



VAASAN AMMATTIKORKEAKOULU  
UNIVERSITY OF APPLIED SCIENCES

Debotosh Chowdhury

# Declining Performance of The Tea Estates: Factor Analysis and Accomplishment.

A Study in Sylhet, Bangladesh

International Business 2019

Vaasa University of Applied Sciences

VAASAN AMMATTIKORKEAKOULU

UNIVERSITY OF APPLIED SCIENCES

International Business

## **ABSTRACT**

Authors: Debotosh Chowdhury

Title: Declining Performance Of The Tea Est.

Year: 2019

Language: English

Pages: 38

Name of Supervisor: Thomas Sabel

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The survey examines the factors behind the decreasing performance of the tea industry of Bangladesh in the Sylhet district. The analysis has been concluded through a productivity analysis of the companies. The actual scenario of the tea industry has also been examined. A total of five tea companies and ten tea estates (two from each tea company) were selected for the study. Primary data were collected through a survey of both the supervisors of the company and managers of the tea estates. The collected data were analyzed using mean, percentage, productivity and trend analysis. It was found that tea companies are suffering from capital shortage, lack of modern technology adaptation, lack of expert labor and lack of government back-up. Climate change is also playing a remarkable role. Though the production of tea is increasing, it is not enough even for the local nor the domestic consumers. The study has concluded that government support and adaptation to new technologies and methods may change the whole scenario sooner or later.

The respondents' evaluation shows the reliability and the assurance of the decrease in the performance of tea estates in Bangladesh. Here, the tea industry is one of the key factors that influences the economy of Bangladesh. It is considered as one of the most important economic products in the economy of Bangladesh nowadays.

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# **1. INTRODUCTION**

Tea is one of the most important drinks considered as non-alcoholic beverage worldwide. It is served as morning drink for nearly 450 million of the world population daily.

The Bangladeshi tea industry is one of the most significant sources of income for the national budget. Internal consumption and international demand of tea is increasing day by day. Since we cannot ensure enough quantity of tea in the country with the increase of consumption in the domestic sector and international demand, the scenario leading the industry to import deficit tea from international market that leads to deficit balance of payments. That's why government and the producers should have a look on this sector.

Nowadays the tea industry is facing multiple problems. Capital shortage and outdated technology, comparatively lower market price and productivity regarding per hectare of land, flexible import condition and lack of modern techniques of quality assurance cause the major problems. There is also shortage of persistent water sources for irrigation during winter season or during enduring drought. In addition, there are often issues of for instance labor strike and load shedding. Lack of expert labor, safety and security lacks, decomposition of law and order situation of the tea estates (stealing, political influence on internal arrangements, illegal possession of land by the outsiders), lack of medical facilities for labor and infrastructure problem (road, shelter, water supply and telecommunications) are some of the other constraints. For successful tea cultivation, the problems mentioned above faced by both the production and the marketing sector need to be resolved immediately.

In Bangladesh, there is an immediate need to pay heed on improvements in the manufacturing sector including quality productivity of tea, efficiency and minimum production cost as well as the marketing strategy. The study investigates the factors behind the waning performance of the tea industry in Bangladesh in the Sylhet district and supportive measures to compete with the international market.

## **1.1 Scope of The Study**

In this thesis, the causes of decline in the performance of tea estates in Bangladesh is examined through the respondents' data which is subsequently used to finalize the result. The present scenario of the Bangladesh Tea industry, its domestic and international market, exports of tea in

different countries, contribution in economic development of Bangladesh and the socioeconomic condition of tea estates workers are thoroughly studied.

## **1.2 Topic Selection**

Tea has been one of the most profitable products in the economy of Bangladesh since liberation. Sylhet, a north-eastern district of Bangladesh, is called the city of “two leaves and a bud”. In 1854, the first tea estate was established at Malnichara in Sylhet. Bangladesh had a glorious past in the tea industry. It was 5<sup>th</sup> largest exporter of tea in the international market. But now it steps back to 12<sup>th</sup> position. Once a major exporter has become an importer today. The Government is encouraging small-scale investors to cultivate tea and has taken some steps also. But the scenario is still unchanged. Tea manufacturers address this situation because of an increasing domestic demand of tea that leads the country to import. In the fiscal year 2017-18, Bangladesh has produced approximately 79 million kg of tea which is lower than approximately 85 million kg in 2016. But internal consumption was 85.13 million kg that incurs an import of approximately 9.69 million kg as

2.56 million kg tea has exported. Domestic consumption was approximately 81 million kg and export were approximately 0.62 million kg. The scenario shows that domestic consumption is increasing but production has been decreasing the last two years that cause a deficit in the current account in this industry. The detailed issues are discussed in chapter 2.

Labor dissatisfaction, capital shortage, destruction of cultivable land, higher production cost, lower degree of modern technology adaptation and natural disasters are some common scenarios in this sector. This study intends to answer the question why once profitable sector is now facing so many problems. The study also wants to find why this industry cannot meet the domestic demand, whether it is natural obstacles or artificial crisis. In this study, issues of production and marketing are also considered.

## **1.3 Purpose of the Study**

The primary objective of this study is to determine what lead the Bangladeshi tea industry into a declined performance. This paper will also answer some crucial question about Bangladeshi Tea industry especially in Sylhet. The study will also provide information regarding history and present scenario of tea industry, the total land cultivated in tea estates in Sylhet, annual tea production of

selected tea companies. It will also determine the productivity of tea estates and degree of adaptation of new manufacturing technologies by the selected tea estates.

Besides, the study will examine the level of managers satisfaction with the performance of workforce employed in these tea estates.

Finally, the study will recommend some measurement and guidelines for future researchers and to improve the present condition of tea industry.

#### **1.4 Limitation of the Study**

This report is obviously far from being perfect. Despite of my sincerest endeavor in preparing a perfect report, some of the limitations were inescapable. Bangladesh has 163 tea estates and I have conducted my study in 10 tea estates. The research aims to study the performance of tea estates located in the Sylhet district in Bangladesh. The research does not claim to be accurate to be implemented for other products or in other places. This study is based on a small sample and population which may not represent the whole tea industry. Besides, the respondents were at times very much reluctant to provide information. Managers of tea companies may not disclose accurate information about their workforce, production and earnings to protect their internal control and reputation. That is why there are possibilities of some error of facts. As this research is a part of the academic curriculum, there was restrictions and limitations of time that lessen the scope to justify the information provided.

Because limited materials and resources, time constraints and relatively small sampling groups makes this finding not completely accurate and it cannot be fully generalized, and a more comprehensive study is needed to fully understand this area of study.

#### **1.5 Structure of Thesis**

This study comprised of five parts and there are several elements in each of the five parts. So, broadly the five parts are-

Part One, the introduction contains some basic information that allows readers to know about the history of Bangladesh tea industry, the scope of study, purpose and limitation of the study. It also contains how and why this topic is chosen.

The second section is on the theoretical framework of the tea industry. It has nine subsections which consist of the history of tea and cultivation in Bangladesh and its present scenario. It also contains the general cultivation and manufacturing process of tea and its several types. This section shows the basic facts about Bangladeshi tea industry and what types of tea is produced in Bangladesh. In subsection 2.8 and in 2.9, domestic and international market for Bangladeshi Tea and its contribution to the economic development of Bangladesh are discussed thoroughly. This section will provide readers with a clear view of the Bangladeshi Tea Industry.

The third part comprises Methodology and the implementation of Methodology. The duration of the study and research has been clarified. The subjective and quantitative methodology has been explained and which technique is utilized and why it is utilized has been portrayed.

The fourth section comprises the empirical result of data analysis. It provides readers to get an analytical view of the performance of tea estates and allow them to find some recommendation for their future research.

Part five concluded the thesis with some final resolution.

## **2. THEORETICAL FRAMEWORK**

### **2.1 History of Cultivation of Tea in Bangladesh**

The tea Industry developed during the nineteenth century in Assam and especially in Sylhet. Primarily, the British planters initiated the cultivation of tea on the slopes of the hillocks of Sylhet and the highlands of Assam. In 1839, Assam Tea Company was formed at a meeting of some British capitalists and Indian entrepreneurs like prince Dwarakanath Tagore, Babu Motilal Sil, Haji Hashem Ispahani and others. The Company formally launched on 12 February 1839 in London with a capital of A 3300000 (\$500,000) was later merged with the Bengal Tea Association of Kolkata.

Robert Bruce first discovered tea plant in Assam in 1834. In 1855, an indigenous tea plant was discovered in Chandkhani hillock of Sylhet. At about the same time, a wild tea plant was found along the Khasi and Jaintia hills. Tea cultivation also started in Chittagong in 1840 with a few plants imported from China and some plants of Chinese origin developed in the Calcutta Botanical Garden. The first tea garden of Bangladesh was established in 1854 at Malnichhara in Sylhet. Two other tea gardens, Lalchand and Matiranga were established in 1860.

Initially, the tea plantation was the outcome of an individual venture. But following the depression and slump of the 1860s the development of new plantation came to a standstill, and the tea industry turned to be a monopoly of the big companies. For example, James Finlay dominated the plantation venture in Sylhet after the depression. However, in the closing years of the nineteenth century, a small group of local entrepreneurs were involved in tea plantation. Eventually, the European planters and companies faced new competitors, but the local planters could not stand in their way because of their dependence on the European planters for technological know-how. There an interaction of the Europeans and local entrepreneurs was developed. The partition of India in 1947 and the subsequent dislocation of the Hindu entrepreneurs, paved the way for the dominance of some capitalists of West Pakistan and a group of Urdu speaking north Indian Muslims migrating to Pakistan.

Tea estates in Bangladesh were owned and managed by Bangladeshi Companies, Sterling Companies and Proprietorship Concerns. The term Bangladeshi Companies refers to the companies formed and registered in the country under the Companies Act, 1913 and under earlier

Acts. Sterling Companies are foreign companies, mainly originating in the United Kingdom and multinational in nature. The average size of the tea estate of the Sterling Companies was 1648 acres, and that of Bangladeshi Companies 669 acres, while that of proprietorship concern 343 acres.

**Table 2.1: Tea History of Bangladesh**

Year	Location	District	Remarks
1840	Chittagong Club	Chittagong	Tea cultivation starts
1854	Malnichera	Sylhet	First Tea Garden in Bangladesh
1857	Malnichera	Sylhet	Commercial Production starts
1947	Surma Valley	Sylhet	Products were called Indian Tea
1947-1971			Post Partition duration
1950		Dhaka	Pakistan Tea Board was established
1957		Sylhet	Tea Research Institute was established as Srimangal
1959		Dhaka	Tea Ordinance Act 1959 introduced
1960		Chittagong	Tea Traders Association of Pakistan registered
1971		Throughout Bangladesh	Imported tea to meet local demand. Liberation starts
1973			British Agency Overseas Development Administration (ODA) commissioned the Commonwealth Development Corporation (CDC)
1974		Chittagong	Tea Traders Association of Pakistan replaced Tea Traders Association of Bangladesh
1977			Bangladesh Tea Board constituted

1975-76			Attempt to increase yields by Tea Board
1979			British consultants developed a strategy to rehabilitate the damaged tea gardens and industry during liberation war
1983-84			Replanting starts

## 2.2 Present Status

Tea industry of Bangladesh faced huge damages during the liberation war in 1971. In 1972, government deployed a committee to oversee the problems hampering productivity and situations of tea industry. The committee had suggested efficient production and marketing strategy to be ensured.

In 1977, Bangladesh Tea Board was established to look after this industry. From 1970's to 1990's, larger tea estates were owned by overseas firms. They were the most market share holder in that time. Domestic owners got less productivity. At present Bangladesh has 167 tea estates registered, of which 91 estates situated in Moulavibazar district, 25 in Habiganj, 19 in Sylhet, 21 in Chittagong, 2 in Rangamati, 8 in Panchagarh and 1 in Thakurgaon district. The tea industry of Bangladesh has produced approximately 85 million KG of tea in last year. The production has increased 24% compared to 5 years earlier. In 2008, the country occupied 11<sup>th</sup> position among 30 countries. Compared to the last 5 years, though production has increased, export has fallen by 25% and country has downgraded to 12<sup>th</sup> position in the international market. Despite an increase in production, export has been falling compared to year 2001 when production was 53 million KG and export was 13 million KG which has decreased to 0.403 million KG when production is 85 million KG in year 2018. Bangladesh is exporting tea in following countries – Afghanistan, Bahrain, China, Djibouti, France, Germany, Ghana, Greece, India, Iran, Japan, Kazakhstan, Kenya, K.S.A. Kuwait, Mauritius, Oman, Pakistan, Poland,, Qatar Russia, Thailand, Turkey, United Arab Emirates, United Kingdom, Ukraine and United states of America.

Here, tea is traded in a tea market called tea auction center in Chittagong. Auctioning organizations also offer broker services and other facilities to producers. Brokers advance funds to producers or stand surety to banks for repayment of bank loans. Brokerage houses have rendered tea marketing smooth and economical through tea tasting, cataloging, sampling, evaluating and statistical services. Bankers helped tea exporters with advances against shipping documents.

About 150,000 people, both men and women, directly employed in tea industry with about 500,000 people directly dependent on them. In Sylhet and Moulvibazar district, a huge number of people especially indigenous population are mostly involved in tea industry.

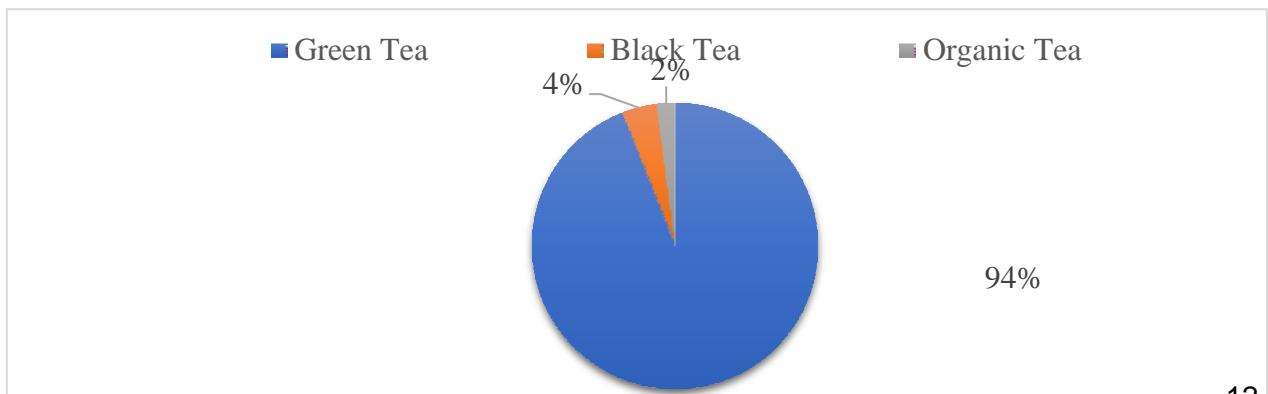
### 2.3 Types of Tea

Tea is the most widely consumed drink in the world, after water. Tea is classified based on the techniques with which it is produced and processed.

**Table 2.2: Types of Tea**

S.N.	Types of Tea	Basic Characteristic
1.	Green Tea	Unwilted and Unoxidized
2.	White tea	Wilted and un oxidized
3.	Yellow tea	Unwilted and Unoxidized, but allowed to yellow
4.	Oolong	Wilted, bruised, and partially oxidized
5.	Black tea	Wilted, sometimes crushed, and fully oxidized
6.	Post-fermented tea	Green tea that has been allowed to ferment/compost

**Figure 2.1: Types of Tea**



The processed teas after grading as per size being packed and send to Warehouses in Chittagong for sale through auction (as Bangladesh has only one tea auction center at Chittagong).

## 2.4 Productivity

The tea industry is facing less productivity due to the lack of investment. Owners of the tea industry are showing a lack of interest and because of that the whole industry is in trouble.

About 16% of the tea producing land is in the non-profit area, with an average annual production of only 482 kg per hectare. Due to this very old area, it is difficult to increase the national average production per hectare.

Global warming also became a factor to deal with for increasing productivity. As a result, numerous tea plants are dying.

Government intervention is essential to boost investment in the tea sector. An important obstacle in less productivity is also the import habit from foreign country. To protect the tea industry, the import of tea from abroad should be discouraged and banned if possible. The government would rather impose trade barriers and undertake awareness programs throughout the country to make people conscious about quality, price and employment opportunity in domestic tea industry. The problem of gas supply and interrupted power supply has become a major issue in the industry for production.

Overall productivity is highly dependent on the demand, appropriate investment, proper energy supply including gas and electricity, and people's awareness.

## 2.5 Basic Fact of Bangladesh Tea Industry

The Bangladeshi tea industry is consisting of 167 tea estates with 114 tea factories. The following data will give a picture of the current position of the tea industry of Bangladesh:

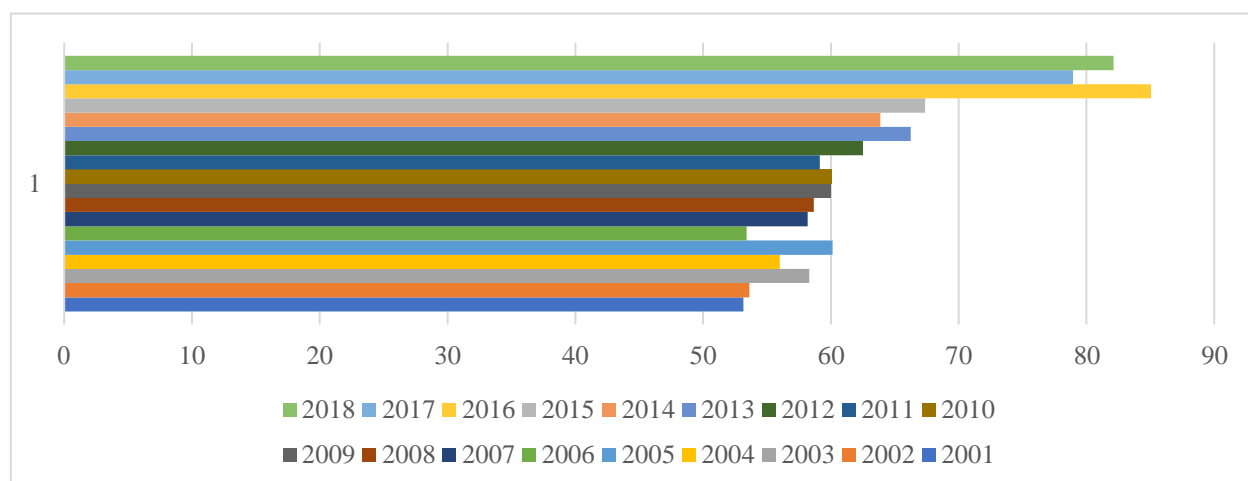
**Table 2.3: Basic Fact of Bangladesh Tea Industry**

S. N	Facts	Quantity
	No. of Tea Estates	167
	No. of Tea Factories	114

	Total allotted area	115820.33 hectare
	Total area employed	54106.24 hectare
	Total Agriculture area	42789.23 hectare
	Total Non-Agricultural area	17887.03 hectare
	Total Production (2018-19)	82.134 mil. KG
	Total Export (2018-19)	0.403 mil. KG
	Internal Consumption (2018-19)	54.79 mil. KG

## 2.6 Tea Market

**Figure 2.2: Tea Production for last 18 years**



(Source: teaboard.gov.bd)

(ITC Annual Bulletin Supplement 2018)

The marketing system of Bangladeshi tea is defined as the process of sale of manufactured tea in bulk or packed from tea estates to the buyers at Chittagong Auction or at estates levels from where teas are sold either directly to overseas buyers or internal traders. A tea Auction is held every Tuesday at Chittagong.

The marketing of tea in Bangladesh can be divided into two segments. These are:

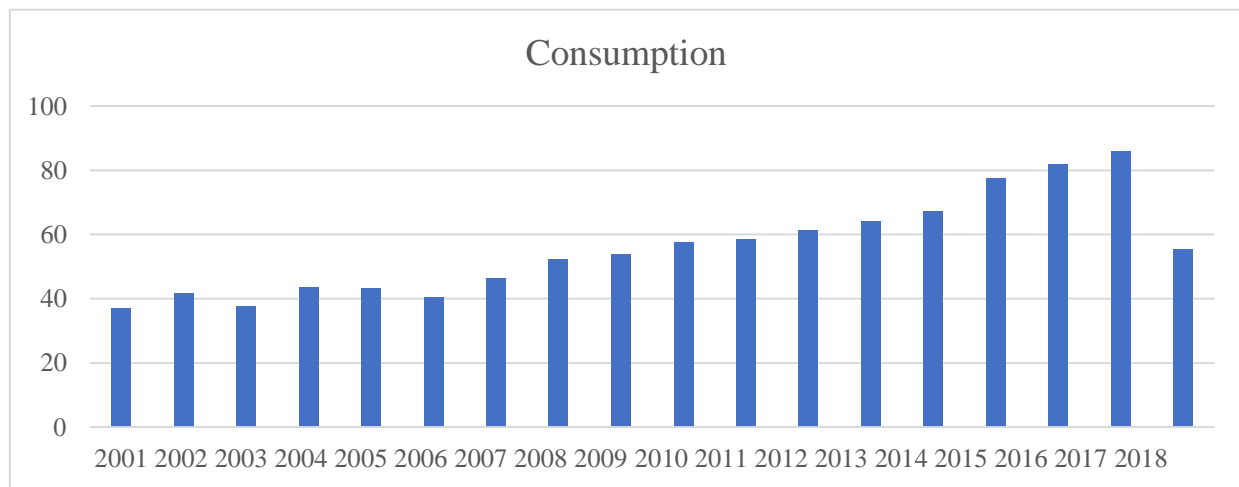
- a) Internal Marketing
- b) External Marketing

### a) Internal Marketing:

Internal marketing deals in wholesale and retail business of tea for internal consumption in the country. In this case wholesale, retail and blending licenses are to be obtained from Bangladesh Tea Board. Here teas are sold under ex-garden sale and through auction.

- I) **Ex-Garden Sale:** Sales by the producers directly from the estates to the internal buyers with prior approval from Bangladesh tea board.
- II) **Auction:** Local traders having Bidder ship license from Bangladesh Tea Board, can purchase tea from Chittagong auction in internal account to sale in the internal Market.

**Figure 2.3: Tea Consumption for last 18 years**



(Source: *teaboard.gov.bd*)

(*ITC Annual Bulletin Supplement 2018*)

### b) External Market:

External marketing deals in export business of tea. Here teas are sold under direct contract sale and through auction.

- I) **Direct contract sale:** Tea can be exported to foreign buyers through direct negotiation between the buyer and producer with prior approval from the Bangladeshi Tea Board.

- II) **Auction:** Traders having Bidder ship license from the Bangladeshi Tea Board can purchase tea from Chittagong Auction in external account to export tea. For export this has to obtain license from Bangladesh Tea Board.

## 2.7 Impact of Tea Industry on the Economic Development of Bangladesh

The tea industry makes a vital contribution to the economy of the producing countries. The countries that produce tea are largely developing countries with large pools of low-cost labor. The tea industry of Bangladesh plays an important role in the economic development. The playing roles are given below:

- **Labor intensive industry:** Tea industry is a labor-intensive industry. It creates employment for most of the tribal and non-educated and non-skilled people. There are so many people employed here and maintain their livelihood by working there. Almost 150,000 people are working as labor in different tea estates. Almost 3.5 lakhs people are depending on those labors.
- **Contribution in GDP growth:** The tea industry of Bangladesh plays a role in GDP growth although it is very small amount. Bangladesh earns approximately 11572.89 million takas in 2018-2019 fiscal years, which contributes greatly to the GDP growth of our country.
- **Earn foreign currency:** Bangladesh was once the fourth tea exporting countries in the world. And that time Bangladesh earns a huge amount of money through exporting. Now Bangladesh is losing its position in the international market, but still continues to earn a huge sum of money through exporting. This contributes to the economic development of our country.
- **Tea garden as tourist spot:** The Bangladeshi tea industry not only produces tea but also plays an important role in tourism. Everyday many people come to visit the tea gardens. People are attracted by the natural beauty of the tea garden. Tea gardens have many hilly tracks which attracts the visitors mostly. The industry gave Sylhet a different identification.

### 3. METHODOLOGY

#### 3.1 Implementation of Methodology

There are 11 tea companies and 19 tea estates in Sylhet. The tea companies are- M Ahmed Tea and lands Co. Ltd., Mathiura Tea Co. Ltd., Taz Tea & Trading Co. Ltd., New Sylhet Tea Estates, Kaliti Tea Estates, Macson Brothers BD. Ltd., Nina Afzal Industries Ltd., Alibahar Tea Estates, Hamidia Tea Estates, Kalikabari Tea estates and Dalia Tea Estate. These companies are population. 5 of tea estates has selected as sample. The study has used the simple random sampling method in selecting the sample tea companies. Two tea estates have been selected from each tea company.

**Table 3.1: Respondents**

Name of the tea companies	Tea estates under the company
M Ahmed tea and lands co ltd.	Khan Tea Estate, Phulbari Tea Estate.
Mathiura Tea co. Ltd	Mtahiura Tea Estate, Uttarbagn Tea Estate
Taz tea and trading co. Ltd.	Mominchora Tea Estate, Ayeshabagn Tea Estate
Nina Afzal Industries ltd.	Khadim Tea Estate, Jongolbari Tea Estate.
Alibahar Tea estate	Alibahar Tea Estate, Kaliti Tea Estate

#### 3.2 Qualitative Methodology

Qualitative research is the scientific way of observation to gather qualitative and descriptive data. This type of research refers to the definitions, meanings, characteristics and description of units, not to their measures. This research indicates the quality of a thing and why an observation occurs (Howrd-2012). Qualitative research explores in the exploratory research of the discipline of social sciences that focuses on the human elements. It also includes qualitative market research and refers for instance what a customer thinks about a brand, how satisfied he/she is and which color they choose most.

#### 3.3 Quantitative Methodology

Quantitative methodology of research refers to the objective or normative measurement. It involves statistical, mathematical or numerical analysis of data that are collected through survey and then representation of results in a numerical way. It prefers numbers rather than statements.

Quantitative methodology focuses on gathering, generalizing and analyzing data among the groups to pick a conclusion of observation.

Quantitative research tries to recognize and isolate the specific variables contained in the study to construct the correlation, analyze relationships and draw a regression model. It also tries to construct a more classified, more accurate and a more specific result in numerical manner. It includes inferential statistics, data simulation and experiments.

The collected data has been analyzed by using some statistical tools (i.e. mean, percentage, trend analysis). The analyzed data will be represented through tables, pie charts and diagrams.

The research explores the various causes of waning performance of tea estates in Sylhet while trying some questions:

- Are tea estates in Sylhet suffering from adequate capital?
- Do tea estates have the capacity to produce quality tea? (If yes then why their performance is declining)

### **3.4 Validity and Reliability**

Validity refers to the accuracy of a measure that indicates to which extent a result represents truthfully a concept. How much a concept is valid can be answered by evidence that a researcher provides in the study and professionals' opinion or literature review. I have conducted a survey and concluded it into a specific result. But how much my result is valid can be tested or measure by various testing method, data collected from survey, logical theory behind the concept etc. Messick said that validity refers to the degree to which an empirical evidence and theoretical rationales support the accuracy of interpretation based on the results.

Reliability is the indicator of internal consistency of measurement. A measure is reliable when it covers same result in different attempts of measuring. If a research finding differs significantly from its theory or deviate or show a completely different results in another attempt is not reliable so much. Concepts of reliability revolves around consistency. If a methodology used in a survey show a different result in another survey though all other things remain constant is unreliable.

The data collected from survey might have inaccuracy of 5% approximately, it can be claimed that it is 95% valid and reliable also.

### **3.5 Duration of the study**

The study and research are conducted as planned. Though there were some difficulties the research has completed in time. The proper guidance of the supervisor and cooperation of tea estates' employees and managers were appreciable. The study would not be completed without the help of supervisor. Because of time constraint, the study was started in December and completed in August. Specifically, it takes 10 months to complete the study.

#### 4. RESULT OF EMPERICAL DATA ANALYSIS

##### 4.1 Analysis of Data with Theoretical Framework

**Table 4.1: Area and number of tea estate**

Area	Frequency (No of tea estate)
0-200 hectors	1
200-400 hectors	3
400-600 hectors	2
600-800 hectors	4

(Source: Field work, 2019)

The data indicates most of the sample occupies more than 600 hectors of area. Only 1 of the tea estates (Alibahar Tea Estate) occupies less than 200 hectors.

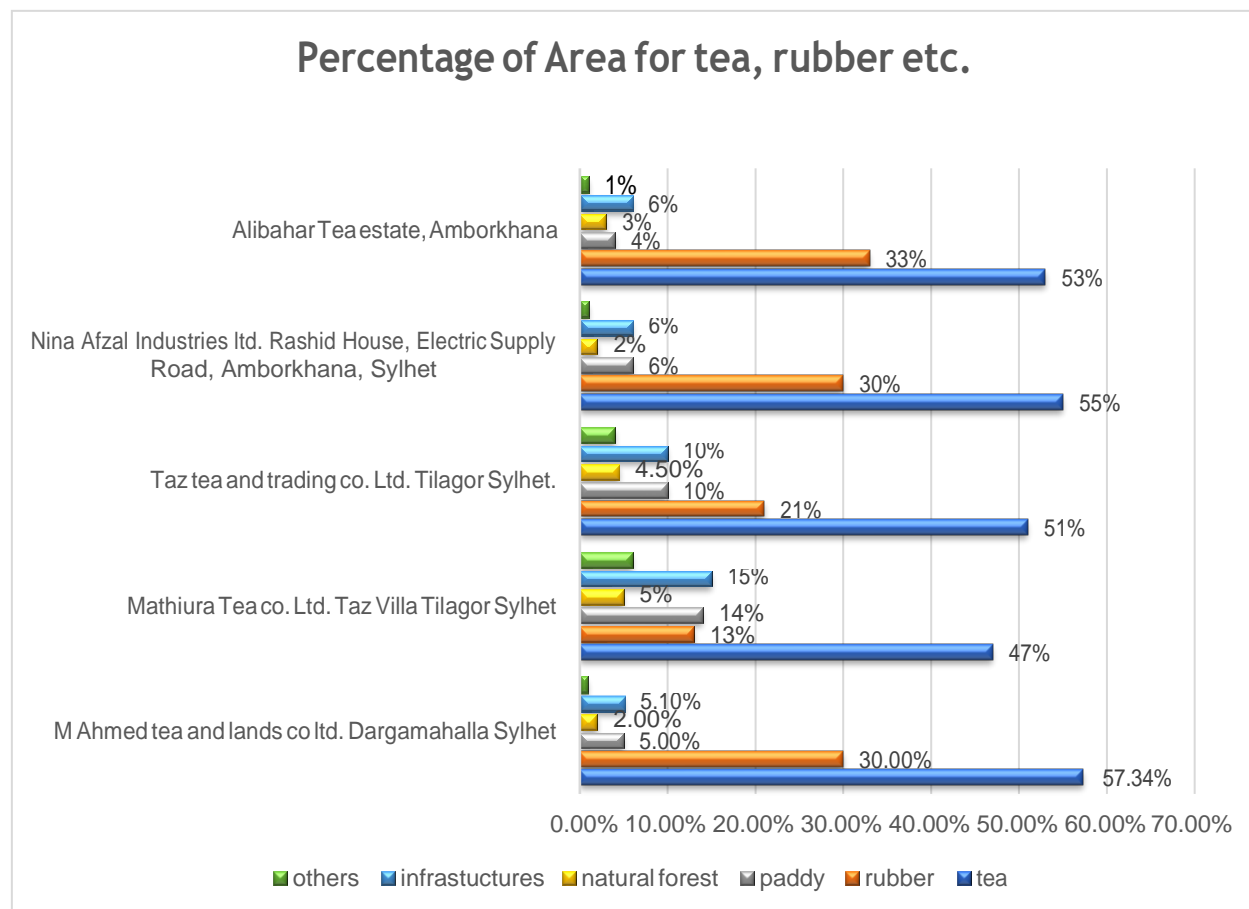
**Table 4.2: Annual average production of tea (per hector)**

Range	Frequency	Percentage
500 kg – 700kg	1	10%
800 kg – 1000 kg	3	30%
1100 kg – 1300 kg	4	40%
Above 1300 kg	2	20%

(Source: Field Work, 2019)

The table shows, 40% of the sample produces between 1,100 kg to 1300kg annually. 20% produces more than 1,300 kg. The table captures that average production of selected sample tea estates ranging from 1,100kg-1,300kg annually.

**Figure 4.1: Tea and Rubber**



(Source: Field Work, 2019)

The diagram shows the uses of land for the cultivation of tea.

**Table 4.3: Annual production (of the companies)**

Name of the tea companies	Annual production in kg	Frequency
M Ahmed tea and lands co ltd. Dargamahalla Sylhet	> 300000kg	2
Mathiura Tea co. Ltd. Taz Villa Tilagor Sylhet	100000kg 200000kg	- 2
Taz tea and trading co. Ltd. Tilagor Sylhet.	100000kg 200000kg	- 2
Nina Afzal Industries Ltd. Rashid House, Electric Supply Road, Amborkhana, Sylhet	> 300000kg	2
Alibahar Tea estate, Amborkhana	< 100000kg	2

(Source: Field Work, 2019)

The table shows 4 tea estates produces between 100,000kg to 200,000kg annually. 4 tea estates produce more than 300,000kg annually.

All the companies stated that they sell 100% of their product domestically. Also, the companies stated that they do not export.

**Table 4.4: Degree of adaptation to modern technologies**

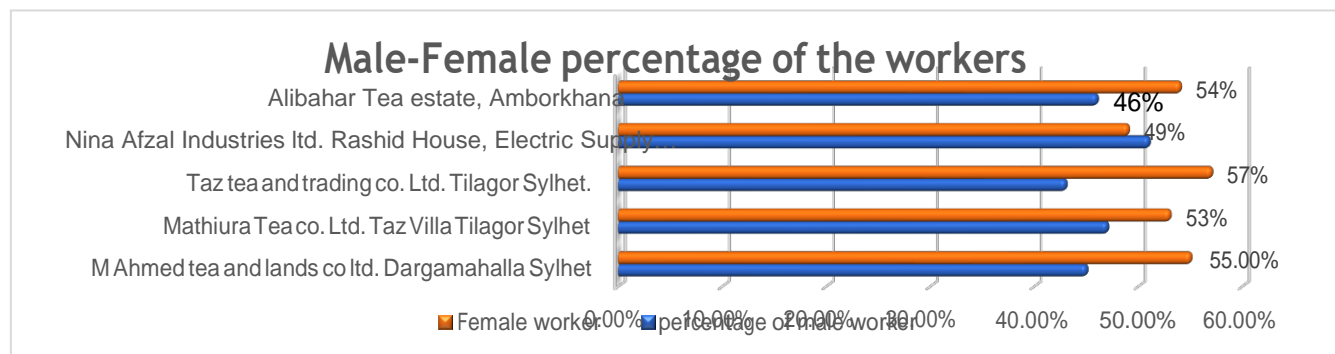
Name of the company	Yes/ No	Name of the technology
M Ahmed tea and lands co ltd. Dargamahalla Sylhet	Yes	CTC, CFM, VFBD, Dryer, Vibro, Sortter
Mathiura Tea co. Ltd. Taz Villa Tilagor Sylhet	No	
Taz tea and trading co. Ltd. Tilagor Sylhet.	No	
Nina Afzal Industries ltd. Rashid House, Electric Supply Road, Amborkhana, Sylhet	Yes	CTC, CFM, Dryer
Alibahar Tea estate, Amborkhana	No	

(Source: Field Worker, 2019)

The table shows only two of the companies use modern technologies for their production purpose.

All the companies said there is government subsidy for food grains (rice/wheat). They also said that it is not at all enough.

**Figure 4.2: Workers' Gender Ratio**



(Source: Field Work, 2019)

The diagram shows most of the companies have more than 50% of the female workers. Only 1 company has more male workers. It describes that female workers' participation in tea estates are greater and it contributes to the country's GDP to a greater extent.

**Table 4.5: Infilling Requirement Status**

Name of the company	Requirement Status
M Ahmed tea and lands co ltd. Dargamahalla Sylhet	Required
Mathiura Tea co. Ltd. Taz Villa Tilagor Sylhet	Not required
Taz tea and trading co. Ltd. Tilagor Sylhet.	Required
Nina Afzal Industries ltd. Rashid House, Electric Supply Road, Amborkhana, Sylhet	Required
Alibahar Tea estate, Amborkhana, Sylhet	Required

(Source: Field Work, 2019)

The table shows almost all the companies (4 companies) said infilling is required in their tea estates. Only 1 company stated infilling was not required.

**Table 4.6: Probability of increase in production because of infilling**

Percentage of increase	No of tea estates
0% - 0.5%	6
0.5% - 1%	3
>1%	1

(Source: Field work, 2019)

The table shows, most of the companies (4 companies) said infilling can increase the production level.

**Figure 4.3: Satisfaction level of the managers about workers**



(Source: Field Work, 2019)

The diagram shows most of the companies (3 companies) stayed neutral about the satisfaction level of their employees. 1 of them said they are satisfied.

**Table 4.7: Productivity analysis of the companies.**

Name of the company	Revenue per hector	Material cost per hector	Production cost per hector	Factory overhead cost per hector	Productivity (revenue/All type of cost)
M Ahmed tea and lands co ltd. Dargamahalla Sylhet	220 Tk	50 Tk	125 tk	10 Tk	1.19
Mathiura Tea co. Ltd. Taz Villa Tilagor Sylhet	180 Tk	45 Tk	100 Tk	8 Tk	1.18

Taz tea and trading co. Ltd. TilagorSylhet.	165 Tk	47 Tk	95 Tk	5 Tk	1.12
Nina Afzal Industries ltd. Rashid House, Electric Supply Road, Amborkhana, Sylhet	200 Tk	50 Tk	115 Tk	9 Tk	1.15
Alibahar Tea estate, Amborkhana	150 Tk	40 Tk	90 Tk	5 Tk	1.11

(Source: Field Work, 2019)

The table shows that all the companies productivity ranges from 1.11 to 1.19.

**Table 4.8: Problems of tea industry**

Problem	Frequency	Percentage
Lack of capital	5 Companies	100%
Poor Infrastructure	2 Companies	100%
Natural Calamities (Drought, Tornado, Excessive rainfall)	5 Companies	100%
Higher production cost	5 Companies	100%
Climatic Change	2 Companies	40%
Import of tea at low tax rate	4 Companies	90%
Lack of technological support	2 Companies	40%
Selling System of tea	1 Company	20%

(Source: Field Work, 2019)

The above table shows all of the companies think, lack of capital, poor infrastructure, natural calamities and higher production cost is the main problem of production of tea. The 2<sup>nd</sup> most important problem is the low tax rate on the import of tea from India.

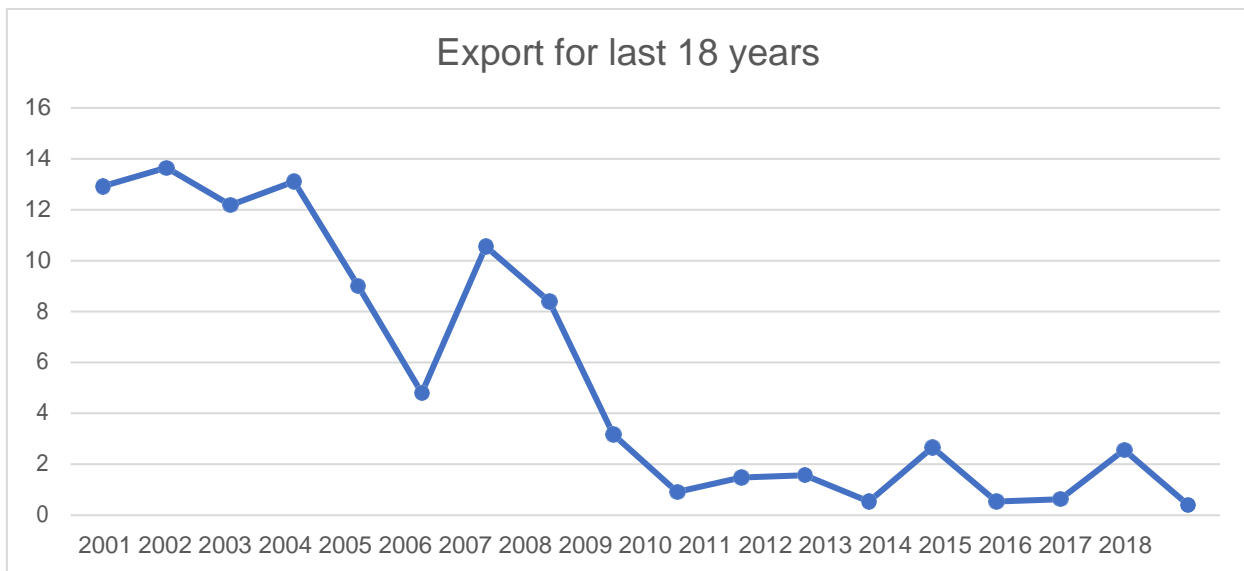
**Table 4.9: Causes of the declining performance**

Reasons of the declining performance of the tea estates	Frequency
Skilled labor shortage	7 estates
Lack of Government support	10 estates
Exhausted soil	5 estates
Pest and disease attack	8 estates

(Source: Field Work, 2019)

The table shows lack of government support, shortage of skilled labor, and pest and disease attack are the most supported reasons of the decline in the performance of the tea estates.

**Figure 4.4: Export for last 18 years**



(Source: Bangladesh tea board, statistical bulletin, published in December- 2018).

The above trend line shows that at 2001 Bangladesh exported around 12.92 million kgs of tea. But at 2018 it has reduced to 0.403 million kgs of tea.

**Table 5: Tea Production, Consumption & Export**

Year	Production ( Million kg)	Internal consumption ( Million kg)	Export ( Million kg)	Export Value ( Million Tk)
1990	18.36	14.21	26.95	1565.68
1991	23.77	19.21	25.40	1392.25
1992	23.87	21.77	27.15	1263.35
1993	19.01	14.50	31.92	1686.63
1994	27.13	24.00	23.65	1166.16
1995	31.38	22.00	25.43	1291.75
1996	29.09	20.50	26.13	1349.28
1997	40.04	22.20	25.17	1775.39
1998	43.29	25.17	22.23	1808.57
1999	46.16	32.11	15.18	1008.70
2000	47.67	38.79	18.10	1205.19
2001	53.15	36.95	12.92	894.99
2002	53.62	41.50	13.65	939.93
2003	58.30	37.44	12.18	915.07
2004	56.00	43.33	13.11	934.04
2005	60.14	43.30	9.01	742.62
2006	53.41	40.51	4.79	469.59
2007	58.19	46.27	10.56	899.01
2008	58.66	52.12	8.39	976.95
2009	59.99	53.74	3.15	433.50
2010	60.04	57.63	0.91	176.68
2011	59.13	58.50	1.47	213.51
2012	62.52	61.19	1.50	222.28
2013	66.26	64.00	0.54	133.04
2014	63.88	67.17	2.66	281.72

#### **4.1.1 Comparison and Causes**

There is genuine reason that can compel one to go in favor of the statement that declining performance of the Bangladeshi tea industry continues and losing the edge in tea export and the most important reason behind it is the increase of domestic consumption. According to a report from United Nations Food & Agriculture Organization (FAO), the export of tea is increased by 50,000 tons which is more than the production in 2003. But the production of major exporters like Bangladesh has decreased (bdnews24). The FAO report prepared in a tea meeting in Bali, 2005. One of the crucial reasons of less export of Bangladeshi tea was mainly for the record number of productions in countries like Indonesia, China, Turkey, Sri Lanka, Kenya, Malawi. The overall growth from these countries affects a lot in the export of other major tea countries. According to the report from the website of Bangladeshi Tea Board Industry, Bangladesh used to export 90% of its total tea in between 1985 to 1990. Pakistan, Afghanistan, former USSR (Union of Soviet Socialist Republics), Iraq, Iran, Jordan, Sudan, Kuwait, Bahrain and the United Arab Emirates were the main importing countries of Bangladeshi tea. But due to the increase of domestic tea consumption in recent years, the country exports only five to six million kg. Also, low hectare- wise production, lack of development initiatives and replacement of century old saplings are equally responsible for which the previous importing countries lost interest in Bangladeshi tea. Now Pakistan, Kazakhstan and Uzbekistan are the only importing country left (thedailystar.net). Abu Taher, vice-chairman of Tea Traders Association of Bangladesh assume that Bangladesh will require tea imports within next five to six years if the current situation continues

#### **4.2 Findings and Recommendation**

As I have surveyed over 5 sample tea companies and 10 sample tea estates, some of common problems are mentioned by all of respondents. All of the companies stated that lake of capital, poor infrastructure, natural calamities and higher production cost are the main reasons behind the waning performance of tea estates. They also agitated that lower import tax on tea import from India is a challenge for Bangladeshi tea companies to grab the maximum market share. Importing tea from India is demolishing market demand for domestic production, as they said. The

companies said that though government provide subsidy, but it is not actually sufficient. They consider lake of skilled labor and medical treatment as strong drawbacks of the industry.

Managers of selected tea companies and tea estate suggested that the problems mentioned above may be overcame by providing some facilities including adequate capital allocation, extended and improved infrastructural facilities, providing special training program to build a skilled-labor team that might be beneficiary both for company and industry as well as for employees. Advanced technology introduction, time to time infilling, lowering production cost using modern technologies and hybrid seeds, subsidy and allocation for tackling natural harshness might be some of probable solution for safeguarding of tea industry from being waned. Government support by creating a lucrative market by promoting domestic tea and imposing higher import tax might be an indirect way of marketing and expansions of Bangladeshi tea industry.

#### **4.3 Suggestions for future researchers**

Although this paper may provide a broad picture of causes behind the waning performance of tea estates in Bangladesh, especially in Sylhet but the paper, I know, is far from being perfect. As I studied over few numbers of tea estates and companies, I have faced lake of required data that might be more useful for the perfection of the paper. Though the writing process went very well but I found some difficulties in data analysis like lower number of respondents and reluctance of respondents from responding.

For future researchers I suggest selecting minimum 50 tea estates and 10 tea companies so that it would be easy for data analysis and making the conclusion more accurate. The more the respondents, the more valid and reliable the research will be. Another matter which should be considered that convincing respondents so that they will not be reluctant in responding.

## **5. Conclusion**

The ultimate goal of the study is to find out the reasons of the decline in the performance of tea estates. Through all the data analysis, I have found that lack of capital, technology and skilled labor are the main causes of declining performance. Dramatic increase of domestic consumption is also a very big issue for that performance. There is a huge possibility of higher production of tea if the problems are detected properly. Sooner or later there will be a time when there will be enough tea to export. At last I would like to conclude on a note that, the government as well as the management of the tea estates and the companies should take necessary steps to re-awake the industry as soon as possible because for a country like Bangladesh tea estates is not only the sources of foreign income but also it is a tourist spot. We believe to see the light of hope in our tea again soon by increasing more consciousness among all the people, government and the authority.

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# Appendix

## Section 1

### Questionnaire for the tea companies:



VAASAN AMMATTIKORKEAKOULU  
UNIVERSITY OF APPLIED SCIENCES

International Business 2019

Vaasa University of Applied Sciences

### Academic Research Questions:

This questionnaire will be used only for academic research purpose. The answers will be kept confidential. Your honest judgment will be highly appreciated.

**Topic: - Declining performance of the tea estates: A study in Sylhet district**

**Name of the company:**

**Respondent's position:**

### Questionnaire

1. What is the total area of your tea estates? (in hector)

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2. Please mention the percentage of the area used by the followings:

- Tea
- Rubber
- Paddy or gazing land
- Natural Forest

- Infrastructures
  - Ponds, drainage and roads
  - Others
3. Per hector annual average production of tea is:
- 500 kg – 700kg
  - 800 kg – 1000 kg
  - 1100kg – 1300kg
  - Above 1300kg
4. What is the amount of annual production of your tea estate?
- < 100000kg
  - 100000kg – 200000kg
  - 200000kg – 300000kg
  - > 300000kg
5. What is the average production cost of your company?
- 
6. What is the amount of your annual domestic sales?
- 
7. Do you export? If yes, what is the amount of your annual export?
- 
8. Do you use any modern technology for the purpose of the production? If yes name them.
- 
9. What is the market price of your tea? (per kg)
- 
10. What is your tea selling policy?
- Personal selling

- Auction
- Others (Please mention them)

11. Is there any subsidy from government?

- Yes
- No

12. If is, is it sufficient?

---

13. Please mention your degree of satisfaction about the performance of your workforce:

- Highly Satisfied
- Satisfied
- Neutral
- Dissatisfied
- Highly Dissatisfied

14. What are the constraints you face while producing tea?

- Lack of capital
- Lack of technological support
- Lack of infrastructure
- Lack of quality seeds
- Natural calamities.
- Higher production cost
- Selling system of tea
- Climatic change
- Others.

15. Are you satisfied with the overall performance of your company?

- Yes
- No
- No comments

16. According to you why the performances of the tea companies are declining?-----

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17. What steps you recommend being followed to improve the situation?

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## Section 2

### Questionnaire for the tea estates:



VAASAN AMMATTIKORKEAKOULU  
UNIVERSITY OF APPLIED SCIENCES

International Business 2019

Vaasa University of Applied Sciences

### Academic Research Questions:

This questionnaire will be used only for academic research purpose. The answers will be kept confidential. Your honest judgment will be highly appreciated.

**Topic: - Declining performance of the tea estates: A study in Sylhet district**

**Name of the tea estate:**

**Name of the company:**

**Respondent's position:**

### Questionnaire

1. What is the amount of wages of a tea labor for plucking 1 kg tea leaves?

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2. What is the number of the tea labors in your estate?

Male: \_\_\_\_\_ Female: \_\_\_\_\_ Total: \_\_\_\_\_

Permanent: \_\_\_\_\_ Temporary: \_\_\_\_\_ Total: \_\_\_\_\_

3. Is the number of tea labor sufficient for achieving the targeted production level?

Yes

No

4. Are there any unutilized land in your tea estate which can be used for tea cultivation?

Yes

No

5. If yes than what is the amount of land? (in hector)

---

6. Is infilling required in your tea estate?

Yes

No

7. If yes than what percentage of tea production can be increased due to infilling?

---

8. Please provide the following cost and revenue data:

Revenue per hector: \_\_\_\_\_

Cost per hector: \_\_\_\_\_

Material cost: \_\_\_\_\_

Labor cost: \_\_\_\_\_

Factory overhead cost: \_\_\_\_\_