launched in January 2018 wherein Rs. 2500 was transferred as the first tranche to each of the 7,21,485 bank accounts of Tea Garden workers across 752 Tea Gardens spread over 26 Districts of Assam through Direct Benefit Transfer . Further, to ensure that this digitization is not a one-off event, a further Rs.2500 additional incentive will be transferred to all the accounts that are kept active continuously for 6 months. Going a step further, processes are initiated for enrolling all these active bank accounts under the Pradhan Mantri Jeevan Jyoti Yojana(PMJJY), a Life Insurance coverage plan, and the Pradhan Mantri Suraksha Bima Yojana(PMSBY), an accident insurance scheme which have a maximum sum assured of Rs.2 Lakhs".(Assam Budget 2018-19)

CONCLUSION:

There is hardly any industry that has stood the topmost position consequently for the last 150 years like the Assam Tea Industry. The Tea Industry of Assam has great prospects in both national as well as international market. In order to take the tea Industry of Assam to greater heights, it is high time that the tea companies as well as the government change their attitude towards the tea workers, and think on a serious note to improve their condition. The government should support both the big and small tea gardens financially and politically for the greater interest of the tea Industry as well the state. There are other inherent problems too that must be addressed by the government. Also regular bandhs must be called off

immediately. In a nutshell, “the sustainability of Assam tea industry depends on different factors like quality, cost-effectiveness, control of pests and diseases, increase in domestic consumption, identification of newer export market etc.” (Roy, 2011)

REFERENCES:

1. Arya.N, (2013) ‘Growth and Development of Tea Industry of Assam’, *International Journal of Scientific and Engineering Research*, 4(7): 226-274
2. Barooah, D.P. (2007) *The Tea Industry of Assam: Origin and Development* Guwahati : EBH Publishers (India)
3. Budget Highlights 2018-19: Assam Legislative Assembly(undated)
[Online]
Available: <http://assamassembly.gov.in/budget-highlights-2018-19.pdf>
[Accessed on 25th Nov 2018]
4. Bhattacharjee, A; Nirmolia, P.L (2015) ‘Role of Tea Industry in Rural Development of Assam: Issues and Challenges in respect of Human Recourses’ XVI Annual Conference Preceeding.
Available: http://www.internationalconference.in/XVI_AIC/INDEX.HTM
5. EcoIndia (undated) ‘Assam Tea’
[Online]
Available: <http://www.ecoindia.com/tea-gardens/assam1.html>
[Accessed on 9th Nov 2018]
6. Goshal, S. (2017) Goodricke plans to take Tea Gardens in Assam
[Online]
Available:<https://economictimes.indiatimes.com/industry/consproducts/food/goodricke-plans-to-acquire-tea-gardens-in-assam/articleshow/57341599.cms>
[Accessed on 7th Nov 2018]
7. Ghosal, S. (2018) ICRA feels that Steep interim hike in wage rates for tea estate workers will result in higher cost pressure for the tea trade
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/agriculture/icra-feels-that-steep-interim-hike-in-wage-rates-for-tea-estate-workers-will-result-in-higher-cost-pressure-for-the-tea-trade/articleshow/65292253.cms>
[Accessed on 7th Nov 2018]
8. Hussain, M.M ; Hazarika, S.D. (2010) Assam Tea Industry and its Crisis
[Online]
Available: https://www.asthabharati.org/Dia_July_010/moon.htm
[Accessed on 7th November 2018]

9. IBEF (undated), 'History of Indian Tea- Origin of Assam and Darjeeling Tea'
[Online]
Available: <https://www.teacoffeespiceofindia.com/tea/tea-origin>
[Accessed on 9th Nov 2018]
10. Narzary,S. (2016) 'A Study on the Status of Growth and Development of Tea Industry in Assam', *SSRG International Journal of Humanities and Social Science(SSRG-IJHSS)*, 3(4): 1-7
11. Pachoni, P. (2018) 'Prospects and Problem of Small Tea Growers in Assam- A Study in Lakhimpur District', *DimorianReview: A Peer Reviewed Multidisciplinary International Indexed E-Journal*, 5(5)
12. Phukan, P.K. (2015) Tea Industry an Analysis
[Online]
Available: <https://www.nelive.in/north-east/business/tea-industry-assam-analysis>
[Accessed on 7th Nov 2018]
13. Roy, S. (2011) Historical Review of Growth Of Tea Industries Of India: A Case Study Of Assam Tea
[Online]
Available:https://www.researchgate.net/publication/267363467_Historical_Review_of_Growth_of_Tea_Industries_in_India_A_Study_of_Assam_Tea
[Accessed on 8th Nov 2018]
14. Shah, S.K. (2013) 'Prospect of Indian Tea Industry', *International Journal of Agricultural Science and Veterinary Medicine*,1(1): 18-25
15. Singh, B. (2018, March 12) Key Highlights of Assam State Budget 2018-19
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/finance/key-highlights-of-assam-state-budget-2018-19/articleshow/63271684.cms>
[Accessed November 7, 2018]
16. Singh, B. (2017, June 15) Assam government to provide micro and small industries with special benefits in state industrial policy
[Online]
Available: <https://economictimes.indiatimes.com/small-biz/sme-sector/assam-government-to-provide-micro-and-small-industries-with-special-benefits-in-state-industrial-policy/articleshow/59164806.cms>
[Accessed on 8th November 2018]
17. Singh, B.(2017, 17 Nov) Assam tea planters to move Centre against ASEAN Free Trade Agreement
[Online]

- Available: <https://economictimes.indiatimes.com/news/economy/agriculture/assam-tea-planters-to-move-centre-against-asean-free-trade-agreement/articleshow/61691587.cms>
[Accessed on 7 Nov 2018]
18. Singh,B ; Seetharaman, G.(2017) Assam government's move to regularize landholdings can improve the fortunes of small tea growers
[Online]
Available: <https://economictimes.indiatimes.com/news/politics-and-nation/assam-governments-move-to-regularise-landholdings-can-improve-the-fortunes-of-small-tea-growers/articleshow/61083759.cms>
[Accessed on 7th Nov 2018]
19. Singh,B(2018) Erratic power supply takes a heavy toll on Assam's Barak Valley Tea estates
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/agriculture/erratic-power-supply-takes-heavy-toll-on-assams-barak-valley-tea-estates/articleshow/65786263.cms>
[Accessed on 7th Nov 2018]
20. Singh, B (2018) Purple Tea from Assam for Vibrant Gujarat 2019 delegates
[Online]
Available: <https://economictimes.indiatimes.com/industry/cons-products/food/purple-tea-from-assam-for-vibrant-gujarat-2019-delegates/articleshow/66349336.cms>
[Accessed on 7th Nov 2018]
21. Singh,B (2016) Tea Planters In Assam Excited Over Ramdev's Research On Green Tea
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/agriculture/tea-planters-in-assam-excited-over-baba-ramdevs-research-on-green-tea/articleshow/55298177.cms>
[Accessed on 8th Nov 2018]
22. Singh, B (2017) Tea Board planning campaign to promote tea consumption
[Online]
Available: <https://economictimes.indiatimes.com/industry/cons-products/food/tea-board-planning-campaign-to-promote-tea-consumption/articleshow/61727582.cms>
[Accessed on 7th Nov 2018]
23. Singh, B. (2017) Tea Marketing Control Order amended to facilitate small tea growers with Factories
[Online]

- Available: <https://economictimes.indiatimes.com/markets/commodities/tea-marketing-control-order-amended-to-facilitate-small-tea-growers-with-factories/articleshow/56380016.cms>
[Accessed on 8th Nov 2018]
24. Singh, B. (2018) Tea Planters urge finance commission to provide fund for promotion of tea
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/agriculture/tea-planters-urge-finance-commission-to-provide-fund-for-promotion-of-tea/articleshow/63941316.cms>
[Accessed on 7th Nov 2018]
25. Singh, B. (2018) Tea industry affected by the growing bandh culture in Assam: northeastern Tea Association
[Online]
Available: <https://economictimes.indiatimes.com/industry/miscellaneous/tea-industry-affected-by-the-growing-bandh-culture-in-assam-north-eastern-tea-association/articleshow/65476526.cms>
[Accessed on 7th Nov 2018]
26. Singh, B. (2016) Inclement weather condition affecting tea production in Assam
[Online]
Available: <https://economictimes.indiatimes.com/news/economy/agriculture/inclement-weather-condition-affecting-tea-production-in-assam/articleshow/52026593.cms>
[Accessed on 7th Nov 2018]
27. TEAORB(undated) History of Assam Tea
[Online]
Available: <https://teaorb.com/info/LEARN%20ABOUT%20TEA/History%20of%20Assam%20Tea>
[Accessed on 9th Nov 2018]
28. Tea101-Teabox (undated), Assam: Wildlife, History and Native Tea
[Online]
Available: <https://tea101.teabox.com/the-assam-tea/>
[Accessed on 8th Nov 2018]
29. Upetry, S. (2017) Assam's Tea Industry Needs A Helping Hand
[Online]
Available: <https://www.youthkiawaaz.com/2017/08/shaft-of-light-for-the-economy-of-assam/>
[Accessed on 8th Nov 2018]

30. Varunsean (2015) Assam Tea History

[Online]

Available: <https://varunsean.wordpress.com/2015/08/12/assam-tea-history/>

[Accessed on 9th Nov 2018]