

Indian Tea Scenario

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Abstract- World tea production reached 4.73 million tonnes in 2008. At the international level, China, with 28.9 per cent share of the total world tea production, dominates the market. In 2010 world tea production reached 1738.41 m kg. India was the market leader with regard to production and consumption until 2005. At present, India is the second largest producer of tea in the world, and produces around 972.77 million kilograms in 2008-09 as against of 945.27 million kgs in 2007-2008. Total export of tea from India has estimated at 183.99 million kgs valued at Rs.2274.74 crores with a unit price realization of Rs. 123.64 per Kgs during 2008-2009. As against this 185.32million Kgs valued at Rs, 1888.68 crores with a unit price of Rs. 101.91 per Kgs estimated in 2007-2008. The tea industry accounts for the employment of more than 2 million people in India. India is the largest producer and consumer of black tea in the world. India produces all the three types of tea CTC tea, Orthodox tea, and Green tea, wherein CTC tea accounted for 88% of total output in CY 2010, while orthodox tea comprised 10% and the green tea accounts just 2 percent of the total production.

Index Terms- Indian tea, tea export, volume of export, production, productivity of tea

I. INTRODUCTION

Tea industry in India is about 180 years old and occupies an integral place in the economy of India. India has retained its leadership in the production of tea in the world until 2005. India is also the largest consumer of tea in the world. In India, tea industry is one of the oldest agro-based well-organized industries. The tea industry sees fluctuating trends due to agricultural nature of the operations, long gestation periods and unstable prices of tea, which are not likely to undergo any changes in the future. In the past, tea prices had shown brief periods of boom followed by longer periods of depression. Tea industry in India is facing a numeral problems like ageing tea bushes, high cost of production, price fluctuation etc. This situation can cause danger to the prospects of tea plantation in the region.

II. HISTORY OF TEA INDUSTRY IN INDIA

Tea is grown in North and in South India. The cultivation and brewing of tea industry in India has a long history of application of traditional system of medicine and for consumption. Research shows that tea is indigenous to eastern and northern India, and was cultivated and consumed there for thousands of years. In the early 1820s, the British East India Company began large-scale production of tea in Assam. In 1837, the first English tea garden was established at Chabua in Upper

Assam; in 1840, the Assam Tea Company began the commercial production of tea in the region and in 1850s, the tea industry rapidly extended to other parts of the country, at which point a large tracts of land converted for mass tea production. Today, India is one of the largest tea producers in the world, though 70% of tea is consumed within India itself. A number of renowned teas such as Darjeeling tea are also grown exclusively in India. By the turn of the century, Assam became the leading tea-producing region in the world.

However, due to certain specific soil and climatic requirements its cultivation was confined to only certain parts of the country.

Tea is grown in 16 Indian States, of which Assam, West Bengal, Tamil Nadu and Kerala account for about 96 per cent of the total tea production. About 78% of the country's total area under plantation is located in North East India. The teas originating from Darjeeling, Assam and Nilgiris are well known for their distinctive quality worldwide over and tea exports contribute significant amount of foreign exchange into the country.

Further the regions which are associated with small business to this industry are Karnataka, Tripura, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur Sikkim, Nagaland, Meghalaya, Mizoram, Bihar and Orissa. The tea industry in India includes small and big growers and government plantations. Small tea growers in India are economically and socially susceptible as they are mostly marginal farmers. Many of the small farmers do not have rights over the land they cultivate. For the last two decades, Indian tea industry has witnessed many structural changes. Some of the problems faced by the tea industry in the recent years are crises in the tea industry, abandoning tea estates, low productivity, low profit and low export.

Assam is the only region in the world that has its own variety of tea, called *Camellia Assamica*. Assam tea gives a malty sweetness and an earthy flavor, as opposed to the floral aroma of highland (e.g. Darjeeling, Taiwanese) teas. The tea industry developed by the British planters brought in labour from Bihar and Orissa and their descendents form a significant demographic group in the state.

This industry is now considered as valuable asset to the nation. Plantation industry is a branch of agriculture in the border sense. The number of tea producing countries has been increasing since 1950 and at present there are more than 80 such countries in the world, India occupies the first place in terms of area.

III. INDIAN TEA SCENARIO

The industry had also faced the problem of steep decline in prices during 1999 to 2006, which brought out the susceptible areas and these areas need to be addressed for guarding against reoccurrence of such eventualities and to achieve sustainable global competitiveness and livelihood to millions of workers employed in the industry. Around 130 tea gardens closed, abandoned or suspended their operations for some time due to this recession of which majority of tea gardens have reopened with the gradual improvement in tea prices from 2008 onwards. The decline in the prices has mainly been due to strong growth in supply in the face of sluggish demand. The tea industry faces the fluctuating affinity and other related problems and these problems are not doable to endure any changes.

Union Commerce and Industry Minister Anand Sharma announced that the Tea Board of India would take up rehabilitation of nearly 10,000 hectares of tea plantation in the Kangra district of Himachal Pradesh. He also announced a 250 acre organic tea project. "A joint team of Tea Development Board, Vice-Chancellor of Himachal Pradesh Agriculture University, Palampur, and Director, Institute of Himalayan Bio-

Resource Technology visited the tea growing areas of Himachal in December, 2009, to assess the potential and submit proposals for revival of the tea industry in the State. They have come up with some concrete proposals and we have decided to implement them in letter and spirit which would benefit farmers from across the region in the State," Mr. Sharma said.

For the expansion and revival of tea plantation, the union minister has said that 10,000 hectares of land being recognized in the region. In addition to this, 250 acres of land would be used for organic tea plantation project. It is expected of fetching very high price in the international market.

In 2008, a sizeable quantity of Kangra tea was directly exported to Germany at an average price of Rs.605 per kg against an average price of Rs.98 per kg in Kolkata auctions. Hence, Kangra tea could have a distinct identity and tap the niche markets of Europe and United States along with the traditional markets of Kenya, Egypt, Iran and Pakistan. The state government is identifying appropriate entrepreneurs for setting up plantation companies' partnership with local farmers to restart the abandoned tea growing areas.

Table: 1. Production, Import & Exports of tea in India and domestic consumption

The position of production, import and export of tea and its domestic consumption in India during the last 13 years is given in the table below: *In million kgs (mkgs)*

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production	810	874	826	847	854	838	878	893	946	982	986	981 (E)	979 (E)	966 (E)
Import	3	9	10	13	17	25	10	31	17	24	16	20	25	20
Total availability	813	883	836	860	871	863	888	924	963	1006	1002	1001	1004	986
Export	203	210	192	207	183	201	174	198	199	219	179	203	198	193
Domestic consumption	597	615	633	653	673	693	714	735	757	771	786	802	819	837
Total absorption	800	825	825	860	856	894	888	933	956	990	965	1005	1017	1030
Surplus(+)/ Deficit(-) of availability vis-à-vis absorption	13	58	11	0	15	(-) 31	0	(-)9	7	16	37	(-)4	(-)13	(-)44
Cumulative overall surplus	13	71	82	82	97	66	66	57	64	80	117	113	100	56

Source: Tea Statistics, E – Estimated

During the period from 1997 (start of the Ninth Five Year Plan) to 2010 (Third Year of the Eleventh Five Year Plan), the overall production of tea in India has increased by 19 per cent. The domestic consumption of tea has also been increasing gradually. On the other hand, the export of tea has been stagnant during this period and has shown declining trend after 2008. This

has led to an overall surplus of 56 m kgs tea in the Indian market as of 2010. Tea Board acknowledged that the cause for surplus tea was excess supply over demand. It further stated that tea being perishable item and the demand – supply being estimated for certain period, this surplus or excess supply over demand remained in the trade chain and utilised by the absorption at the

lower price. The decline exports despite surplus situation is also connected with the fact that cost of production of tea in India is reasonably high, as a result the tea price is higher in international market compared to other tea exporting countries, at the same time the poor quality of tea is also accelerating the situation. According to Tea Board, the surplus supply condition is expected to continue during main part of Eleventh Five Year Plan. It would be indispensable for them to restrict uncontrolled

extension of tea area and to focus on enhancing the productivity in order to improve returns, reducing the unit costs through productivity gains, building capacity of small growers, streamlining marketing channels and improving infrastructure in the Eleventh Five Year Plan.

Table: 1.1 Productivity of tea in India

Year	Productivity In million kgs (mkgs) All India	Total area under tea (ha) All India	Area containing tea bushes aged over 40 years (ha)		
			NI	SI	All India
1997	810	434294	128121	54484	182605
1998	874	474027	128582	54647	183229
1999	826	490200	129968	55271	185239
2000	847	504366	129320	53777	183097
2001	854	509806	136068	54034	190102
2002	838	515832	140642	54168	194810
2003	878	519598	141422	54243	195665
2004	893	521403	141474	54471	195945
2005	946	556807	147982	54958	202940
2006	982	567020	180099	58230	238329
2007	986	578460	182050	58480	240530
2008	981	579353 (E)	188250	59360	247610
2009	979	NA	-	-	-
2010	966	NA	-	-	-

Source: Tea Statistics, Tea Board, E-Estimated (NI- North India, SI- South India)

Productivity is defined as yield of tea grown per hectare. The productivity of tea in India has declined over the years as can be seen from the table. The above table shows that there is stagnation in productivity during the last four years despite of increase in area of tea plantation. One of the primary reasons for low productivity and substandard quality of tea produced in the country was ageing plantations. The above mentioned statistics show that in 1997 out of the total area of 4,34,294 hectares under tea cultivation, 1,82,605 hectares (42 per cent) of tea bushes were not economically feasible as they were more than 40 years old. Moreover the area under unproductive tea bushes has increased from 1, 82,605 to 2, 47,610 hectares indicating increase of 36 percent. Consequently the area of commercially unproductive area has increased from 42 percent in 1997 to 57 percent in 2008.

The unproductive area would continue to remain commercially unproductive and require replantation/replacement planting for humanizing the productivity. It has been observed that the percentage of replantation/replacement planting in the country as a whole was appallingly low and less than two percent and this status of replantation/replacement planting in south India was insignificant. At this rate, clearance of the backlog for replanting/replacement planting would take many more years. This would have an adverse impact on the productivity of tea plantations in the

country. This indicates that increasing age of tea bushes with slow rate of replanting would pose a high risk to tea industry in future.

IV. VARIETY OF TEA PRODUCED IN INDIA

A. North Indian Tea

Assam is the largest producer state of tea in India and it is divided into Brahmaputra valley and the Surma (Borak valley). This region is famous for their full, gutty, bright and pungent/brisk liquors with unusual 'creaming down' quality. The orthodox variety has abundance bright, golden and chunky, tip from this state. West Bengal offers teas from Darjeeling, Dooars and Terai and the Darjeeling is known as "The Champagne of Teas", cultivated on the slope of the Himalayas, have unique, delicate flavor and character. No one has been able to match "the Darjeeling flavor". No wonder the world record of Rs. 5001 per Kg. is held by Darjeeling's Castleton tea. The teas from Doors and Terai are well made neat in appearance and have strong brisk liquors and these varieties are very much popular in the internal market. The state of Tripura is also produces orthodox and CTC teas. A different variety of tea at a small quantity comes from small growers of Kangra Valley in the picturesque Himachal Pradesh. This valley is famous for its green teas which is the

specialty of the region. Dehradun in Uttarakhand contributes its own variety of tea to Indian quality.

B. South Indian Tea

The quality of south Indian teas has its own distinctive characteristics. Teas from the Nilgiris possess delicate flavour along with strength and brightness. The produce of high range has its own specialty. The CTC production from all the Southern states is tuned to producing a large percentage of fine grades. The popularity of South India CTCs is attributed to good leaf appearance and strong, bright and brisk liquors. Amongst the fine variety of teas produced in India, South enjoys a place of pride. Today tea cultivation is extending to new regions like Orissa, Meghalaya, and Arunachal Pradesh and produce teas of flavoured Orthodox variety. They will further add to the vast variety of Indian Tea in the years to come. India's greatest agro asset is tea, which has its vast variety and superb quality.

In south, tea is produced throughout the year. In North India tea production starts in the late March and ends in early December. In 2006, South India produced 213 million kgs of tea accounting for about 23.71 percent of the total production. It owns 73,424 tea estates, which cover 120 thousand hectares of land. The share of tea production in Tamil Nadu, Kerala and Karnataka are 139 million kgs, 69 million kgs and 5 million kgs respectively.

Tea industry provides employment opportunities to people living in rural as well as in urban areas as it is highly labour intensive industry.

In South India, most of the small tea growers are located in places like Nilgiris in Tamil Nadu, and Kottayam and Idukki in Kerala. The problems and situations of small tea growers are quite different from other big growers. Big growers own their own factories to manufacture tea but small growers have to depend on big tea estates or bought leaf factory to sell their green leaf. In recent years, some small growers have been encouraged to go for their own factories on a cooperative basis and the Tea Board and the State Government have provided financial help for this purpose.

The small tea growers whose area under tea is up to 10.12 hectares or less are considered economically poor for the following various reasons-

- A very high percent tea bushes are overage
- Total grant area is not fully utilized
- Lack of technical knowhow and non accessibility of planning material
- Non applicability of fertilizer and manure

- Agricultural practices for tea cultivation have not been used properly
- No proper machinery is used at the time of green leaf processing
- Due to inferior quality, no standardized price is paid and depended on other crops for their livelihood.

To improve the quality of the small tea growers the state governments in South took initiative in support of the success of cooperative factory and series of cooperative factories are constructed. The cooperative factories carry out the distribution of manure etc. The Central Service Society at Coonor purchase

tea manure mixture and distribute it to the small growers members through the respective cooperative factories.

In India, plantations account for 0.8 percent of the total cultivation land. They also contribute 5 percent to the national income. Plantation employs a large number of labour force especially women workers which is higher compared to other industries. This industry is the second largest foreign exchange earner and exported to about 85 countries. In addition, this industry also helps in the development of other industries and provides indirect employment in various sectors like road construction, transportation, manufacture of plywood chest, aluminium foil, tin plate, warehouses, metal fittings, paper, cardboard, fertilizers, insecticides, pesticides, coal, iron, steel, etc. Today it provides to the common man a pleasant and stimulating non-alcoholic drink.

V. BOUGHT LEAF FACTORIES IN SOUTH INDIA

The factories known as 'Bought Leaf Factory' are usually run by private sectors. They extend help to all small growers in South India, as the cooperative factory service is limited only to member growers. The bought leaf factories are mostly in the nature of partnership or public limited firms. Bought leaf factories have existed in South India since 1963 - 64 and at present the number of bought leaf factories is more than 110. Usually they purchase green leaf from the small growers.

VI. ROLE OF UNITED PLANTERS ASSOCIATION OF SOUTH INDIA (UPASI)

One of the main objectives of United Association of South India is to improve the assortment of small tea growers in south by rendering various services. With the collaboration of United Association of South India (UPASI) the Tea Board is rendering services to small growers like imparting training in modern method of tea culture, arranging for supply of clonally tea plants at subsidized rate and also enlightening the small growers about the scientific technique of tea cultivation.

The Tea Board grants financial support in the form of loan for the purchase of tea machinery and for building of cooperative tea factories and it has been financed by the Tea Board and the State Government on the basis of 50:50 for the construction of tea factory. The Tea Board grants financial support to the UPASI and the UPASI extends necessary scientific advice to small tea growers through its research centres, existed at Perermede (Kerala), Cinchona (Tamil Nadu) and the substations at Vandiperiyar and the advisory centres at Munnar and Mepadi (Kerala). The Tea Board provides this service free of charge to members of UPASI and the small growers. To demonstrate modern scientific methods to the small tea growers 10 demonstration plots were also set up 6 in Nilgiris in Tamil Nadu and 4 in Kerala by the Board in collaboration with the UPASI and the respective State Governments.

VII. STRUCTURE OF THE TEA INDUSTRY

Tea plantation in India originally developed and initiated by British enterprise. It started on a commercial level in India

after the British monopoly of trade in tea with China abolished in 1833 and wild tea plants, indigenous to Assam, found in the early part of the 19th century.

Cultivation and Manufacturing of tea

Manufacturing of tea is a very elongated process. The preparation of 'seed *bari*' to packing of tea, the entire practice takes some years for the entrepreneur to get some profit. Before transplanting the seedlings in the field, they are to be grown-up in the nursery for one or two years, the transplantation of the young plants requires leveling of land. For the strong development of tea plants, proper drainage system, trees for shade, proper application of manure and fertilizers, control of pest attacks and pruning and plucking are essential maneuver for tea industry. The manufacturing of tea goes through different stages - i) withering ii) rolling, iii) fermenting iv) firing or drying, v) shifting and grading and vi) packing.

There are organizations of traders', producers', and picketers, in tea industry in India. The Indian Tea Association of producers' established in 1881 and its membership opened to proprietary concerns, partnership firms, public and private limited companies and sterling companies' these are rupee companies.

All tea estates of North India are the members of this Association. Consequently, Tea Association of Indian and Bharatiya Cha Parishad came into existence. These associations of tea estates were formed by the Indian planters who purchased tea estates directly from the European tea planters or represented through Indian managing agents controlling the affairs of the

companies and the tea estates of North Indian are the members of these Associations.

United Planters Association of South India (UPASI) established for South Indian tea estates. The association provides all helps to its member gardens in procuring ration quote at reasonable rates from the state, in recruiting labour, providing coal, cement and fertilizer at subsidized rates and spreading the result of scientific and technical research. It also acts as representatives for tea planters to the government bodies and committees.

VIII. TEA EXPORTS FROM INDIA

India exports tea to about 85 countries of the world. Which are traditional markets and some are new markets. North India comprise almost one third of total tea exports from India while the rest by the South India.

India generally exports tea to United Kingdom. It exports through London auction. Moreover, forward contract, private sale and direct export are very famous. Most of the sterling companies are having head office at London; prefer either to place tea in London auction or to sell it in the form of forward contract and direct exports. Another feature of export auction is the increase in the quantity of re-exports from the United Kingdom to other importing countries.

**Table: 1.2EXPORTS OF TEA FROM INDIA
(Financial Year 1990-1991 to 2008-2009)**

Year	Quantity (M kgs)	Value (Rs crs)	Unit price Rs 1 kg
1990-1991	199.17	1071.10	53.78
1991-1992	216.45	1212.27	56.01
1992-1993	180.69	1058.70	58.59
1993-1994	161.17	1080.10	67.02
1994-1995	152.16	986.41	64.83
1995-1996	169.47	1244.52	74.31
1996-1997	169.04	1301.46	76.99
1997-1998	211.26	2003.15	94.82
1998-1999	205.86	2191.84	106.47
1999-2000	192.44	1932.66	100.43
2000-2001	203.55	1889.79	92.84
2001-2002	190.00	1695.79	89.25
2002-2003	184.40	1665.04	90.29
2003-2004	183.07	1636.99	89.42
2004-2005	205.81	1924.71	93.56
2005-2006	196.67	1793.58	91.19
2006-2007	218.15	2045.72	93.78
2007-2008	185.32	1888.68	101.92
2008-2009	190.64	2381.79	124.94
2009-2010	213.43	3038.69	142.37

Source: Tea Board of India

During the period 1990-1991 to 2009-2010 the overall export from India was not very satisfactory, it has increased to only 7.15 percent. However, in the same period the export value has significantly increased to 183.70 percent and this increased

value can be attributed to unit price of tea which has increased to 164.73 percent during the period 1990-1991 to 2009-2010.

Table: 1.3 Analysis of growth of exports of tea from India and value of exported tea (1990-1991 to 2001-2010)

Decade	Compound growth rate of exports	Compound growth rate of value of exported tea	Compound growth rate Unit price Rs 1 kg
1990-1991 1999-2000	-0.38%	5.31%	7.18%
2000-2001 2009-2010	0.52%	5.41%	4.86

Table: 1.4 Overall 20 years

Decade	Compound growth rate of export	Compound growth rate of value of exported tea	Compound growth rate Unit price Rs 1 kg
1990-91 to 2001-10	0.36%	5.64%	5.25%

The tea industry experienced ups and downs in its growth of exports and value of export during the period of 20 years (1990-91 to 2000-10). The industry has been facing problems of fall in exports since the collapse of the USSR in 1991. The Soviet Union was the biggest buyer of Indian tea. In the first decade i.e. 1990-91 to 1999-00 the compound growth rate of export was negative with -0.38 percent, although the growth rate of value of tea has shown much higher rate with 5.3 percent which was due to high growth rate of unit price with 7.18 percent. During the second decade, growth rate of export was much satisfactory as it increased to 0.52 percent but value of exported tea only marginally enhanced to 5.41 percent as the unit price Rs 1 kg declined to 4.86 percent. Hence it can be attributed that even though the unit price Rs 1 kg declined, it did not affect the value of exported tea due to the increase of quantity of tea. It can be seen from the analysis that there is an indirect association between the growth of export and value of export.

The overall 20 years, compound growth rate of export in India for 1990-91 to 2001-10 was 0.36 percent which was much lower than the overall growth rate of value of exported tea of 5.64 percent and the unit price was 5.25. Hence it can be concluded that the increase in value of exported tea was due to increases in unit price Rs 1 kg not due to increase in quantity.

The growth rate of India's tea export can be examined in terms of quantity and value. Value of exports increases either through increase in quantity of export or price of export or both. It is important to find out the relative importance of change in price of export and change in quantity of export in the overall change in value. India's tea export growth rate in terms of quantity and value is estimated by calculating the ratio of both export growth rate in terms of quantity and value and multiplied it by 100 (CV value / CV quantity * 100). It gives whether value of export increased due to increase in price or quantity or both.

If the ratio is less than 100, for that commodity, the increase in value has been less than that of quantity and hence the increase in value of exports has been more due to increase in quantity than increase in price. If ratio is more than 100, for that commodity the increase in value of exports has been more than that of quantity and hence the increase in value of exports has been more due to increase in price than increase in quantity. This is beneficial for the economy.

Table: 1.5 Analysis of CV Export value/ CV Export quantity*100 of Tea in India (1990-1991 to 2001-2010)

Year	The CV of export quantity	The CV of value of export	CV Export value/ CV Export quantity*100
1990-1991 to 1999-2000	14.7%	45.8%	311.56
2000-2001 to 2009-2010	6.8%	26%	382.35

Analysis of co-efficient of variance (CV) of export in quantity and value of tea in India is calculated in the above table. The table shows that, the CV value of export in terms of quantity is 45.8 per cent and 26 per cent during 1990-1991 to 1999-2000 and 2000-2001 to 2009-2010 respectively and the CV of quantity of export during the same period 14.7 percent and 6.8 percent respectively.

The results show that in two decades (1990-1991 to 1999-2000 and 2000-2001 to 2009-2010) growth rate of export in quantity declined however, the growth rate of export in value increased. The ratio values during 1990-1991 to 1999-2000 and

2000-2001 to 2009-2010 were 311.56 percent and 382.35 respectively. The ratio values were more than 100 in both decades. It happened due to increase in price per unit of export quantity of Indian tea. Though this may be good for a short duration from the economic point of view, but in the long run it is likely to have adverse effect on the tea exports as other countries will be able to sell better quality tea at a lesser price.

Though export market of Indian tea is losing its position, the next substitute will be domestic market, which has a trend in increase in demand. The tea producers should try to understand market demand which is very important for long term sustainability of the industry; since 80 percent of total tea produced in the country is consumed in the domestic market itself.

The Indian tea industry is facing threats on account of its high cost of production. The threat is particularly severe in the international field where India is now a distant fourth with a global share of 12 per cent in 2009 and after Kenya, China and Sri Lanka.

These facets on the Indian tea industry has been highlighted in a recent status paper published by the Indian Tea Association which says that over the years, India has slipped to the fourth position in world tea exports as its competitors like Kenya and Sri Lanka, serviced by well-organised low-cost high quality small-holder sector is outdoing India.

Value added exports

With volumes dropping, the emphasis now should be on value-added exports as these teas realise better price. Emphasis should also be placed on enhanced production of orthodox teas, the paper says. Exports are estimated at 190 million kg against 198 million kg in 2009 and 203 million in 2008.

IX. MOST IMPORTANT FACTORS OF EXPORT FROM INDIA

India being the largest consumer of tea, it consumed 829 thousand tonnes in 2010. About 182.7 thousand tonnes tea was exported from India which brings about \$ 400 million as foreign exchange for the country per annum. Tea industry is a crucial source of revenue for the country.

The demand for tea in the international market is determined by the various standards, which vary from country to country. These days' consumers are more concerned about their health and try to go for a quality tea influencing the price of tea in the global market. The high demand for organic tea from European countries and the demand for green tea from other countries can be considered as specific preferences of export.

The demand for packet tea in the international market is more as it describes the quality and procedures of tea production and their environmental consciousness. The price and quality are also important to the export of Indian tea. The low price tea from countries like Sri Lanka, Kenya and Indonesia badly affected export from India. Some other factors challenging the export potential of Indian tea include various tariff and non-tariff measures imposed by some tea importing countries, change in consumer preferences, lower production of orthodox teas which have a larger demand worldwide, quality problems and the higher cost of production and prices of Indian tea.

The major issues liable for poor performance of India's tea exports which are identified in the present study are sluggish increase in productivity, slow growth of area under tea cultivation, rising domestic demand, incapable to compete with major tea exporting countries, increase in world supply of tea compared to world demand, lost of traditional tea market and more attraction towards domestic market compared to international market.

More than 70 percent tea is consumed within the country itself. Growing domestic demand in India, improved the comparative profitability of domestic sales against exports. India is still the largest consumer of Black Tea in the world with domestic consumption accounting for almost 80 per cent of the total tea production in the country. Since 2000, domestic consumption has shown a steady and positive growth. The major tea-consuming states in India include Maharashtra (87 million kilograms), Uttar Pradesh (82 million kilograms), Gujarat (64 million kilograms), Rajasthan (58 million kilograms) and Madhya Pradesh (42 million kilograms) the average annual per capita consumption of tea in India diverges significantly from region to region. It varies from a maximum of 1.2 kilograms in Punjab to a minimum of 0.36 kilograms in Orissa.

The Indian domestic tea market is mainly a loose tea market, comprising around 60 per cent of the total tea consumption; however, over the past few years the demand has shifted from loose tea to branded packet tea, as a result the growth of packet tea has increased. Big companies sell branded tea in loose and packet. Since 1985, the branded tea sector has recorded good growth and its share in the total tea market is currently around 40 per cent. Most of the big tea groups such as Tata Tea and Hindustan Lever Limited captured the tea market as branded packed tea producers and claimed that they offer good quality tea at reasonable prices. However, small local producers in the unorganized sector are major contributors in loose tea markets.

Table: 1.6 Estimates of (Internal) Consumption and Per capita consumption of Tea in India

Year	Domestic consumption (M kg)	Per capita consumption (Grammes Per Head)
1991	511	600
1992	524	606
1993	537	606
1994	550	608
1995	562	610
1996	580	617

1997	597	625
1998	615	633
1999	633	642
2000	653	652
2001	673	654
2002	693	663
2003	714	672
2004	735	681
2005	757	691
2006	771	693
2007	786	696
2008	802	701
2009	819	706
2010	837	711

Source:Tea Board of India

India is still the largest consumer of Black Tea in the world with domestic consumption accounting for almost 80 per cent of the total tea production in the country. The pattern of domestic consumption has shown a sturdy and positive growth since 1991.

From the above table it was observed that during the period 1991 to 2010 tea consumption in India has significantly

increased from 511 M kg to 837 M kg showing an overall increase of 63.80 percent. During the same period per capita consumption (grammes per head) increased from 600 grammes to 711 grammes with an overall increase of 18.6 percent.

Table: 1.7 Area, Production, Yield, Export, Volume of export, Unit value and Retention 1990-2010 (India)

Year (1)	Area (Th.ha) (2)	Production (M.kgs) (3)	Yield Kg/ha (4)	Export (M.kgs) (5)	Value of export (Cr.Rs) (6)	Unit value (Rs/kg) (7)	Retention (3-5) (8)
1990	416	720	1731	209	1025	51.05	511
1991	421	754	1794	202	1120	55.45	522
1992	420	703	1692	169	971	56.05	534
1993	418	760	1794	173	1132	65.19	587
1994	425	752	1742	149	9677	64.64	603
1995	427	756	1819	167	1190	71.24	589
1996	431	780	1768	160	1207	75.44	620
1997	434	810	1770	201	1721	85.79	609
1998	474	874	1809	207	2238	107.08	667
1999	490	825	1865	190	1902	100.61	635
2000	504	846	1844	204	1827	89.41	642
2001	510	853	1685	180	1602	89.08	673
2002	512	860	1669	190	1720	90.05	670
2003	516	865	1675	195	1796	92.15	670
2004	520	875	1683	200	1855	92.95	675
2005	525	875	1685	205	1917	93.05	670
2006	526	880	1711	200	1896	94.08	680
2007	530	895	1735	210	2001	95.25	685
2008	540	900	1741	207	1972	95.75	688
2009	550	950	1736	200	1925	96.25	750
2010	560	900	1785	205	1982	96.07	795

Table: 1.8 Analysis of growth of area under tea and production in India- (1990 to2010)

Decade	Compound growth rate of area under tea	Compound growth rate of production
1990-2000	1.93%	1.62%
2001-2010	0.93%	0.53%

Table: 1.9 Overall 20 years

Decade	Compound growth rate of area under tea	Compound growth rate of production
1990-2010	1.49%	1.12%

Compound annual growth rates were calculated for area under tea and production of tea in India for the period 1990 to 2010. The analysis is made for two decades from 1990 to 2000 and 2001 to 2010. It can be seen from the table that the growth rates of area under tea in India for the decade, i.e. 1990-2000 and 2001-2010 were 1.93 percent and 0.93 percent and during the same period growth rates of production were 1.62 percent and 0.53 percent respectively. In the decades 1990-2000 and 2001-2010 increase in production and area were positively related. The area under tea has declined from 1.93 percent (1990-2000) to 0.93 percent (2001-2010) and production has also reflected the same trend, production has declined from 1.62 percent to 0.53 percent. The overall 20 years growth rates of area under tea and production in India for 1990-2010 were 1.49 percent and 1.12 percent respectively. It shows that relation between area under tea and production associated with each other.

Table: 2 Decade 1990-2000 to 2001-2010 resort

Decade	Compound growth rate of production	Compound growth rate of exports
1990-2000	1.62%	-0.24%
2001-2010	0.53%	1.30%

Table: 2.1 Overall 20 years

Decade	Compound growth rate of production	Compound growth rate of exports
1990-2000 To 2001-2010	1.12%	-0.09

In the first decade i.e. 1990-2000 although the growth rate of production in India was 1.62 percent, the growth rate of export was negative (-0.24 percent) compared to that of production. However the negative growth of export was due to collapse of Russian market in early 1990s and increased demand for high quality and organic tea. The growth rate of production in the decade 2001-2010 has reduced to just 0.53 percent, however the export has augmented to 1.30 percent. Due to fall in exports and crash in the market, the producers opted to cut in production and laid more emphasis on high quality and organic tea to compete in the international market and export has shown some positive sign. The overall 20 years growth rate of production in India was 1.12 percent which was much higher than the growth rate of export as export has shown negative growth during the same period.

Table: 2.1 Growth of area (th.ha), production (M kgs), export (M kgs), yield in (Kg/ha) and Value of export (Cr.Rs) of tea in India during 1990-2010

Sl No.	Particulars	Year		Percentage increase or decrease over 1990	Average Annual growth rate (%)
		1990	2010		
1	Area (th.ha),	416	560	34.62	1.74
2	Production (M kgs)	720	900	25.00	1.25

3	Export (M kgs)	209	205	-1.92	-0.09
4	Yield (Kg/ha)	1731	1785	3.11	0.15
5	Value of export (Cr.Rs)	1025	1982	93.36	4.67
6	Unit value (Rs/kg)	51.05	96.07	88.18	4.40

During the period the (1991-2010) the above comparative study indicated that percentage of increase of area under tea was significant with 34.62 percent with an average annual growth rate of 1.74 percent and the tea production was also considerably high with 25.00 percent with an average annual growth rate of 1.25 percent. However, during the same period the overall export from India declined to -1.92 percent with a negative growth rate of -0.09 percent, even though the export value increased to 93.36 percent with an annual growth rate of 4.67 percent. The increase of export value was due to rise of Unit value (Rs/kg), since the unit value (Rs/kg) was appreciably high with 88.18 percent with an annual growth rate of 4.40 percent.

X. CONCLUSION

Tea industry of India is going through a very difficult phase. The industry has seen many structural changes over the last two decades (1990-2010) or so.

The price and quality also plays an important role in determining export from a particular country. Since the demand for tea is very high within the country itself, this can be looked upon as one of the reasons for the slow growth of export from India. Growing domestic demand in India enhanced the relative profitability of domestic sales against exports. India is still the largest consumer of Black Tea in the world. Since 2000, domestic consumption has shown a steady and positive growth.

However, the major factors responsible for poor performance of Indian tea industry are high cost of production, the old age of tea bushes, lack of infrastructure, high price, labour problem, inefficient Tea Board, high labour cost, etc. Unable to face competition in the international market, it is slowly losing its traditional buyers and the India's liberalization phase has been less successful in revitalizing the tea growers. The rising competition at domestic as well as in international front has deepened the crisis of tea industry of India and has lost its position in the international market due to its high cost and poor quality.

REFERENCES

- [1] Tea Statistics ,2005, J Thomas & Company Pvt. Ltd and www.indiateaportal.com
- [2] Kadavil Saji M Indian Tea Research,
- [3] IGIDR Proceedings/Project Reports Series PP-062-21
- [4] Nagoor Dr.B.H., 2009, Performance of India's Tea Exports: A Comparative Study of Major Tea Exporting Countries of The World
- [5] THE HINDU, 2010online edition of India's National news paper
- [6] Banerjee Gd and Baneerjee Srijeet, 2009, Global Tea industry in Transition, Structural Development in tea Industry, Tea Trade; Dimensions and Dynamics ABHIJIT PUBLICATIONS, DELHI-110094,
- [7] Jain Shweta, 2011, INDIAN TEA INDUSTRY - AN ANALYSIS USING CONCEPT OF FORWARD ENGINEERING, ABES-IT Group of Institutions
- [8] The Tea Industry in India A survey Department of Economic analysis and research NABARD 2005
- [9] Annual Report 2008-2009 commodity Boards and other development Authorities
- [10] NEDFi Databank, Tea in Assam 2009, Tea industry of Assam, 27th April 2011
- [11] Bhowmik S K, Labour and Social Issues in Plantations in South Asia p147-150
- [12] Mitra Neelanjana, Nov. 30, 1991 ,Economic and Political weekly Indian Tea Industry: Problems and Policies Vol. 26, No. 48
- [13] Majumdera A. Basu, Beraa B. and Rajanb, A. 2010, Tea Statistics: Global Scenario. Inc. J. Tea Sci. 8 (1): 121-124
- [14] Current Tea Scenario Indian tea association central budget 2011-12 pre-budget memorandum: issues relating to tea industry
- [15] Rao K B K, Jul. 13, 1974 India and the World Tea Economy Source: Economic and Political Weekly, Vol. 9, No. 28
- [16] Tea statistics –various issues, Tea Board of India, Under Ministry Commerce and Industry, Government of India

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