CHAPTER VI
SUMMARY, MAJOR FINDINGS, CONCLUSIONS AND SUGGESTIONS

6.1 SUMMARY

In India, the tea Industry is 170 years old. Since then, tea continues to be the most popular drink in India. This sector is crucial to Indian economy as it contributes to a lion’s share of the exports of India. The Tea Industry is one of the oldest organized firm sectors with a large network of tea producers, retailers, distributors, auctioneers, exporters and employees. India is one of the world’s largest producers and the largest consumer of tea, which accounts for 27 percent of the world production and around 12–13 percent of the world tea export. Besides, as an agro-based industry, the development of plantation industry has contributed greatly towards rural development and urbanization of remote hilly areas by optimum use of land, opening up road and other communication network in those areas. As a result of its importance, the industry has witnessed many structural changes during recent years, which include – emergence of small tea growers in place of large plantations and introduction of bought leaf factories (BLF).

However, the tea industry in this country has some inherent weaknesses–due to poor yield arising out of poor condition of the gardens (more than 30 percent of the tea grown areas being above the economic threshold age limit), defective auction mechanism, old factory setup (which is affecting tea quality and price realization), poor garden management due to frequent changes of garden management/managers, in-experienced owners (like traders who have no previous experience in tea cultivation and interest in plantation business) and the owners’ excessive reliance on bank-debts with negligible fresh equity infusion. In some of the gardens, the neglect has been due to ownership disputes and diversion of funds from tea gardens to other
activities and in many cases strained relationship between management and garden workers have added fuel to the fire.

Despite India’s historical success with the tea industry, in recent years, the industry faces serious competition in the international and national market which has led to the present crisis. Tea prices in India are being driven down by many factors that include: a) Decline in demand for Indian tea in the global market, b) Defects in auction system, c) Poor price realization, d) Defective market structure and e) Increase in cost of production.

With a majority of the sample growers having small holdings, the plantation operation in these small holdings is expected to result in high cost of production on the one hand and poor revenue on the other due poor quality of the product and poor bargaining power. Given these issues, a moot question that arises is that whether the tea cultivation is remunerative to them. To what extent these cultivators particularly the small cultivators are able to realize revenue from tea cultivation. The present study attempted to examine these issues in the context of The Nilgiris a district in Tamilnadu, which constitutes 32 per cent of total area and in terms of production under tea in South India. In terms of contribution of the small growers, the small growers of The Nilgiris contribute to 14 per cent of the total South Indian tea production with a percentage contribution to all India tea production is around three per cent. In terms of favourable factors, The Nilgiris tea Industry is endowed with suitable agro-climatic conditions, large existence of tea bushes in the economic age group of "below 50 years", better application of fertilizers, wider use of pesticides, weedicides, etc., more or less satisfactory conditions in the factories, better transport facilities, comparatively better yield rates, good labour welfare measures etc.
Given the existence of mixed favourable and equally unfavourable factors in The Nilgiris tea plantation section, there remains a doubt whether the tea growers, more specifically, the small tea growers are benefited from the tea plantation activity. Based on this major issue, the objectives framed for the present study can be given as below: 1) to examine the trends in growth of tea in The Nilgiris vis-a-vis other neighbouring producing states in India in terms of area, production and productivity, 2) to study and compare the contribution of area and yield on output of tea, 3) to study the socio economic status of the sample tea growers of The Nilgiris district, 4) to estimate the cost and the return from tea plantation of sample small and large growers of The Nilgiris, 5) to describe the existing models of small tea growers in tea value chain in The Nilgiris and 6) to draw policy implications.

To study the objectives framed, the present research relied both on primary and secondary data collected. The published reports of Tea Board, India, UPASI, State Planning Board, Tamilnadu, Annual Reports of different Tea Companies constituted the secondary source.

The required primary data were collected from 600 tea growers selected at random from Coonoor, Udagamandalam and Gudalur taluks. A pre-tested questionnaire was prepared to collect the information pertaining to social background of the tea growers, the farm practices, the information on the cost involved in the process of tea plantation and the revenue obtained from the sale of leaf for understanding the existing system of value chain among the small growers.

To analyze the collected primary and secondary data, simple arithmetic mean, Linear Growth Rate, Compound Growth Rate, Instability Index and Decomposition Analysis and a Logit model are used.
6.2 MAJOR FINDINGS OF THE STUDY

The analysis of the secondary and primary data with the help of the appropriate tools and techniques mentioned above has provided the following findings:

1) The growth in the area of tea plantation in India is higher than the global area also with a lower volatility registered. However, the average production and yield are lower in the case of India though the instability is slightly lower than the instability registered at the global level.

2) The level and growth in the supply of tea are higher than the level and growth in the absorption of tea indicating a glut in the tea produce that is excess supply in the market resulting in an unfavourable price for the product in the global market.

3) In terms of area, the Northern region has registered a higher share. However in term of growth, the southern regions have registered a higher average indicating the better performance of the Southern region than the Northern region.

4) In terms of growth in production, while Southern region has made a head away than the Northern region, in terms of absolute production, the average level is around three fourth in the case of Northern region while it is just the remaining one fourth in the case of Southern region.

5) The yield of tea crop during the study period has declined in the case of both Northern and Southern region with a higher decline experienced in the case of Southern region.

6) In terms of exports South Indian Tea industry had made a headway than that of North India.
7) The domestic consumption has experienced a smooth, continuous and stable growth during the period under review.

8) The prices of tea in the case of both Northern region and Southern region have increased but with a higher growth experienced in the case of North India than South India.

9) The employment of labour in the tea plantation at the All India level has increased significantly at the rate of 2.02 per cent per annum during the study period.

10) The area under tea has increased at a higher rate in the case of Tamilnadu than in the case of South India.

11) The growth in the production of tea in the state of Tamilnadu is far higher than the growth in the production of tea in South India.

12) Tamilnadu, followed by South India and all India have recorded the highest average in tea yield in their order.

13) Among the states of South India, the average area under tea is found to be highest in Tamilnadu and in terms of growth next to Kerala.

14) The quantum of production and growth in production are found to be higher in the case of Tamilnadu than Kerala and Karnataka.

15) All the southern states except Karnataka have experienced a decline in the growth in yield. In terms of average yield per hectare also Karnataka has registered the highest yield.

16) The growth rate of area in The Nilgiris is the highest when compared with Tamil Nadu and South India.

17) The production of tea in the southern states has increased during the study period with the highest growth recorded in the case of The Nilgiris but with a higher instability registered in growth.
18) In terms of average yield during the study period, the district of The Nilgiris has registered the highest though the volatility in growth of yield is also found to be the highest among Tamilnadu and South India.

19) The prices of tea in Tamilnadu, South India and The Nilgiris have increased almost at an equal rate and the average price of tea is slightly lower in The Nilgiris.

20) The growth rate in area under the tea in the case of small growers of The Nilgiris has increased, while it declines in respect of large gardens.

21) The rate of growth of output of tea in the small sector of The Nilgiris has increased at a higher rate than that of the estate sector.

22) The yield rate in the small sector in the district declines, when it experiences a very high growth rate in the case of large growers.

23) Between 2004 and 2008, the tea area of small growers in India has increased.

24) The production of small tea growers has increased during the five years of the period of analysis in India.

25) In the case of small growers of India, the productivity of tea crop has actually declined during the study period of five years and contrary to this trend in the case of large or big growers, the productivity has actually increased from 1899 kilograms to 2039 kilograms per hectare.

26) The impact of area is found to be higher in the case of Kerala, Tamilnadu, South India and The Nilgiris but with a negative contribution of these regions in terms of yield growth to output change.

27) The Decomposition analysis showed a mixed pattern among the three states. While the southern states including Tamil Nadu, Kerala and Karnataka could
improve their yield effect in the second phase, Northern regions have registered a
negative impact between the two phases.

28) The growth performance of Indian tea has been moderate and the contribution of
South India has been significant. A trend break is observed in the second period.
The performance of Kerala has been the poorest among the three major tea
producing South Indian States. Decomposition analysis showed a mixed pattern
among the three states. While the southern states including Tamil Nadu, Kerala
and Karnataka could improve their yield effect in the second phase, Northern
regions have registered a negative impact between the two phases.

29) All the gardens surveyed, (600) have applied chemical fertilizers covering an area
of 9379.75 hectares. The total quantity applied per acre by these gardens was
reported to be 565 Kgs in the case of big growers and 340 Kgs. by the small
growers.

30) 90 per cent of small tea gardens in The Nilgiris were reported to have been
attacked by pests.

31) A large part of tea area in The Nilgiris is prone to soil erosion reportedly due to
deforestation.

32) Pruning cycle generally adopted by small growers is 5 years and above for
gardens in higher elevation and 4 years for gardens in lower elevation. Small
growers may, therefore, be given practical training in scientific way of pruning.

33) Majority of the sample have not undertaken replantation due to financial
constraints and expected crop loss in the initial years.

34) Major items of replantation cost are uprooting, revetments and planting materials
for both small growers and estates. The total replantation cost during the first year
worked out to Rs.169423 for the sample small growers and Rs.197490 for the
large growers. Green tea leaves can be plucked from 2nd year onwards and reaches the stabilized yield in the fifth year.

35) The sample gardens were found to take preventive measures against red spider mite like spraying of pesticides - zolon, sulphur, etc as prescribed by UPASI from time to time.

36) All the sample growers were reported to be using chemicals like copper fungicide, blue copper, nickel chloride, etc to control this disease.

37) The weed control practices were poor among the sample small growers. It is estimated that the dicot weeds can cause 12 per cent crop loss and monocots 21 per cent crop loss.

38) Pruning was done by all the sample small growers and estates. The pruning cycle adopted big gardeners was 5 years i.e. 20 per cent of total area under tea is being pruned every year and that of small gardeners was 6½ years cycle with 15.38 per cent of the area pruned annually.

39) Labour was employed by the sample on a contractual basis and the average cost for pruning worked out to Rs. 3804.71 per hect. for large estates and 3761.05 in the case of small growers.

40) Plucking is carried out after 3 months of pruning and 50-100 kg of green leaf is plucked in each round. After 1 year, full fledged plucking is be carried out.

41) Burial of pruning was also undertaken by the sample estates as this helps in water conservation and increases the soil fertility.

42) All the sample estates were found to undertake infilling operation and on an average 100 to 400 plants per acre were planted. The average infilling cost worked
out to Rs.316.77 per acre for the small sample growers and Rs.182.32 per acre for the sample large estates.

43) Plucking was mostly done manually by the sample small and large growers and on an average, there were 25 plucking rounds in a year.

44) About 80 per cent of the total green leaves plucked from the tea gardens of small growers were 3 leaves and a bud, 10 per cent were a single leaf banji and the remaining 10 per cent were coarse plucking.

45) The maximum cost incurred by the sample small growers (46.85 per cent) and large growers (64 per cent) has been on plucking.

46) The yield of GTL was 5760 kg per ha and 9600 kg per ha for the small growers and estates respectively. The average price realized by the sample small growers during 2010 was Rs.11 per kg. and by large growers Rs.16 per kg. The net income worked out to small growers stood at Rs.17055.83 and at Rs.45995.20 in the case of large growers.

47) The benefit cost ratio for small growers worked out to 1.37:1 and in the case of large growers it stood at 1.43:1.

48) Small growers in The Nilgiris district are generally covered by co-operative (INDCO) and Bought Leaf Factories (BLFs). The sample small growers (non-members of INDCO) were supplying green leaf to BLFs which had their collection centres in the villages. Members of INDCO factories were supplying GTL to the INDCO factories which also had collection centres nearby. It was revealed during the study that these members are not bound to sell their green leaf tea to INDCO and sometimes when the bought leaf factories offer price slightly
higher than that offered by INDCO factories, the members sell off their GTL to them causing a shortage of GTL to these factories.

49) As the sample farmers have been involved in tea cultivation since a very long period, the predevelopment income has not been taken into consideration.

50) The financial rate of return is worked out to 11.20 per cent per annually in the case of small growers and 12.32 per cent in the case of large growers.

51) The financial rate of return for sample small growers worked out to 15.47 per cent with subsidy and the same was 11.2 per cent without taking into account the subsidy for replantation. Given the price of tea in the year 2011, with the same investment and maintenance costs, the FRR was worked out and the same was 39.41 per cent.

52) The break even point worked out to 0.48 and the break even level of green leaf was Rs. 2.88.

53) The collectivization of small tea growers can be considered success in the context of the sample small growers of The Nilgiris district.

6.3 SUGGESTIONS

The emerging suggestions from the analysis of the data area:

1) Despite being one of the largest producers and the largest consumer of tea, the Indian plantation sector lacks appropriate mapping of production and consumption levels. Due to absence of accurate estimates the formulation of long term industry wide action plans have been affected.

2) The fact which emerges from the present crisis is that Indian tea has not been globally competitive. It has concentrated more on building up its large estates and
has given less attention to processing and improving the quality by proper blending and marketing for higher price realization of their products.

3) Unlike its key competitors, India does not have any powerful brand to support its promotion drive in the international market. To win back the confidence of lost foreign markets, Accentore (a global consultancy firm) has identified the need to revitalize the image of Indian tea in the international market. A vigorous campaign which include Indian tea logos and making Indian brands acceptable in those markets is to be organized. Further, an inspection agency should be appointed to keep a quality check on the tea that is exported, as the study also recommended that a major thrust should be made to improve quality for the long term sustainability of tea industry of India.

4) There is a need for reducing the unit cost of production through productivity gains, capacity building of small growers, streamlining marketing channels, improving infrastructure, tailoring marketing activities to individual country’s demand, propagating health benefits of tea and promotion of organic tea using the tea mark. This is exactly what the domestic tea companies should do for their long term survival.

5) Improvement of supply chain management inside the country and global tea marketing network has to be made.

6) The tea industry in India has a legacy of corporate farming right from the day of British rule. The current situation in the sector has given ample reason for a rethinking on whether corporate farming can really boost agriculture. Time has come when tea companies should sell out their large estates to farmers for cultivation, for ensuring more competitiveness and make the industry viable. This
will reduce production costs also. In return big companies should enter into contract with tea growers by giving them technical and marketing support and all that is needed for backward and forward linkages. Indian farmers have done wonders by ushering in the green revolution and ensuring food security in this country. They will replicate the same in the tea sector also.

7) As it is observed, retail price of tea have not declined when prices at the local auction centers have fallen so dramatically since 1990’s, noting the larger profit by the packers/retailers who are mostly at the end of the value chain. The issue here is the role played by these companies in their own plantation, implications of direct purchases by them from other growers and their relationship with brokers at the tea auctions, where price manipulation is widely suspected. These defects at the auction centers should be investigated and remedial measures like – bringing more transparency at the auction market; introduction of online auction practices for tea, etc. should be taken which will lead to changes in the structure of tea auctions to limit the manipulation by the big players in the industry.

8) International brands like Liptons, Brooke Bond of HUL and Tetly tea of Tata Tea; etc are the market leaders and have great power in price determination in both domestic and international market. This needs to be stopped and proper investigation is needed to curb the wrong practices in the tea market by introducing new laws to regulate the price movements.

9) The actual producer of tea has no direct link with the ultimate consumer. Tea producers sell their products to the bulk purchaser through direct sale or through auction to big buyers. Therefore, the producers do not understand the market demand / choice of the customer, it is very important in today’s market economy
for long term sustainability of the industry. With the withdrawal of sales restriction, the growers can directly go to the market by building their own brand. As the margin of profit is very high at the present domestic retail market, Indian tea growers should invest and take this opportunity for the promotion of their brand at the retail market.

10) Fresh capital inflow is needed right at this moment for the tea industry of India. Investment in new plantations and production machineries must come immediately to compete in the international market. Since tea industry has to compete globally, it is necessary that they should have access to global capital at competitive rate. This can bring life to the industry and those who live on it, especially workers.

11) Since tea plantation industry is an agro-based industry it has to pay agricultural as well as industrial taxes which will increase the cost of production. Considering the situation of high cost of production and low price realization faced by the industry Government could help the tea companies by reducing the tax burden.

12) It was understood from the discussion made with the small tea growers; the financial support extended either by the government or by the tea associations is very less. Since the auction price of tea is widely oscillating, the tea manufacturers are also reluctant to extend advance of loans. This greatly affects the future area under tea and eventually the supply of tea in the international and domestic market. Hence, the government and the associations can extend sufficient credit on the basis of the historical output of a particular grower.

13) The subsidy provided has not affected the production cost much. More over, the subsidies are provided only for a few items of inputs. Hence, extending subsidy to
few more inputs may increase the benefit from tea growing which may also help to reduce the fallow land through bringing more area under tea cultivation.

14) The process of collectivisation of small tea growers studied in the context of The Nilgiris shows that the existing institutional arrangements have responded to the challenges that confront the STGs and they have tried to build a counter pressure through upgrading their productivity and quality, improving forward linkages and enhancing their bargaining power.

15) INDCOSERVE, SHGs and PPSs intend to enable the farmers to overcome market entry barriers and improve the accrual of economic value for their produce. SHGs turn out to be unsustainable. While INDCOSERVE manages to get the small growers into a direct relationship with the processing factories and have direct marketing channel - TEASERVE, the cooperative apart from the exception of Salisbury does not succeed in getting farmers a better price. The price gains for INDCO members are limited and short-lived and also the price of auction price of made tea is low. On the other hand the PPS model enables farmers to get a better price for members by avoiding the leaf agent and get direct access to BLFs. Better price realisation for the farmers organised in PPSs is a result of their improved negotiating capacities. But the PPSs have not gone beyond this. They have not been able to go further up the value chain to establish their own processing units and to establish direct market linkages.

16) Tea Board needs to be strengthened and work on strategies to enhance capacities of STGs and facilitate them to upgrade in the tea value chain - technical support, marketing assistance and improving credit accessibility remain important cogs in the wheel.
17) Historically, at the time when the Tea Board was set up in 1954, the presence of small tea growers was non-existent. Structurally, Tea Board does not have an institutional set up to cater to the needs of the small tea growers. Recently it has been announced that a Tea Directorate will be set up under the Tea Board during the 12th Plan period. The directorate can benefit the STGs societies as there could be more focused implementation of the schemes, increased transparency and implementation.

18) A data bank on the STGs, the PPSs and BLFs should be maintained by the Tea Board. This should include information on the quantity and quality of leaf produced by STGs and the price at which it was sold. This will enable better monitoring.

19) STG Directorate should facilitate market linkages for the STGs by supporting development of geographical indicators, organic tea production and branding of small tea growers' tea both at the national and international level.

20) The STG directorate should make further provisions to enable the STGs to benefit from the revolving fund as well as Special Purpose Tea Fund.

21) The cost benefit ratio worked out indicated that the small growers experience a lower cost of production when compared to the large growers. The small growers, for maintaining the same level of cost, if could increase the yield of tea, such an activity could increase the revenue considerably and eventually the profit too.

6.4 CONCLUSION OF THE STUDY

This study on the economics of tea plantation is a maiden attempt as far as the study area is concerned. The analysis of the secondary and primary data has provided
the major conclusion that though at the all India level, the area, output and yield have increased, at the regional level, the increase in area and output are positive with a decline in the yield of tea in certain parts including Tamilnadu. The decomposition analysis indicated that the contribution of area to output change is higher for many regions than the yield. The calculation of cost-benefit of tea plantation indicated that the benefit is only marginally higher for small growers.

The conclusion that can be made in the context of the value chain can be given as:

1. The process of collectivization of small tea growers has resulted in the upgrading of their productivity and quality, improving forward linkages and enhancing their bargaining power.

2. INDCOSERVE, SHGs and PPSs intend to enable the farmers to overcome market entry barriers and improve the accrual of economic value for their produce. SHGs turn out to be unsustainable. While INDCOSERVE manages to get the small growers into a direct relationship with the processing factories and have direct marketing channel - TEASERVE, the cooperative apart from the exception of Salisbury does not succeed in getting farmers a better price.

3. Small tea growers are inserted into the tea value chain as a result of global changes in tea trade and brand led restructuring process.