CHAPTER – I

INTRODUCTION AND DESIGN OF THE STUDY

1.1 Introduction

The commodities are classified into food and non-food items. The food items include cereals (rice; wheat; maize and products) milk and milk products (milk liquid; baby food; ghee; butter), pulses (arhar; gram; moong; magoor and urad), Vegetables (potato; onion; pumpkin; bitter; gourd and patal) fruits and nuts banana; water melon; orange; mango; litchi; apple; grapes; and other fresh fruits; ground nut; cashew nut; kishmish and other dry fruits), salt and spices (salt iodized; salt others; chilli; black pepper; turmeric; garti; ginger; curry power and other spices), sugar, (sugar crystal; gur; honey and other sugar item), Beverages and processed food (tea leaf; tea dust; coffee powders cold beverage and other beverages; biscuits and confectionary; pickles; jam-jelly and other processed foods)\(^1\). In the category of beverages and processed food found tea is included. Tea is considered as important beverages in India. Tea provides the average Indian with a pleasant and stimulating non-alcoholic beverage at a reasonable affordable price and has found a place in the culture. Tea is one of the important fast moving consumer goods in India.

Industries in India are classified as (i) Size-based Industries, (ii) Proprietary-based Industries, (iii) Use-based Industries, (iv) Input-based Industries, and (v) Area-based Industries. In the input based industries, agro-based industries are considered as an important industry. It includes plantation and non-plantation sector. Tea industry comes under plantation sector. The details of the classification of different industries in India are shown in Chart 1.1 as follows:

Plantations producing tea, coffee and rubber are some of the important class of organized industries in India. Work in plantations is essentially agricultural although the plantation system has many features in common with organized industry. As remarked by Witley commission, “The plantation represents the development of agricultural resources of tropical countries in accordance with the methods of western industrialism; it is a large scale enterprise in agriculture”\(^2\).

In India, plantations accounts for 0.8 percent of the total cultivable land. They also contribute 5 percent to the national income in agriculture. Besides they provide more employment per rupee of investment in the country than either agriculture or in industry. Plantation industry employs a large amount of labour force especially women workers which are highest compared to any industry\(^3\). Moreover this industry helps in the development of other industries.

Among the different plantation crops, tea is considered to be the most important crop in our country. It is the second biggest foreign exchange earner and is exported to about 85 countries. It also contributes a sizable amount to the national income. Moreover, it provides direct gainful employment to a large number of people and helps in providing indirect employment in various sectors. Apart from its contribution to the economy of India, tea today provides to the common man a pleasant stimulating non-alcoholic beverage\(^4\).

**Origin of Word Tea**

The word “tea” comes from a Chinese ideogram pronounced “Chah” contonse and “tay” in the dialect of Amoy. As “Chah” the word travelled to Japan, India, Pensia and Russia, but the

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English “tea” was derived from the “tay” from which was bought by the Dutch to Europe by way of Jawla. It was first spelled “tea” in 1660, but was pronounced “tay” until the mid 18th century.

The word “Tea” comes from the Chinese local Amoy dialect word t’e, pronounced “tay” In Cantonese it is Ch’a pronounced as “Chah”. In Japan, India, Persia and Russia tea has also been known as “Chah”. It is said that the Dutch brought the form t’e to Europe.

**Origin of Tea Industry**

The tea is scientifically known as Camellia Sinensis (L) Kuntz (Botanical family Theaceae). In 2737BC the Chinese Emperor Shen Nung, an able administrator, herbalist and a naturalist went for hunting. Tired as he was, he was relaxing under a tree. His servant was boiling water in the open when some leaves fell into the boiling water. The servant was afraid that the emperor might punish him. But smilingly the emperor drank that water. What a surprise? He felt fresh and started thinking over the leaves. The plant identified as Tchai then called Cha, Tay and now as tea. The Tang dynasty declared tea as a spreading Buddhism, tea also reached far and wide.

**Tea Industry in India**

Tea is one of the oldest industries in India and today it enjoys the status of one of the best organized industries in the country. Although tea has been known since 2737 B.C. and consumed as a beverage for 1250 years, its cultivation in India commenced very recently.

The weakening of trade relations between China and Britain during 1780 led to the initiative of the East India Company to raise the commodity in India. In 1778, Sir Joseph Banks was asked to prepare a series of notes for the company. He recommended the cultivation of tea

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in India. He gave priority to tea as an article of greatest national importance to Britain. The first recorded mention of tea in India was in 1780 when Robert Kyol experimented with tea cultivation with imported seeds. Warren Hastings had some interest in tea cultivation.

- The discovery that the tea plant grows wild in the upper part of the Brahmaputra Valley was made by Robert Bruce in 1823 and the rise of the industry in India owes its origin to the momentous discovery of this indigenous tea plant.

- India is considered as one of the native homes of the tea plant. “The indigenous tea plant growing in a wild condition in Assam was first discovered about 1820”\(^9\).

The inception of the tea industry in India can be associated with the refusal of the Chinese Government in 1833 to renew the agreement as granting the East India Company the rights of monopoly of British trade with China. This removal of the monopoly of the China trade in 1833 ‘quickened their perceptions to the advantages likely to accrue to India by the establishment of a new industry’\(^10\). Subsequently, in 1834, Lord William Bentinck, the then Government – General, appointed a committee, called Tea committee with Dr. N. Wallich as head “to study a plan for the accomplishment of the introduction of tea culture in India and for the superintendence of its execution”. The committee recommended that G.J. Garden should be directed to proceed to China to obtain more knowledge about the cultivation. In 1835, the secretary of committee dispatched the seeds from China which reached Calcutta later in the same year. A Governmental experimental garden was opened at Chabua planted with Assam indigenous seed. Experiments were also conducted in South India under the auspices of the Tea Committee.

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The first commercial sample of Assam tea of eight chests, weighing 488 lbs., was sent to London and sold on January 10, 1838 at a fancy price. The Assam Company with a capital of 200000 pounds was formed in that city in 1839. The Assam Company had a virtual monopoly of tea production during the first decade; but its management was so ineffective that it did not pay dividends out of earnings for thirteen years and at one time had dissipated all its capital\textsuperscript{11}, but, later on, it began paying handsome profit; this led to a great extension of a tea planting.

“There was a frenzied rush for opening up tea gardens and in fact, tea became a favourite topic”\textsuperscript{12}. Tea was first planted in Darjeeling (West Bengal) in 1839, in Sylnet and Cachar (Assam) in 1855, in the Terai (West Bengal) in 1862 and in the Dooars (West Bengal) in 1874.

The foundation of the present tea industry was laid between 1856 and 1859\textsuperscript{13}. In 1852, a private garden was started and then, the number of gardens began to increase. From the latter date, the rate of growth was, indeed, amazing both in the number of estates and the outturn of tea.

### 1.2 Importance of Tea Industry

The importance of the tea industry in the nation’s economy and its role in our planned economic development has been widely recognized. Except the public utility services like the Railways, it is the largest organized industry which comprises more than a million workers employed both in plantation and manufacturing industry. Till recently tea had been the largest foreign exchange earner for India but for the last few years’ jute has taken the first place and tea remains as the second largest foreign exchange earner.

\textsuperscript{11} Parliamentary papers, 1874, XLVIII, Cd, 982, P. 36.
\textsuperscript{13} Edgar., “Note on the Tea Industry in Bengal” – Papers regarding the Tea Industry in Bengal (1873), P. 7.
1.2.1 Source of Employment

The tea industry is a labour intensive industry providing gainful employment to a large number of people. It has its specific importance in India where unemployment is one of the serious economic problems. The tea plantation and manufacturing industry provides direct employment about one million workers in India. A large number of ancillary industries have been started to fulfill the requirements of the tea industry where thousands of persons have been employed in different jobs. The business and trade, associated with tea industry have also provided enough opportunities for employment to a large number of persons.

1.2.2 Contribution to the Foreign Exchange

A considerable volume of tea is being exported from India and this has given the tea industry a place of importance in the national economy of India as an earner of foreign exchange. The tea industry accounts for more than 12.65 per cent of India’s total foreign exchange earnings. During 2005, India earns Rs.1831 crores South India accounts for Rs.669.8 crores through foreign exchange. During 2006, India earns Rs.2006.5 crores and South India accounts for Rs.814.8 crores through foreign exchange. During 2007, our country earns Rs.1528.1 crores and South India accounts for Rs.576.6 crores through foreign exchange.

1.2.3 Contribution to the National Revenue

Tea is a commodity which is subject to direct taxation in the form of excise duty, export duty and cess, under Tea Act 1951. In addition to these, various state levies are also imposed on the tea industry and these varied from state to state. Revenue earned by way of export duty, exercise duty and cess are varied from year to year.
1.2.4 Support to other Ancillary Industries

The tea industry influences the growth of many industries including plywood and fertiliser. The first plywood industry in India was started in 1918. A number of plywood factories have developed in Assam and West Bengal, particularly in the vicinity of Calcutta. The types of plywood made in the country include tea chest plywood for packaging, plywood drums, shuttering plywood, water resistant plywood for furniture, building, defence and transport industries and aircraft plywood among other varieties.

Sulphate of ammonia is considered to be most effective in promoting the proper growth of tea. Chemical fertilisers are used widely in the industry. Most of the fertilisers used in the tea industry are now met from indigenous production. It supports the industries engaged in the manufacture of pesticides, insecticides and weedicides. It also adds to the development of various industries like iron, steel, cement, aluminium foils, tin plates, metal fittings, paper, card boards, transport and warehousing.

1.2.5 Development of Infrastructure

The tea industry has provided a stimulus to the development of forestry, means of communication and transport. Tea is grown under shade trees. Tea plantation has not interfered with the growth of forests since it has been possible to grow tea in mountain slopes where trees could provide shade. This also prevented soil erosion very much unlike the cultivation of many other crops.

Most of the roads in the areas producing tea have been constructed by the tea gardens. The Assam Trunk Road (A.T. Road) linking lower and upper Assam has been built by the tea gardens. It may also be mentioned that the steamer service between Bengal and Assam connecting Calcutta to Dibrugarh was originally started for sending essential supplies like coal,
fertilisers, machinery, building materials from Calcutta to Assam and for sending regular supply of tea from the Assam gardens to the Calcutta market.

1.3 Objectives of the Study

The objectives of the study are stated as follows

- To study the history and functions of Tea Board.
- To study the types of assistance provided by Tea Board.
- To study the history, production and marketing of Tea in India.
- To study the history, production and marketing of Tea in Tamilnadu.
- To analyse the Role of Tea Board in the Production and Marketing of Tea in Tamilnadu.
- To give suggestions to improve the functions of Tea Board in the development of Tea Industry in Tamilnadu.

1.4 Hypotheses of the Study

The following are the hypotheses of the study

(i) Average yields of tea in Tamilnadu and Kerala are significantly same.

(ii) Average yields of tea in Tamilnadu and Karnataka are significantly same.

(iii) Average yields of tea in Tamilnadu and Assam are significantly same.

(iv) Average yields of tea in Tamilnadu and West Bengal are significantly same.

(v) Average yields of tea in Kanyakumari District and Tirunelveli District are significantly same.

(vi) Average yields of tea in Kanyakumari District and Madurai District are significantly same.

(vii) Average yields of tea in Kanyakumari District and Coimbatore District are significantly same.

(viii) Average yields of tea in Kanyakumari District and Nilgris District are significantly same.

(ix) Average yields of tea in World and Sample tea cultivators are significantly same.
(x) Average yields of tea in India and Sample tea cultivators are significantly same.

(xi) Average yields of tea in Tamilnadu and Sample tea cultivators are significantly same.

(xii) Average yields of tea in Nilgri and Sample tea cultivators are significantly same.

(xiii) There is no significant difference between age of tea cultivators and level of satisfaction about assistance provided by Tea Board.

(xiv) There is no significant difference between marital status of tea cultivators and level of satisfaction about assistance provided by Tea Board.

(xv) There is no significant difference between education of tea cultivators and level of satisfaction about assistance provided by Tea Board.

(xvi) There is no significant difference between nature of family of tea cultivators and level of satisfaction about assistance provided by Tea Board.

(xvii) There is no significant difference between age of tea manufacturers and level of satisfaction of tea manufacturers.

(xviii) There is no significant difference between education of tea manufacturers and level of satisfaction of tea manufacturers.

(xix) There is no significant difference between marital status of tea manufacturers and level of satisfaction of tea manufacturers.

1.5 Operational Definitions of Concepts

The following are the important operational definitions concepts.
1.5.1 Role

“A term widely used in social psychology to refer to the kind of behavior expected of a given person in a given situation. The term has been applied generally to the organisation and the workplace”14.

1.5.2 Tea

“A hot drink made by infusing the dried crushed leaves of the tea plant in boiling water and usually adding a small amount of milk”15.

1.5.3 Board

“A group of people constituted as the decision-making body of an organisation”16.

1.5.4 Development

“Development means the application of human, financial, living and non-living resources to satisfy human needs and improve the quality of human life”17.

1.5.5 Industry

“It refers to all the manifold activities of a country which offer employment, but more narrowly those activities concerned with the production of goods rather than services. Specifically an industry comprises all those activities which get directed to the production of a given class of goods”18

1.5.6 Packet Tea

Packet tea means tea packed in unit packs or container of types as are ordinarily to put up for the purpose of retail sale under brand names. The net weight of tea in packets varies between 125 gm. and 500 gm.19

1.5.7 Tea Bag

Tea bag means packets containing blended or processed tea in bags made of filter paper or nylone for brewing of tea liquor by direct immersion of such bags in hot or cold water and commercially known as tea bag\textsuperscript{20}.

1.5.8 Instant Tea

Instant tea, soluble tea or tea extract means a water soluble tea powder derived by dehydration of the aqueous extraction of tea\textsuperscript{21}.

1.5.9 Flavoured Tea

Flavoured tea means tea added with permissible flavours where tea used in the manufacture of flavoured tea conforms to the standard of tea indicated in the food act. Some of the flavours used in the manufacture of flavoured teas are: Vanillin, Cardamom, Ginger, Bergamot and Lemon\textsuperscript{22}.

1.5.10 Working Definitions

1.5.10.1 Tea Cultivators

Tea cultivators are those who cultivate tea leaf and supply them to the tea manufacturers/factories.

1.5.10.2 Tea Manufacturers

Tea manufacturers are those who produce tea dust from the tea leaf purchased from tea cultivators.

\textsuperscript{20}  \url{www.teaboard.gov.in}
\textsuperscript{22}  \url{www.teaboard.gov.in}
1.6 Review of Literature

Tapan Ganguli, (1987) in his article titled, “Role of State Trading” has analysed promoting India’s own brands in international market. He stated that the domesticing sales of tea in different years, export sales of tea in different year and quality of packaging of tea in India that can be easily exported to sophisticated markets. Importers in overseas markets, particularly in Western Europe, North America, Australia and Japan operate on minimum inventory holdings.23

Sivaram B., (1987) in his article titled, “Alarm in the South” has analysed dramatic reversal of fortunes in the export market. He stated South India’s share is less than a quarter of the national tea production, it is not often recognised that the region produces as much tea as Kenya, India’s major competitor. He suggested that the countries entire exports of instant tea earning valuable foreign exchange of Rs.10 crore emanates from the South.24

Chakrabarti S.R., (1987) in his article titled, “The Chinese Puzzle” has analysed myths and realities of the treat to Indian exports of tea. This article deals with Chinese tea production, export of tea to different countries, domestic consumption of tea, production cost of tea, China’s entry into the Indian tea markets.25

Dudeja Vijay, (1989) in his article titled, “Internal and Export Tea Demand Outstripping Supply in India” has analysed export quality of tea in India. He stated that uncertainties on the market from as well, price remained depressed up to the middle of October, especially for below best CTC teas. The main reason for low prices of dusts is in the name itself. Over the years,

consumers have come to believe that dusts are inferior to other grades as in their minds they equate tea dust with dust or sweepings\textsuperscript{26}.

Bose Bimal, (1989) in her article titled, “Crisis in Indian Tea” stated that production of tea over the year, marketing of tea to different place of India. Drought conditions in Southern India and lake rains in Assam and Dooars indicate a shortage in total production during 1989. She also stated Sri Lankan production has declined due to internal disturbances in that country\textsuperscript{27}.

Kharma S.S, Garg, A.G. and Brij Bhushan (1990) in their article titled, “Tea Production in India” has analysed state-wise and area wise disparity in tea production, share of India to the world. According to them the bulk of Indian tea is exported to USSR, U.K and middle east countries but the share of Indian tea to the total import of tea by U.K. had gone down from the level of 64.9 percent in 1950 to 14.2 percent in 1985. While tea export by East Africa to U.K. Substantially rose from 2.8 percent to 54 percent during the same period\textsuperscript{28}.

Dhurjati Mukherjee and Patatri De Sarkar (1990) in their article titled, “Tea Industry Needs Revamping” has analysed production and export of tea. This article stated that certain intrinsic problems affect the tea production in India. The first problem with Indian tea yield is quite low by world standards. Secondly, the tea processing machinery has become old and obsolete giving low production. Thirdly, the tea industry bears a very high incidence of tax burden. Also the authors suggested that this is possible only by increasing the per hectare yield through replacement of old bushes and old processing machinery\textsuperscript{29}.

Natarajan K., (1990) in his article titled, “New Incentives Schemes for Tiny Industries” has analysed various incentives schemes offered by Central and State Government to the

\textsuperscript{26} Dudeja, Vijay, Internal and Export Tea Demand Outstripping Supply in India, Tea & Coffee Trade Journal, September 1, 1989, pp-5-7.
\textsuperscript{27} Bose Bimal, Crisis in Indian Tea, Tea & Coffee Trade Journal, October 1, 1989, pp-14-16
\textsuperscript{29} Dhurjati Mukharjee and Patatri De Sarkar, Tea Industry Needs Revamping, Yojana, May 23, 1990,pp. 23-25
tiny sector. This article deals with various incentives allocated to the tiny industries and its utilisation by the entrepreneurs in tiny sector\(^{30}\).

Bose Bimal (1991) in his article titled, “India: Coffee and Tea Update” has analysed Indian coffee and tea plantation, production and productivity, marketing of tea, exports of tea from India and its problems. He stated that tea industry plays an important role in the economy of the country. It not only provides employment to a large number of people but also is a major foreign exchange earner\(^{31}\).

Sivaram B, (1993) in his article title, “Outlook for Tea” has analysed production and marketing of tea and consumption pattern of tea in India. According to him health experts in USA, Japan and China besides India have been concentrating their efforts on establishing the positive effects of tea drinking. Several encouraging findings have now emerged as its impact on maintaining fluid balance in the body, its contribution to better dental health via fluoride, its association with lower blood cholesterol\(^{32}\).

Govindasamy S.K., (1993) in his article titled, “Tea and Drought” has analysed physical and chemical measures. This article deals with physical measures like shade, water conservation. Time of running, wind belts, selection of planting materials and irrigation and chemical measures only method we can think of spraying of potash for the foliage in form of potassium sulphate prior drought – this helps to close the guard cells of the tomatoes to a certain extent and contain transpiration during droughts\(^{33}\).

Asok Kumar (1994) in his article titled, “Limiting Factors of Tea Production in Tamil Nadu” has analysed cultivation of tea and exports of tea. According to him the peculiar feature of

the tea plantation industry in Tamil Nadu is the preponderance of the small and tiny growers. He suggested that provision of sufficient amount of working capital and the improvement of cultural practices in line with scientific specifications will go a long way in ameliorating the small gardens\(^34\).

Subramanian R., (1994) in his article title, “Prospects for Plantations” has analysed main plantation crops of Tea, Coffee, Rubber and Cardamom. According to him, India is the largest producer and largest exporter of tea in the world. India will become a net importer of tea, since our domestic consumption is rising faster than production\(^35\).

Sturdivant Shena (1997) in his article titled, “Tea Trends” has analysed tea production and processing. He stated that tea consumption appears to be rising. According to him many countries have enjoyed the benefits of tea for generations, only in US it is fairly recent phenomenon\(^36\).

Gururaj G. Kulkarni and Manoj Kumar M. Reddy (1997) in their article titled, “Tea Mosquito Bug Menance on Neem” has stated that tea is grown from southern tip of Kerala to the Himalaya Hills, in tropics to subtropical regions, in semi-arid to west tropical regions and from sea level to above 700 m elevation\(^37\).

Yadav L.S., (1997) in his articles titled, “Tea Estates of North East India” has analysed manufacturing of Tea in India. This article deals with processing of green leaves such as withering, rolling, fermentation and drying. The hand harvested tender green leaves, having 80 percent moisture content are spread over with a bed thickness ranging from 20 cm to 45 cm\(^38\).

Satya Sundaram I., (1997) in his article title, “Tea Industry Down with Disincentive” has analysed tea production and exports and tea plantation in India. This article states that the cultivation must expand to north-eastern states like Arunachal Pradesh, Mizoram, Nagaland and Manipur. The climate in these states is highly conducive to tea plantation. According to him the impact to geo-political changes combined with adverse weather conditions both in North and South India, have resulted in 22 percent decline in the total tea yield\(^{39}\).

Yadav L.S., (1998) in his article titled, “Women and Mechanization in Tea Plantation” has analysed women and tea plantation in India. This article stated that women play an important role in performing various practices of tea plantations, like nursery raising, hoeing, weeding, fertilizer application and plucking tea leaves. According to him, majority of women available in the estates are engaged in nursery raising and highly labour intensive practices of plantation maintenance\(^ {40} \).

Satya Sundaram I., (1999) in his article titled, “Tea” has analysed quality and yield of tea. According to him the gardens are required to get permission from the tea board to go in for new plantings. Export licensing would also be dropped in the amendment. This means that tea companies need to report only statistics on exports\(^ {41}\).

Sethna E.B., (2000) in her articles titled, “The Plantation Prospects” has analysed total area under plantation in the country. She stated that total area under plantation in the country, which stood in 1935 at around 355000 hectares of Tea, 70000 hectares of Coffee and 41000 hectares of Rubber with negligible extent of cardamom, has increased to 432000 ha of Tea, 329000 ha of Coffee and 533000 ha of Rubber\(^ {42}\).

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41. Satya Sundaram , TEA:Quality and yield hold the key,Business and Economic, NewDelhi,April,1999,pp22-23.
Maria Glenda Rose Carvalho and V.K. Raju, (2001) in their article titled, “Tea – A Health Aid” has analysed tea leaves and tea drinkers. This article deals with the tea without milk or sugar contains no calories but is a natural sources of product contains minerals, fluorides like thiamin and riboflavin. According to him regular tea drinkers have lesser chances of heart disease, stroke and some types of cancer, the medicinal value of tea is now getting popular day by day43.

Yadav L.S and Nand Kishor (2001) in their article titled, “Coal Energy Conservation in Small Factories” have analysed conservation of tea factories and production of tea in India. The authors stated that at present, 0.16 million tonnes of coal are consumed annually by tea factories. According to them there was ample scope of conservation of coal energy, though there was little problem of storing the coal and starting of furnaces during rainy seasons44.

Krishna Swamy P.R., (2001) in his article titled, “Tea for Good Health”, has suggested that drinking three or four cups of tea each day may help to keep the heart surgeon away45.

Mohinder Singh (2002) in his article titled, “The New Tea Chic” has stated that coffee considered conducive to productivity, people drinking more and stronger coffee but now it seems it is turn of tea. Some services marketing effort is afoot to impart a new chic to tea46.

Niranjan Rao C., (2005) in his article titled, “Geographical Indications in Indian Context” has analysed Darjeeling Tea. According to him Darjeeling tea is produced by 86 tea gardens/estates over an area of 19000, hectares with an annual production of about 10000 tonnes. About 70 percent of total production of Darjeeling tea is exported47.

Banerjee G.D and Sarda Banerjee (2005) in their article titled, “Tea Industry at Crossroads” has analysed price realization for tea, cost of production, market share and also creating a niche in the value added segment to product innovation. According to them, cost of production may be reduced by improving productivity and minimizing wasteful expenditure to increase profits from the existing plantation\(^\text{48}\).

Saumitra Mohan (2006) in her article titled, “Reviving the Tea Gardens of Jalpaiguri” has analysed socio-economic situation, special schemes offered by the government, plantation of tea, manufacturing techniques and exports of tea. According to her, the number of schemes have been taken up for providing employment opportunities to the jobless workers and their families and for creating some durable assets in the closed tea gardens of the Jalpaiguri district of Assam\(^\text{49}\).

Asopa V.N., (2007) in his article titled, “Tea Industry of India” has deals with medium term export, consumption, price variability, labour problems and low profitability in production. According to him the Indian firm, having made only small investments for value addition, new investments in value additions, such as machineries for tea bags now coming through, is not comparable with Srilanka\(^\text{50}\).

Boriah G., (2007) in his article titled, “Foay on Productivity of Tea” has analysed productivity of tea in India, women employment, price stabilisation and its exports. According to him tea industry provides direct employment for more than a million of whom fifty percent are women\(^\text{51}\).

\(^{49}\) Saumitra Mohan, Reviving the Tea Gardens of Jalpaiguri, YOJANA, December, 2006, Vol. 50, pp.25-28  
\(^{50}\) Asopa  V.N, Tea Industry of India, Indian Institute of Management, Ahmedabad, July 2007, pp.10-13  
Ramkumar B., (2007) in his article titled, “Cost Reduction for Viability” has analysed South Indian Tea exports, private marketing and plantation of tea in Nilgiris Hills. According to him increase in productivity with reduction in cost should be looked into and incentives for quality initiated, reduction of overhead costs, adoption of new technology should be given.

Lakshmanan K.K., (2008) in his article titled, “TEA” has analysed rich beverage of the poor. This article deals with history of the tea and big tea of India. According to him, the Indian tea is a blend of teas from all parts of India. India, the leader in tea production should diversify Research and Development to improve production, quality and explore the value-added utility.

Lakshmanan K.K., (2008) in his article titled, “Why Tea Export Goes Down Hill?” has analysed the lack of human relationship among the plantation workers, research and development and marketing of tea. He stated that India is the world leader in tea production, China is the second largest tea growing country.

Gagnesh Sharma and Mona Sharma (2008) in their article titled, “Human Resource Development and Marketing Management in Tea” have stated that competitive advantage of any industry depends upon the quality of its human resources. According to him financially sound tea producers is perhaps able to take risk of belayed marketing of their produce and can avail any possible opportunity arising out of future upward price movement in tea market.

Pawan Kumar Garga (2009) in his article titled, “Exports of India’s Major Products – Problems and Prospects” has analysed production, consumption, and export of Tea in India. He also stated that export of tea facing competition from Sri Lanka and East / West Africa.

New entrant African tea has an edge over Indian tea by virtue of its younger bush profile and lower freight due to its proximity to western markets.\(^{56}\)

1.7 Scope of the Study

Tea Board, cultivators’ traders are playing the important role in the development of tea industry. So their opinion has been considered to be of immense importance. The study will provide valuable information to all who are involved in tea production and marketing.

1.8 Need for the Study

Tea industry plays a significant role in the economic development and enhancing the employment opportunities and to produce the tea for the requirement of the society. Many researchers studied the tea industry in various aspects. But the role Tea Board which is playing very important role in the development of tea industry has not yet been studied. Hence, the present study is related to the aspects of role of Tea Board in the development of tea industry in Tamilnadu.

1.9 Period of the Study

The present study covers the period of 10 years. Primary data were collected from 2001-02 to 2010-11 and the secondary data were collected from 1998 to 2007. But the Tea Board assistance are studied for the period of 5 years from 2006-07 to 2010-11 because some schemes are introduced only after 2005.

1.10 Methodology of the Study

1.10.1 Sources of data

This study though apparently elementary in nature would require a very huge mass of both secondary and primary data.

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The prevailing data is termed as the secondary data. Secondary data were collected from books, journals, magazines, Tea Board issues, newspapers and published articles from leading national and international journals.

The data which is collected in a fresh manner and which is not available is termed as primary data. For the purpose of collecting primary data with regard to the role of Tea Board in the development of tea industry, the researcher has carefully designed an interview schedule, presented the same and administered it to the sample respondents of tea cultivators and tea traders in Tamil Nadu especially of Nilgri District.

1.10.2 Methods of Data Collection

1.10.2.1 Preparation of Interview Schedule

A interview schedule consists of a number of questions printed in a definite order on a form or set of forms. The respondents have to answer the questions on their own. Quite often, the interview schedule is considered as the heart of a survey operation. Hence it should be very carefully constructed.

1.10.2.2 Interview Schedule for Tea Cultivators

A detailed interview schedule to be presented to elicit information from tea cultivators in major tea cultivating areas of Tamilnadu. The tea cultivators include:

(a) Such tea growers in Tamilnadu who are registered with the Tea Board as tea estates.

(b) Other tea cultivators that is, Small tea cultivators.

1.10.2.3 Interview Schedule for Tea Manufacturers

A special interview schedule to be prepared for various tea manufacturers in Tamilnadu. The interview schedule consists of various questions relating to marketing of tea and role of Tea Board in the marketing of tea in Tamilnadu.
1.10.2.6 Personal Contact
(a) Researcher establishes personal contact with various tea cultivators of Tamilnadu to elicit their opinion on role of tea board in the development of tea cultivation.
(b) Researcher has also come into contact with those who are directly or indirectly connected with the role of Tea Board in the development of marketing of tea in Tamilnadu.

1.10.2.7 Contact with Tea Board
Researcher also contact with Tea Board in connection with various aspects of this research work.

1.10.3 Sampling Size
As far as Tamilnadu is concerned tea is produced and marketed in places like Nilgiri, Coimbatore, Madurai, Tirunelveli and Kanyakumari. There are altogether more than 81000 hectares of land are in tea production and more than 62000 tea cultivators in Tamilnadu. There are altogether more than 60000 manufacturers of tea in Tamilnadu. The researcher selected 200 tea cultivators and 200 tea manufacturers in Nilgiri District, for the study. The researcher adopted proportionate stratified random sampling method. The stratification of the sample is done according to the size of the area of tea cultivation. In this stratified sampling, convenient method was adopted.

1.11 Frame work of Analysis
The collected data are processed with the help of appropriate statistical tools like Chi-square analysis, Correlation analysis, Trend analysis, Compound Growth Rate, Five Point Scaling Technique, Garrett Ranking Technique, Paired Sample Test and t test in order to fulfill the objectives of the study.

The statistical tools are used for the following purpose.
(i) **Straight Line Trend Least Square analyses**

Trend analysis is used by the researcher to find out the Tea Cultivation area in World, Tea cultivation area in India and average sales of tea of sample tea manufacturers in future.

(ii) **Lickert Scaling Technique**

Lickert Scaling Technique is used to analyze the opinion about assistance provided by Tea Board to tea cultivators.

(iii) **Garrett Ranking Technique**

Garrett Ranking Technique is used to analyse the problems faced by tea cultivators, problems in marketing of tea leaf and to analyse the opinion about assistance provided by Tea Board, by tea manufacturers.

It is defined as follows

\[
\frac{100(R_{ij} - 0.5)}{N_{ij}}
\]

(iv) **Correlation analysis and t test**

Correlation analysis and t test are used for analyzing (i) region wise tea cultivation area, production and yield, (ii) state wise tea cultivation area, production and yield (iii) export value of non-instant and instant tea, (iv) export of value added tea from India, (v) district wise tea cultivation area, production and yield in Tamilnadu, (vi) sale of tea dust and leaf, (vi) average price of tea leaf and tea dust, (vii) cost of production, sales and profit of tea cultivators and (viii) cost, sales and profit of tea manufacturers.

(v) **Paired Sample Test**

Paired Sample Test is used by the researcher for

(i) Comparative analysis of State wise yield of tea
(ii) Comparative analysis of District wise yield of tea

(iii) Comparative analysis of Average yield of tea from World, India, Tamilnadu, Nilgris with sample cultivators.

(vi) Chi-square Analysis

The primary data collected from the tea cultivators are tabulated for analysis and interpretation. The data analysed and interpreted are tested by using the chi-square test.

The chi-square test is applied in statistics to test the goodness of fit to verify the distribution of observed data with assumed theoretical distribution.

It is defined as

\[ \chi^2 = \frac{\sum (O-E)^2}{E} \]

Where

\(O =\) Observed frequency

\(E =\) Expected frequency

1.12 Limitations of the Study

The following are the important limitations of the present study.

- The present study covers Tamilnadu, particularly Nilgri District.
- Lack of adequate primary data and some respondents were not willing to give correct and complete information about the production and marketing of tea in Tamilnadu.
- Inadequate secondary data about the export prices and prices of tea in Tamilnadu.
- Assistance was studied only for five years as Tea Board of Tamilnadu maintains data only for the last five years.
- The period of study is also limited.
- Trend value of only 10 years of average sales is calculated.
1.12. Chapter Schemes

The result of the study are presented in the following chapters.

The first chapter entitled “Introduction and Design of the Study” exhibits introduction, statement of the problem, objectives, methodology and limitations of the study.

The second chapter entitled “History and Functions of Tea Board” exhibits history, objectives, functions and organization structure of Tea Board.

The third chapter entitled “Assistance Provided by Tea Board” exhibits types of assistance provided by Tea Board.

The fourth chapter entitled “Tea Industry in Different Countries” exhibits, tea industries in different countries, world tea cultivation area, world tea production and world tea export.

The fifth chapter entitled “Tea Industry in India” exhibits history of tea in India, types of tea, benefits of tea, production process of tea, production, marketing and export of tea from India.

The sixth chapter entitled “Tea Industry in Tamilnadu” exhibits origin of tea in Tamilnadu, production and marketing of tea in Tamilnadu.

The seventh chapter entitled “Analyse the Role of Tea Board in the Production and Marketing of Tea in Tamilnadu” exhibits types of assistance provided by Tea Board of Tamilnadu to cultivators and tea manufacturers and analyse the impact of assistance in production and marketing of tea in Tamilnadu.

The eighth chapter entitled “Findings and Suggestions” exhibits suggestions for improvement in the functioning of Tea Board for the development of Tea Industry.