CHAPTER X

SUMMARY AND CONCLUSION

The study was an overall critical in-depth analysis of the tea industry of Assam encompassing all major spheres of the vital plantation industry of the state. Tea is a way of life in Assam existing for more than 170 years and it pervades economic and socio-cultural aspects of the people of Assam.

Assam produced 52.35 percent of total production of tea in India and occupied 52.77 percent of total area under tea in India in 2002. The production of the state has been about 52 percent of India since 1951. Assam is the single largest tea belt in the World and known for its distinct liquorable quality all over the World. The Guwahati tea auction centre is the largest Indian tea auction centre. Tea industry employs about 6 lakh permanent labours alone and an estimated number of about 20 lakh people of Assam were directly or indirectly dependent on it. Tea industry is also a very important source of revenue for the state and total amount of tax collection of Rs. 122.48 crores in 1999-2000 constituted 13% of the total tax revenue of the state.

An objective analysis of the various aspects of this industry since its beginning in Assam with special emphasis since 1970-71 was expected to bring out vital performance parameters of the industry over the years, understand its problems and prospects, underlying causes of these, so that appropriate measures can be suggested for improvement.

The study was based on data collected since 1999 for the period 1970-71 to 2002-03 from various sources, the important ones being Tea Board statistics, Government of Assam Department of Taxes, sample tea estates and participants of Guwahati auction centre, R&D organizations on tea, labour unions and producer’s associations and others related to the industry with the help of questionnaire and structured interview. These were analyzed using various tools particularly time series analysis and management techniques to have an in-depth understanding of the tea industry of
Assam with regard its growth and development over the years and all other vital aspects associated with the industry.

10.1 Summary of findings and result of analysis

A brief summary of the findings and the results of analysis of the study are presented below.

10.1.1 Historical background of tea in Assam

The credit for discovery of tea in Assam goes to three persons—Beesa Gam, Maniram Dewan and Robert Bruce. It is quite possible that Maniram Dewan informed Robert Bruce about existence of tea plant in the vicinity of Beesa village, but it is not recorded by the British, and so it leads to controversy. The great son of Assam may not have got his due credit and this aspect needs further research.

10.1.2 Growth in area, production and productivity of Assam tea

The rise in productivity of Assam tea has been slowing down and in fact, it came down since 1999. In 2002, the productivity of Assam tea was lower than all India level and all major tea growing states viz. West Bengal, Tamil Nadu and Kerala. The productivity of tea in West Bengal has been steadily increasing since 1990 but it has come down in case of Assam in spite of a jump in the period 1992-1998.

The top three area and production wise tea districts of Assam were Dibrugarh, Sibsagar and Darrang. They were holding these positions since 1951 till 2002.

The yield of the largest producing district of Assam, Dibrugarh was also the highest followed by Lakhimpur and Darrang. But since 1999, the yield of Dibrugarh district has gone down significantly and at 1635 kg/ha stood fourth in 2002. The yield of Cachar tea has risen significantly over years from a low level and with 1609 kg/ha stood fifth in Assam in 2002.
The compound growth in number of tea estates in Assam and all India was nominal at 0.34 percent and 0.72 percent, and 1.02 percent and 0.40 percent respectively for the decades 1971-1980 and 1981-1990. However, as the official Tea Board statistics included the small tea growers since 1998, the growth rates of number of tea estates in Assam showed a massive jump to 62.49 percent during the decade 1991-2000 and also to a high of 11.26 percent for the overall 32 years period of 1971-2002. In reality, the growth in number of traditional tea estates is small.

In absolute terms, Assam added about 2576 ha annually during the 32 years period of 1971-2002 and was the largest contributor to North India and all India area under tea. The compound growth rates of area under tea in Assam for the last three decades of 1971-80, 1981-90 and 1990-2000 were 0.95 percent, 1.37 percent and 1.43 percent respectively, which were always higher than all India tea area growth rates for those periods except for 1991-2000. The overall 32year growth rate of area under tea in Assam for 1971-2002 at 1.17 percent was higher than all India growth rate of 1.07 percent.

The compound growth rates of productivity (Kg Made Tea Per Hectare) of Assam tea at 2.02 percent, 1.50 percent and -0.02 percent respectively for the decades 1971-1980, 1981-1990, and 1991-2000 were lower than the compound growth rates of productivity of all India level at 2.35 percent, 1.99 percent respectively for the first two decades. The growth rate of 1.03 percent of Assam tea for the 32year period of 1971-2002 was also lower than all India growth rate of 1.11 percent. The marginally higher growth rates in all India level were contributed by South India mainly but its growth rate also had shown much decrease the decade 1991-2000. The growth rates of Assam and North India were almost similar as Assam contributed major share of 68-70% of North India’s area and production.

The compound growth rates of production on Assam tea were 2.98 percent, 2.89 percent and 1.42 percent for the decades1971-1980, 1981-1990 and 1991-2000 respectively. The lower growth rate in 1991-2000 was due to voluntary curb in end season production due to fall in prices since 1999 and importance put in production.


of quality tea. The 32-year (1971-2002) compound growth rate of production in Assam was 2.21 percent, which was slightly higher than all India growth rate of 2.18 percent for that period. This slight edge was due to increase in area after inclusion of small tea growers since 1998, as the productivity growth rate of Assam tea was lower than all India level. During this 32-year period, Assam increased its production by about 7432 thousand kg per annum.

Since 1970s, there was a significant shift towards production of CTC tea from orthodox, which changed the product mix completely and in 2002 about 89 percent of total production of India was CTC type.

The production pattern was significantly seasonal and closely followed the geographical area distribution.

Out of ten tea districts of Assam, Dibrugarh was the largest one in area and production followed by Sibsagar, Darrang and Cachar. With inclusion of small tea growers in 1998, the compound growth rate of area under tea of Assam Valley tea estates for the 32-year period of 1971-2002 was a modest one at 1.36 percent while it was only 0.04 percent for Cachar. The growth rates for three largest important tea districts of Assam of Dibrugarh, Sibsagar and Darrang for this period were all about one percent; the highest among these was Dibrugarh at 1.43 percent. The growth rate of area under tea for Dibrugarh district was as high as 3.46 percent during 1991-2000, the major contributor being small tea growers.

Production of tea in Assam increased rapidly in the first two decades of 1971-1980 and 1981-1990 but declined in the decade 1991-2000 for most of the tea districts of Assam except for the districts of Dibrugarh, Sibsagar and Lakhimpur. In the first two decades, Darrang, Dibrugarh, Sibsagar, Goalpara and Cachar maintained compound growth rate of two to three percent and above. In the last decade, growth rate of Assam valley come down to 1.30 percent and important districts - Dibrugarh, Sibsagar, Darrang and Cachar registered growth rates of 1.14 percent, 2.91 percent, 0.34 percent and 2.52 percent respectively. During the 32-year period of 1971-2002,
the production of Assam valley tea estates grew at 2.19 percent and added about 6570 th kg made tea per annum in absolute terms. Dibrugarh (1.75 percent), Sibsagar (2.37 percent), and Darrang (2.10 percent) maintained steady growth rates. However, Cachar achieved a higher growth rate of 2.40 percent during this period.

During the period 1971-2002, the growth rate of productivity (Kg Made Tea Per Hectare) of Assam tea was highest for the decade 1971-1980 for almost all the districts of Assam except Cachar, the highest being for Goalpara (3.11 percent) and Sibsagar (3.08 percent). But the growth in productivity declined in 1991-2000 for all the districts of Assam except Cachar, which registered a very high growth rate. The growth rates were negative for the districts of Dibrugarh, Lakhimpur and Kamrup and were lower for other districts. For the overall period, Assam valley achieved a growth rate of 0.87 percent while it was a high one of 2.36 percent for Cachar. Sibsagar (2.30 percent) achieved the highest growth rate among Assam valley districts and other major districts of Dibrugarh and Darrang achieved 0.36 percent and 1.10 percent growth rates respectively.

Number wise the small tea growers constituted more than 97 percent but their contributions were slightly above 11 percent in both area and production of Assam (1999).

The large tea estates of Assam (above 400 ha) are the major contributors in production and occupy huge area. These tea estates, 0.77 percent in number, contributed 58.33 percent of Assam’s production and occupied an area of 55.74 percent in 1999. This above 200 ha- 400 ha category of tea estates (0.60 percent in number) produced 20.18 percent in an area of 20.56 percent. The medium sized (50-200 ha) tea estates (0.78 percent in number) contributed about 10 percent in both area and production.

Size category wise, among the different districts of Assam, Dibrugarh had the largest sized category of tea estates (above 400 ha) in area and production followed by Sibsagar, Darrang and Cachar (1999). In the large (above 200 ha to 400 ha) and
medium (about 100 ha to 200 ha) category of tea estates, Dibrugarh had the highest area and production followed by Sibsagar.

The tea industry of Assam had a large area under tea of 28.08 percent under old tea bushes (above 50 years) in 1999. The total area above 30 years of age was 48.07 percent of total area under tea in Assam. Only 25.97 percent area was in the high productive age group of 5 to 20 years and 12.94 percent area was under young tea (below 5 years) in Assam.

Among the tea districts of Assam, Dibrugarh had the largest area under old tea (over 50 years) at 31.61 percent followed by Sibsagar and Darrang at about 20 percent of that age group. These are the major tea districts of Assam. Dibrugarh, Sibsagar and Darrang, however, also had highest areas under youngish mature and young tens of that age group among the tea districts. The area under young tea in Cachar has risen significantly to the end of last decade.

10.1.3 Employment and productivity of tea labours

The percentage of labour of Assam tea industry to all India level has almost remained same at about 50 percent for resident and total labour (resident as well as outside permanent and temporary) for the 30 years period of 1971-1999 and for estimated number of bona fide dependents also at about 54 percent. Labour productivity as compared to all India level decreased over the years during this period.

The growth rates of resident labours for all Assam was a modest one at 1.24 percent for the 19 year period of 1981-1999 but it was higher than North India and all India level. In the major tea districts of Assam of Dibrugarh, Sibsagar and Darrang, the growth rates were small for this period at less than one percent, only Cachar registered marginally higher 1.16 percent growth rate.
The employment of outside permanent and temporary labours in Assam tea industry is irregular and do not conform to certain pattern. The growth rates of these labours were much higher compared to resident permanent labours although their number was smaller. This signifies that the tea industry relied more on employment of outside labours, which is a significant shift. The compound growth rates for the 19 year period of 1981-1999 for outside permanent labours and outside temporary labours for all Assam were 3.31 percent and 2.25 percent respectively. All the major districts viz. Dibrugarh, Sibsagar, Darrang and Cachar registered above 2 percent growth for outside permanent labours during this period and in case of outside temporary too, except for Dibrugarh which was a low one of 0.55 percent.

The employment of total labours in the tea industry of Assam followed the pattern for resident labours as this segment constituted bulk of the total labour force. The growth rate of total labour for 1981-1999 at 1.58 percent was higher than North India and all India level. The growth rate was higher in the decade 1981-1990 as compared to the period 1991-1999. The overall growth rate for Dibrugarh district was a modest one at 0.74 percent for the overall 19 year period while these were higher at 1.68 percent for Darrang, 1.26 percent for Sibsagar and 1.55 percent for Cachar.

The growth rates of production and productivity of Assam tea were higher than the growth rate of employment of total labour force.

The compound growth rate of estimated number of bonafide dependents of resident labours for the overall period of 1981-1999 for all Assam was 0.48 percent. It is showing a declining trend in Dibrugarh district and increases in Sibsagar and Darrang districts.

The productivity of labour (production per labour in kg) of tea industry is low and has not attained much increase over the years although it was higher than North Indian average. Among ten tea districts of Assam, Dibrugarh had the highest productivity and achieved steady increase of 766 to 808. The labour productivity of
Darrang was comparable to Dibrugarh but declined in 1999. Sibsagar district had lower labour productivity than these two districts over the years but increased highly in 1999.

The employment of daily number of labour per hectare remained at almost same level during 1982-1999. It was 2.19 in 1982 increasing to 2.51 in 1995 but coming down to 2.31 in 1999. The employment of labour per hectare was highest in Lakhimpur (2.92) followed by Goalpara (2.86) and Darrang (2.81) in 1999.

10.1.4 Factors affecting production of quality tea

Assam Valley teas have normally fetched better price in auction and other modes of sales than Cachar due to its inherent superior quality.

The comparative study of soil types of Upper Assam and Cachar revealed that Upper Assam tea districts had rich loam soil suitable for tea. The soil types of Cachar were usually sandy loam, loam and silt loam texture with profiles of loamy sand and silty clay loam also available. The tea plantations in Cachar suffered from water stress and drought, particularly in the hot slopes (South and South-West facing slopes) but soils of Dibrugarh (Upper Assam) district were mostly in alluvial flats more suitable for growth of tea plant.

Climate plays a vital role in growth of tea plants, and air temperatures and total rainfall and its distribution are vital, tea being a rainfed crop. Topography, soil and environmental conditions cause variations and along with these, plant health and cultural practices determine tea quality.

A comparative analysis of climatic conditions of Dibrugarh (Upper Assam) and Cachar and their affect on tea plant growth and quality raw material (shoots in case of tea plant) revealed that total rainfall was comparatively higher in Cachar but the distribution was better in Dibrugarh and it also received more and well distributed rainfall during the months of December to March which are crucial to early crop and
to avoid droughty condition. The average temperature of Dibrugarh was moderate as compared to Cachar and in favourable range for growth of tea. Cachar climate was hot and humid with longer sunshine hours compared to Upper Assam. The overall climate of Upper Assam was more suitable for growth of tea, which might result in production of better quality along with suitable soil characteristics.

The quality of tea is dependent on green leaf (shoots) produced in the field and ultimately manifested by the process of manufacturing in the factory and overall garden management practices. The most important agronomic and garden management practices responsible for production of quality tea identified in descending order of importance were: type of planting materials used, standard of green leaf plucked, soil and climatic factors, pruning cycle and other field management practices, leaf handling and transportation, manufacturing process in factory, condition of factory machineries, factory hygiene, sorting, handling of made tea, storage, packing and transportation, labour management, quality consciousness and age of bushes. Out of these twelve factors, the top seven were found to be most vital in quality tea production.

10.1.5 Marketing of Assam tea with special reference to Guwahati tea auction centre

Out of different modes of sale of tea, public auction is the traditional, widely accepted and most important mode of sale of tea, although sale through other modes such as ex-factory private sale, packaging in garden and direct sale in market etc. are increasing fast at present. As compared to 67.4 percent of total Indian tea sold in auction in 1971-72, 77.01 percent in 1985, 55.26 percent was sold in 2002.

The Guwahati tea auction centre sold only about 30-35 percent of total production of Assam. The sale of orthodox tea through Guwahati auction centre was less than one percent of total tea sold there due to non-participating of export buyers. Large quantities of Assam tea were sold through other auction centres and other modes of sale of tea, particularly high quality teas were found to be diverted to Kolkata.
auction presently. About 20 percent of Assam tea is sold through Kolkata auction centre and less than one percent through Siliguri auction centre.

The growth rate of sale of Assam tea through auction for the decades of 1971-1980 and 1981-1990 were 1.74 percent and 4.94 percent respectively. With the opening of auction centre at Guwahati in 1970, the sale of Assam tea through it registered very high growth rate of 16.00 percent and 10.83 percent respectively for those periods. This was the period of stupendous growth of the Guwahati auction centre and auction mode of sale of tea and Assam teas were diverted from Kolkata to Guwahati auction. However, during 1991-2000, auction sale of tea drastically came down and total Assam tea sold through auctions declined at -3.21 percent whereas sale through other modes increased at 8.28 percent. Sale of Assam tea through Guwahati auction centre registered a negative growth rate of -0.13 percent during this period and it was much higher at -7.32 percent for sale through other modes. In this period, the sale of Assam tea through Guwahati auction centre registered a high growth rate of 8.46 percent while it decline at Kolkata auction centre at -1.59 percent and in London auction center at -13.21 percent till its closure at 1998. If auction price is taken as a benchmark of tea prices, the average price of Assam tea has fallen in auction from a peak of Rs 82.04 in 1999 to Rs 70.93 in 2001 in real terms. In Guwahati tea auction centre, the average auction prices came down from Rs 79.03 in 1999-2000 to Rs 63.17 in 2001-02.

The Guwahati tea auction centre sold the highest quantity of auction sale of tea in India of about 17-19 percent of total production of India.

The marketing channel for Assam tea was identified in the study.

Out of total volume of dispatch through Inland Container Depot, Amingaon, export of tea constituted 98-99 percent. The destinations of teas exported were to all over the World. The volume has increased from 12.75 million kg of worth 59.75 crores in 1990-1991 to 23.06 million kg of worth 201.49 crores in 2001-2002.
Tea from Assam valley tea estates accounted for about 86-88 percent of total sale of tea in Guwahati auction centre, 10-11 percent was from Cachar District, 1-1.50 percent from Tripura and the rest from other states like Arunachal Pradesh. Sale of tea from West Bengal has stopped since mid of 1980s through very small quantities of Darjeeling tea were sold in Guwahati auction center now and then.

Since its establishment, the performance with regard to sale quantity and price realization for Guwahati auction centre was highly appreciable and significant. In the first decade of establishment of 1970-1971 to 1979-1980, the Guwahati tea auction centre achieved very high growth rates of 22.95 percent and 12.35 percent respectively for total quantity of tea sold and average price realization. The growth rate was even higher for CTC leaf category at 26.50 percent. The next decade of 1980-1981 to 1989-1990 also achieved very high growth rates of 11.09 percent for total quantity of tea sold and 11.00 percent for overall price realization. The growth rate of CTC leaf category tea was the highest. However, the growth rates came down drastically in the decade 1990-1991 to 1999-2000 to 0.60 percent for total tea sold though average price realization grew at a healthy rate of 8.23 percent. For the overall 32year period of 1970-71 to 2001-02, the Guwahati tea auction centre achieved very high compound growth rates of 6.20 percent for total quantity of tea sold and 9.19 percent for average price realization. The growth rate of CTC leaf category tea sold was much higher at 9.27 percent during this period. The decline in sale of orthodox tea in Guwahati auction centre started in 1981-82 and it had been a declining trend since. In the decades 1980-81 to 1989-90 and 1990-91 to 1999-2000, the growth rates of sale of orthodox leaf tea were negative ones at −4.53 percent and −24.39 percent respectively and the overall growth rate of the 32year period was also −4.52 percent. Non-participation of major buyers at Guwahati auction and the tea industry’s shift to more CTC tea production were the causes behind it. At present, Guwahati is the largest Indian auction centre overtaking Kolkata auction centre in the mid 1980s.

The growth rates of sale of Assam Valley tea and Cachar tea at Guwahati auction centre were almost similar at 8.56 percent and 8.03 percent respectively for the
32-year period 1971-2002. The growth rates of total leaf (CTC + Orthodox) category leaf were higher at Guwahati auction centre than dust grades for quantity sold and average price realization for both Assam Valley and Cachar teas. About 35-40 percent total production of Tripura was sold through Guwahati auction centre due to advantages of proximity, lower transport cost and quicker price realization associated with it. The growth rates of sale of Tripura tea in Guwahati auction centre was very high at 12.50 percent for total quantity of tea sold and 8.69 percent for average price realization for the 31-year period of 1970-71 to 2000.

Guwahati and Kolkata auction centres handled more 50 percent of total auction sale of tea in India. While the Guwahati auction centre achieved a high growth rate of 6.52 percent for the 32-year period of 1971-2002, sale at Kolkata declined at -2.26 percent. However, the other auction centre in West Bengal, Siliguri, established in 1976 and selling 16.05 percent of total all India quantity of auction sale, registered a very high growth rate of 7.63 percent. This suggests need of another auction centre in Assam.

More than four-fifth of total sale of tea in Kolkata were from Assam at present (82.11 percent in 2002) of which 79.44 percent was from Assam Valley and 2.67 percent Cachar. In 2002, 20.29 percent of Assam tea was sold in Kolkata and it was over higher at 27.47 percent in 1990. This clearly signifies failure of Guwahati auction centre and need for appropriate policy measures for sale of the produce of the state in the state itself.

The variability in total sale of tea and prices through Guwahati tea auction centre was decreasing over the years and stability was achieved till 1996. But since 1997, variability has increased which was highest in the year 1999, signifying present turbulence and unstable nature in tea marketing, particularly through auctions. The variability in sales for CTC leaf was lowest and highest for Orthodox tea. The prices of all categories of tea were far more stable than sales and CTC leaf prices had the highest stability and the lowest was for Orthodox tea.
Although tea production was highly seasonal, seasonal variation in quantity sold and average price realized were not high except for the months of March and April because of less or no production in the previous months and holidays in auction centre due to festive time of Bihu. It was due to regulated sale by auction committee during slack period. The variations in average prices were still of lesser extent.

There existed a very high level of market integration in prices of different categories of Assam tea sold through different auction centres of India and it was comparatively low while considering London auction center. Near perfect integration was observed in prices of Guwahati and Kolkata tea auction centers. The correlation for leaf grades (CTC+ Orthodox) of tea was very high between Guwahati and Kolkata auction centre but it was comparatively lower for dust grade.

More than five hundred tea estates, most of them of Assam, participated in Guwahati auction and there was no business concentration among them; they were only price takers. Most of the buyers operating in Guwahati auction centre were small to medium category. The market structure for buyers was slightly concentrated oligopsony with top four firm’s concentration being 30-45 percent since 1990s and top single firm’s concentration only being 21- above 30 percent. This oligopsonistic market condition implied market imperfection where few buyers influenced price formation. The top three brokers accounted for about 70 percent of the trade in Guwahati auction centre and had maintained their positions since its inception. Thus, there existed easy scope for collusive action of a handful of big buyers and brokers to maximize their joint profit. The impact of new entrants among all categories of participants in Guwahati auction center was nominal.

About 8-10.5 percent of total sale volume in Guwahati auction center was directly exported since 1996-97. About 95-97 percent of this total export sale belonged to CTC leaf category and sale of orthodox leaf was very low at about 1 percent of total sale only.
10.1.6 Contribution of tea industry to the economy of Assam

Tea industry is a major source of revenue and employment to Assam. The development of tea industry in Assam led to infrastructural development and development of other ancillary industries. Tea industry contributes to nation's revenue by paying cess, duties and taxes as per law to both Central and state Governments.


The total tax revenue collected from tea industry of Assam reached a high of 187.70 crores in 1998-1999 to come down to Rs 80.34 crores in 2002-03. The share of tax revenue of tea to total tax revenue of the state was as high as 19.1 percent in 1998-99, the year of boom in tea prices. This was a rise from 10.57 percent share in 1996-97 but has gone down thereafter to 6.53 percent in 2001-02 and 4.15 percent in 2002-03 following fall in tea prices.

The fall in revenue collection for the Government of Assam was due to fall in collection under Agricultural Income Tax. The income of the tea estates varied depending upon price fluctuation in the market and accounts submitted by the tea companies.

The tax revenue collected by the Government of Assam under the Assam Taxation (On Specified Lands) Act has been increasing over the years, as it is dependent on production of green leaves.

The collection of actual revenue on sales of tea made under the Central Sales Tax Act and total sales tax is meager due to the fact that more than 50 percent of the tea
produced in Assam is despatched to other states for sales on consignment basis (stock transfer) on which there is no tax.

Tax collected under Assam Sales Tax on sale of tea through Guwahati tea auction centre has been steadily increasing over the years. It increased from Rs 11.54 crores (approx.) in 1990-91 to Rs 15.16 crores (approx.) in 1996-97, Rs 24.16 crores (approx.) on 1999-2000 and then felt to Rs 17.81 crores in 2002-03.

The head offices of the tea companies and Tea Board being situated outside Assam, the local people of Assam are deprived of employment opportunities, causes outflow of income from Assam and has not helped in development of local business or alternative sources of income and caused loss of revenue to the Government of Assam as most of the purchases for use in the tea estates of Assam and major decisions were taken in the head offices.

The evolution and development of small tea growers among the unemployed educated youths of local population to the end of last century had major impact on the socio-economy of the state of Assam. The highest number of growers was in Dibrugarh followed by Tinsukia, Sibsagar and Golaghat.

The growth of small tea growers in Assam has been phenomenal. There were about 28,585 small tea growers in Assam in 2000-01 cultivating tea in about 27,878 ha area spread all over Assam and produced about 257.6 million kg of green leaf or about 60.5 million kg of made tea which was about 13.4 percent of total production of the state. 138 bought leaf factories have come up to manufacture green leaves of these small growers (2002).

The small tea gardens have provided source of income to educated young generation of Assam, provided employment to others as staff, sub-staff and labour and generated revenue for the state with this economic activity.
Lack of proper mechanism of fixing price of green leaves, dependence on big companies for sale of leaves, non-official status of tea cultivated land, lack of organizational finance and support, lack of quality consciousness and price fixation mechanism are major problems of the small tea growers in this economic venture.

10.1.7 Problems and prospects of tea industry of Assam

The major problems and prospects of the tea industry of Assam were identified and SWOT analysis of the industry was carried out.

Old age of bushes and vacancies in large areas under tea was a major problem of tea industry of Assam for which productivity was poor. The tea estates did not carry out uprooting and replanting operations at the recommended rate.

Annually recurring flood, high water table and waterlogging were major problems in Upper Assam.

High labour cost, low productivity and obligatory social responsibilities were causes of great concern to the management of the tea estates. The rise in total labour cost exceeds increase in price realization.

The effort on human resource development for the tea labours has been inadequate.

The tea industry has lost export markets due to complacency and lack of far sightedness. It could not adapt to changes in world demand in time. Consistencies in quality export and market development efforts were lacking.

Demand in domestic market was sluggish due to inadequate promotional measures and aerated drinks of multinational companies pose great threat.

The original auction system of sale of tea has lost efficiency over the years in India, the margin of the intermediary has become too big and three existed huge gap
between consumer price and price realized by the producer. Due to various developments, the whole marketing system of tea is in turbulence and in the process of settling down.

The best categories of tea are sold in private or in Kolkata auction for many tea estates and do not come to Guwahati auction.

Power supply was irregular in Assam, which resulted in huge additional costs.

Blending/packaging units of major companies were not situated in Assam.

Tocklai Experimental Station, the premier R&D center, is facing problems in functioning due to dwindling membership of the tea estates.

There, however, existed enough scope for improving quality of Assam tea using available planting materials and by adoption of standard field management practices, particularly plucking with the existing technique of manufacturing. It was also same in case of productivity.

Orthodox tea and organic tea are two major segments of export market. Assam used to produce orthodox tea earlier till switch over in 1970s. There are enough scope for deciding a right product mix and going for dual manufacture to capture export market.

10.2 Testing of hypothesis

The results of analyses summerised earlier in part 10.1 helped testing the hypotheses.

The growth rate of production of the tea industry of Assam was very high and was higher than North India and all India level. The growth rate of area under tea in Assam was smaller than the growth rate of production, land being a limiting factor
but it maintained higher growth compared to North India and all India level. The productivity of tea industry of Assam was almost similar to all India level but it was lower than major tea producing areas and main competitors of World export market. The growth rate of productivity was also lower than North India and all India level. Thus, the first hypothesis was accepted for the first two factors area and production but rejected for the third factor productivity.

The growth rate of tea labours of Assam was modest over the years but higher than North India and all India levels though it was lower than the growth rate of production of tea industry of Assam. The growth rates of outside permanent and outside temporary labours exceeded growth rate of resident labours signifying increasing employment in these sectors. The employment of daily labour per hectare has remained almost at same level since 1982. The labour productivity of Assam has not achieved much increase once the year and it was lower than all India level. Thus, the second hypothesis was rejected.

Quality factors on comparative analysis of Upper Assam and Cachar areas revealed overwhelming dominance of soil, climate and field management practices. All these agro-climatic and garden management practices highly influencing quality tea production could be identified. Thus, the third hypothesis was found to hold.

The market share of Guwahati tea auction centre was increasing at a very high rate due to many factors to its advantage viz. proximity to producing tea estates, better facilities provided, efficient handling of tea and efficient functioning. However it had failed to attract export buyers to the auction centre and a large volume of tea produced in Assam was sold through other auction centres and also through other modes. Oligopsony with dominance of a few buyers and some unhealthy trade practices of participating parties were weaknesses. Thus, the fourth hypothesis that marketing of tea through Guwahati auction centre was efficient was accepted with some caution.
The contribution of the tea industry of Assam to the economic development of the state was highly significant. Tea industry has an all-encompassing influence in socio-economic sectors of Assam although it did not act as a harbinger for growth of other industries of the state and there is mistrust to the industry among the local population, particularly on employment, as head offices of the tea companies were situated outside the state. However, the share of tax revenue from the tea industry to the total exchequer of the state Government is substantial. The development of small tea grower sector had major impact on local employment generation and economic upliftment. Thus, the fifth hypothesis was accepted.

10.3 Conclusion and recommendations

From the forgoing summary of the research study, the following suggestions and recommendations emerge to give future direction for development of the tea industry of Assam on the basis of its growth pattern and strength and weaknesses evaluated over long period of time and to help to formulate policy measures.

10.3.1 Production of Tea

The tea estates should take up uprooting and replanting, rejuvenation pruning and infilling with better planting materials to get rid of the old and uneconomic tea bushes availing facilities provided by Tea Board to improve productivity and quality of tea. The target should be to increase productivity taking into account all associated factors.

Reduction in cost of production and improvement and sustenance of quality with appropriate field and factory management practices should be the aims of tea industry of Assam. In fact, if productivity is increased maintaining quality, the cost of production comes down. The price of good quality tea has remained unaffected in the overall slump in the market. Indian tea used to command premium prices in international market mainly due to quality image.
For major problems like erosion, flood and waterlogging due restricted outlet, joint measures along with state administration would pave the way for solution.

The tea estates should enhance implementation of available improved technology and cultural practices. Farm mechanization should be adopted wherever feasible maintaining quality.

As per demand of the market, right product mix should be adopted. The tea estates should produce more good quality orthodox tea with proper marketing strategy availing incentives of Tea Board factory upgradation scheme to meet the demand of the World market.

The tea estates should go for quality certification for garden/manufacturing unit like ISO/HACCP, which are recognized as quality standards World over. The MRL levels of importing countries should be strictly adhered to.

The field management practices should be reviewed along with manufacturing process. Investment should be made on product quality improvement as premium fetched by quality outweighs additional costs incurred.

10.3.2 Tea labours

Urgent efforts should be made for development of the vital human resources of the tea industry with application of human resource development principles for their motivation. Increase in productivity and overall development of tea labours should be given top priority.

The qualified labour youths should be encouraged to learn specialized technical skills to enlarge their scope of alternative employment opportunity. Importance should be given on proper educational facility.
The labours should be taken into confidence and developed for mechanization of tea industry.

The tea estates should undertake necessary actions so that the labours feel that they are integral part of the industry. Joint effort of management and labour is necessary to increase productivity and improve quality. Adequate incentives should be provided for improving labour productivity.

The tea estates should avail labour welfare measures provided by Tea board and other Government agencies.

Proper mechanism should be evolved to relate labour wages to productivity.

The Government of Assam should carefully consider the long standing demand of the tea garden owners to share part of responsibility of tea labour welfare measures and take it up with central Government to find ways to offer subsidy on obligatory social security expenditure.

10.3.3 Marketing of tea

The lacuna for non-participation of export-buyers in Guwahati auction center should be removed and all necessary facilities and attractive incentives like exclusive tax holiday or rebate should be worked out with the help of Central Government.

The public auction system should be revamped making it more efficient, effective and transparent removing existing infirmities and high transaction cost.

A separate 'Assam' brand of special identity of pure Assam tea should be established in the market with vigorous promotional efforts like that of 'Darjeeling' brand already established.
The second auction center of Assam should be established in Upper Assam either at Dibrugarh or Jorhat at the earliest which will be nearer to producing tea estates and would reduce cost, save transaction time and also help in economic development of the area. Necessary infrastructure should be developed for it and the Assam Government should provide incentives to buyers and brokers to transact in the new auction centre in the initial stage.

Revitalisation of export market of Indian (Assam) tea is most important with an aggressive marketing strategy. The thrust and potential World tea markets should be identified and all out promotional efforts should be taken up. The misgivings about deterioration of quality of Assam tea should be removed by consistent quality product supply and back up information.

The premium niche segments should be targeted with best quality produce. Market research and development strategy should be formulated by the tea industry. The idea of establishment of an auction centre in Dubai to directly sell in West Asia and North African market is worth considering.

Massive promotion of tea in domestic as well as in international market highlighting beneficial medicinal aspects and health properties of tea is needed for which the tea industry and Government must act together. Establishment of market information center on Assam tea and put these information in website and their constant updating is important.

Value-added tea, product development with emphasis on non-conventional tea drinks should be with given priority to extend frontiers of tea consumption. These efforts should be supported by Central Government.

The Guwahati tea auction center should take measures to attract teas of Assam and neighboring states presently being sold at Kolkata and Siliguri. With better facilities and incentives of state Government to producers and buyers, even teas from South
India may also find it more profitable to sell in Guwahati, particularly with the introduction on line e-auction system.

For retail marketing of tea, new approaches like opening of 'tea bar', tea vending machines at prime locations of the state and the country should be encouraged with incentives. Self help group formation for direct retail marketing of tea should be given proper guidance and encouragement.

**10.3.4 Quality tea production**

Improvement in tea quality lies with improved basic raw material green leaf produced in the field. Quality depends on agro-climate and field management practices. The tea estates should improve their soil to optimum required level of organic matter status, and fertility level along with shade and irrigation etc. Suitable micro-climate should be created by aforestation and creating water bodies etc. which has positive affect on quality. A suitable micro-climate and media should be given to the tea bushes removing the stress factors.

In the garden level, the tea estates should lay emphasis on the following to improve quality - use of better planting material, plucking standard of green leaves at regular intervals, adopting proper pruning cycle, timely control of pests and diseases and adequate dose of fertilizer application as per soil testing report, careful leaf handling and transportation and labour management with quality consciousness. Manufacturing should be in efficiently running factory maintaining hygiene in proper process with utmost care in post-production stages of sorting, handling, storage, packing and transportation.

**10.3.5 Small tea growers**

Efficient technical support to the small tea growers in the form of field level training and advisory services on improved production practices with special emphasis on creating leaf quality consciousness should be ensured.
Price stabilization scheme or support price scheme formulated for small tea growers should be sincerely implemented by Tea Board with quarterly revisions as per price fluctuation in the market and timely release of money to the small tea growers should also be ensured. There should be wide publicity to these schemes and on other facilities like credit for tea development from various agencies.

Further uncontrolled expansion of tea growing areas should be restricted.

The Government should consider granting pattas to the land they are occupying for long on lease basis for growing tea or horticultural/medicinal/aromatic plants in non-forest land and degraded forest lands.

The small tea growers should be guided and encouraged to form co-operatives to move jointly to overcome the problems of middlemen, exploitation of bought leaf factory and to avail the benefits of such united moves from Government agencies. They should be encouraged for entrepreneurial development and having bought leaf factories of own preferably on co-operative sector to avail ensuing advantages like bank finance etc.

In the long run, a comprehensive scheme should be drawn up to integrate the small tea growers fully into the system. The small tea growers should be handled with utmost care keeping in mind long-term interest of the people of the state.

10.3.6 Socio-Economic and taxation issues

The tea industry should take steps to remove misgivings and mistrust from the mind of local population of Assam by way of providing employment opportunity at executive levels in particular and awarding contracts and supplies to local youths in general and also by undertaking various social works and public relation activities.

The tea companies should be given tax reliefs and other incentives for selling their produce within the state of Assam and for establishment of subsidiary industries like
blending and packing and other ancillary industries. To encourage establishment of tea packaging industry in Assam, transport subsidy should be provided in addition to incentive under North-East Industrial Policy.

Proper incentive should be given to the tea companies by the state Government to reinvest the profit earned in other industries.

10.3.7. Policy measures and other issues related to tea industry

The Government of Assam should strengthen the existing Directorate of Tea, Assam, with necessary power and resources to be responsible for monitoring the development of the tea industry, liaise with producers’ and labour associations, marketing and government agencies. For this purpose, various departments looking after tea development and welfare measures at present should be brought under its ambit to put all tea related works of Assam under a single umbrella. The policies for development of tea industry of Assam should be made from this specialized Department of technical personnel.

Research and development should receive top priority to maintain prime position of Assam tea in the World market and to meet the emerging challenges. For this the premier research organization, Tocklai Experimental station, Jorhat of Tea Research Association should be strengthened with Government support. The technology should be bought closer to small tea growers, the transfer of technology should be highly efficient and there should be closer interaction between marketing, commercial aspects and scientific research. Efficient market research and market information system should be developed.

Banks and other financial institutions should be made to play a proactive role in resuscitating the tea industry by giving loans to the industry with liberal working capital disbursements and longer moratorium periods.
The efforts to bring the head offices of Tea Board and tea companies to Assam should be continued.

The long planned ‘Tea Township Complex’ project of Government of Assam at Amingaon should be revived.

Supply of electricity and gas to the estates at optimum level should be ensured.

Dibrugh, Sibsagar, Darrang and Cachar being the major tea growing districts of Assam, there should be special emphasis for closer interaction between district administration and tea estate management in these districts.

Tea tourism has got great potentials with the mystique and nostalgia associated with traditional British life style of the bungalows, club life, golf course etc. The Tourism Department should exploit this potential with right promotional approach in international level.

Separate scheme should be formulated by Central Government at concessional rate to assist the weaker tea estates to increase productivity and improve quality.

The state Government should constantly pursue with the Central Government to open the Stillwell Road from Assam connecting India with Myanmar and ASEAN countries to open new vistas for trade of Assam tea. The possibility river navigation through Bangladesh should also be studied in depth.

There exists doubts and controversy regarding true discoverer of tea in Assam. The role of patriot and martyr Mamiram Dewan in discovery of tea in Assam should be subjected to in-depth research so that he receives his due place in history of tea.

Along with other sister states of North-east India, the Government of Assam should take up with Central Government to take up scheme for providing financial assistance to exporters of tea from North-East India for meeting part of the cost of
handling, packaging, transport/freight charges in addition to existing ones for export of tea through Inland Container Depot, Amingaon to enhance competitiveness in international market.

The Government of Assam should convince Central Government to explore possibilities of global and SAARC level bodies for tackling various issues of demand and price stabilization and expansion of trade.

The tea industry of Assam should also prepare itself in advance to meet the challenges when the WTO regime will become operational in the year 2007.