

CHAPTER III

NEED SCOPE AND RESEARCH DESIGN

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3.1 NEED

Tea in Himachal Pradesh which had once been vanguard of tea cultivation in India today stands reduced to a very minor position in the tea map of India.

The area under cultivation of tea in 1986 stood at 2063 hectares and which has remained unchanged till 1996, which shows that no new area has been brought under tea cultivation during the last 10 years. Main reason which contributed to this down fall of the area has been loss of interest among the planters and tea growers in tea plantation due to uneconomic holdings and lower returns which led them to sell of their tea holding which subsequently resulted in diversion of tea land for purposes other than tea. Though it is difficult to measure uneconomic gardens, the Tea Board for the purpose of licencing new plantation considers individual owned estate below 150 acres and company owed estates below 300 acres as uneconomic unit. Most of the gardens which are existing in the state are of small holdings. At present their are around 1660 tea estates, out of which 1515 plantations are below 1.5 hectares. The uneconomic units have come into being primarily through fragmentation of holdings and inheritance of gardens under continous process of sub division, due to which there is no disagreement on the privilege of low yields of an uneconomic units.

A survey conducted by the Tea Board, bearing testimony of this shows that the majority of bushes of this area are over 80 years old; some of them are as old as 130 years. The tea bush which is essentially a wasting asset, increasing age beyond a point is viewed as a possible liability in context of plans for production augmentation from existing tea stands, which indeed reflects as emerging threat to the growth of area. Renewal of the tea industry's most important and productive asset the tea bush at one time or other is imperative and therefore should be considered unavoidable. An analysis of the past trend reveals that because of circumstances differing from unit to unit depending upon size, location their managerial capacities and relevant economic strengths the progress regarding increasing the area under cultivation and replanting of the old uneconomic bushes in the state gardens has not been uniform, due to which yield of tea showed a positive growth rate at country level where as it showed a negative trend in Himachal Pradesh and Tehsil Palampur in particular since tehsil Palampur accounts for major portion of the total area under tea, the decline in its production is reflected in the state as whole.

A constant process of renewal of old bushes through the means of regeneration, replanting & extension is necessary for the purpose of keeping the estate in good condition so that neither the productivity falls nor the quality deteriorates , but unfortunately the tea estate owners in the state of Himachal Pradesh have been

reluctant to uproot and replant as it entails considerable loss of revenue due to crop more loss. Expenses has to be incurred on uprooting, soil rehabilitation, raising of nurseries planting and establishing of tea through watch ful management during the period where not much income is available from the area. The cost and expenditure vary from location to location depending upon variety of pertinent factors, but increasing cost of the regeneration replantation has dissuaded the planters from taking up this costly activity and study reveals that with vary meagre subsidy rate and interest rate of more than 15 percent on developmental loans for this purpose and pay back period of the replanting, rehabilitation is as much as 14 years is major constraint towards embarking upon regular planting program .It is found that the large planters are bearing the loss of a temporary crop reduction in their stride and have been under taking programs of renovating their aging tea stands, while middle level planters are more inclined to increase yields from the existing tea bushes in efforts to improve their economic strength and smaller section of planters are not too well organised section to take up a process of planned development because they are ill equipped technically or managerially which has resulted in stagnation.

Yield of made tea across various groups over the year has shown signs of narrowing. Their is very less consistency in the obtaining good quality in the end product. The study done Council of Scientific and Industrial Research in 1980 reveals that yield in the state gardens

has stagnated around 250 KMT/H which is only one sixth of the national average while the same variety of tea in the hills of Darjeeling produces 700 KMT/H.

From the survey it was also identified that lack of know-how in tea agrotechnology was the main cause of the low yield . 80 percent of the 1660 recorded tea planters, whose holdings are smaller than 1 hectare and contributes only 6 percent of the production were totally ignorant of the modern cultural practices, even the bigger holding were not sound in modern agrotechniques. Labour which is employed in the gardens for the plucking of the tea leaves which is a technical process is unskilled or semi skilled, who are unaware of the plucking standards, which results in coarsened plucking which is not fit for the production of tea is also one reason for the low productivity.

A survey of Council of Scientific and Industrial Research (CSIR) has shown that less than 1 percent of the tea planters derived more than 50 percent income from tea plantations and out of recorded 1660 planters 1001 were such who derived no income from the tea plantation.

With regard to the production, it is found that production which is mainly standardised through cooperative tea factories at Palampur, Bir, Baijnath, and Dharamshala are under utilising their capacities. There are various reasons cited for under utilising of the productive capacity mainly in the form of power failures, inadequate supply of raw material by the planters. The Kangra region has a peculiar

feature that the small cultivators prepare hand made tea and sun dried tea and sell it directly due to delayed payments by the cooperative factories for the leave supplied to the factory in view of their limited resources. The cost pattern of the factories show that nearly 70 to 75 percent of the cost is on payment of commission ,interest and selling expenses like brokerage and carriage.Labour which accounts for nearly 10 to 15 percent share in cost of production is major constraints in determining the the quality of tea in the gardens, and since labour are not properly trained to take up the various garden activities, which ultimately affect the quality of made tea.Due to the above reasons the cost of production of the tea factories is constantly showing rising trend which has affected the profitability of the factories.Financial position of the cooperative tea factories show that with the exteremly high cost of production the, profitability of these cooperative factories have been eroded and mounting interest charges on the outstanding loans are the major contributory factors causing erosion of financial base of these factories. Kangra tea which swings between black and green tea is sold through auction centres at Amritsar and Calcutta and marketing agency, The Kangra Tea Planters Marketing and Industrial Society plays a vital role in the sale of Kangra Tea, but it is found that on one hand the poor quality of made tea and **secondly due to expliotation** of the sellers in the hands of the agents they are not paid the remunerative prices at times,due to low sales the sellers are not paid at all which results in piling up of large stocks of tea at auction

centres, which entail high rental charges.

In chapter two studies under taken on this subject has been reviewed and it has been observed that some of the studies have also been conducted in the Himachal Pradesh but these are not sufficient as to growing needs of the tea cultivation and tea industry in Himachal Pradesh. Keeping in view this research gap the present study has been undertaken.

3.2. OBJECTIVES

The main objectives of the present study are as under:

1. To analyse the trends in production and productivity of Kangra Tea.
2. To examine the prominent problems of the tea industry in the State.
3. To suggest the steps for the implementation of the "New Area Infilling Subsidy Scheme" introduced in 1993-94 in order to augment the production of the tea bushes in vacant areas available in the state.
4. To study the marketing pattern of the industry and suggest the ways and means to ensure the global competitiveness.

3.3. SCOPE

Notwithstanding the industry's past achievements and exemplary track record in diverse fields of catering to the needs of people such as creating employment opportunities and generating economic activities in the backward region, it needs a regeneration and rehabilitation.

Substantial, sustained and accelerated augmentation of area, production and productivity emerges as a single important and crucial goal at this junctures. To meet such challenge with in specified time span, need arises to find answer to some questions which go a long way to affect the production in the area and productivity of tea viz identification and analysis of the factors affecting yield of tea gardens and what are the factors which can improve the yield substantially in the gardens and factories. Need arisis to identify and study the special problems confronted by the small and medium tea growers and suggest the measures to ameliorate their problems. Besides studying their current needs and requirements, their is a need to absolve the measures through which production base can be widened, renovation of tea estates can be taken up with least cost burden.

In order to achieve the said objectives the government and the industry needs to have shared perception and comprehensive tea policy is the need of the hour for taking up the development activities like knowing the production requirements, financial requirements and framing the appropriate taxation policy. The scope for expansion of hectarage under tea, in the traditional area's is limited though there is considerable scope for increasing the productivity. For increasing the productivity, consolidation of the existing mature tea area by rejuvenation is essential to take the full advantage from that section, this would help to maintain the level of

production of the estates, when lowest yielding section are being uprooted and replanted as replanting remains an essential operation for long term productivity of the estate. A subsidy for rejuvenation and infilling of vacancy at the rate of Rs 3000 per hectares, infilling and inter planting at the rate of Rs.4000 per hectare has remained unchanged since 1975 at national level, which needs to be revised in tune with current cost of operations to encourage rejuvenation and infilling. So in order to achieve planned and consistent increase in production, it becomes imperative that the rate of subsidy be raised substantially to compensate for crop loss and thus motivate the planters to step up the replanting. As in the area large segment of the planters form part of the small grower sector, considerable policy for expansion and development of this segment is necessary and assistance towards suitable grouping of small growers to create economically viable entities is important. In this scheme of things the government must come forward to offer preferential loans. A separate cell for financing small growers development may be set up under Tea Board and should be located in the local area.

In terms of production of made tea the performance of the cooperative factories have been very dismal, which requires the maximum attention objectively; identifying and analysing on continuous basis its emerging, requirements be these in terms of physical or financial resources or in terms of input. The major area requiring attention are that how the poor utalization of the cooperative assests in the factories can be improved, what are the area's where the

costs can be curtailed to reduce the cost of production, so that factories can have some returns which can be ploughed back in these factories for taking up the development activities like upgradation of the technology. Consequently there should be an enabling provision framed for waiving off the accumulated loans of these factories so that current profits of bussiness should be ploughed back in to these factories.

To make Kangra tea globally competitive and in order to compete with the major front runners in the tea exports like Srilanka, Africa, firstly Tea of Kangra needs to find better place in the National market, which require that quality of made tea need to be improved and cost of production need to be reduced with greater market orientation leaving aside the old auction system of marketing. Besides the enormous cost incurred to reach the produce to the auction centres, the Kangra valley tea have to compete in orthodox segment of market which pay good prices but is extremely selective. So steps should be taken to take up market reasearch for the formulation of policies. Steps should be taken up expeditious turnover including measures for obviating blocking of funds in unsold stock as also minimizing the 'On Cost', viz, transportation including insurance, warehousing and brokerage etc in the major auction centres, which collectively and severally have tremendous bearing on augmentation of the profitability.

3.4. RESEARCH DESIGN

In order to study the problems of the tea industry and

the tea planters in particular, a complete list of the planters was prepared with the help of the records obtained from the tea Board office and tea planters. The total gardens were clasified in to three catagories viz small, medium and large on the basis of area under tea plantation.

3.4.1 DATA COLLECTION

The data for the said study is collected both from the primary sources as well secondary sources. A schedule was used to study the various problems of the planters through which required information is collected from sampled planters. The secondary data on area, production, sale and other aspects were collected from the cooperative tea factories, Office of the Registrar copporative societies, office of the Tea Board of India, Kangra Tea Planters Supply and Marketing Industrial Society through my personal visits to the respective office.

3.4.2 SAMPLE DESIGN

The sample of 83 planters was choosen from three catagories of the planters i.e small,medium and large by using the simple random method for collecting the data on production, sale and cost.

TABLE 2.1
SAMPLE OF TEA PLANTERS.

CATAGORY	AREA IN HECTARES	TOTAL NO.OF ESTATES	SAMPLE
Small	Below 2.0	1506	75
Medium	2.0 TO 20.0	140	7
Large	20.0 & above	14	1
	Total	1660	83

3.4.3 METHODOLOGY

(a)

GROWTH RATE - To examine the growth rate of area production and productivity of tea following formula is of used;

$$R = T \left| \frac{P/K}{-1} \right| * 100$$

Where R = Stands for growth rate

T = Time period (i.e. 10 years)

P = Present area, Production & Productivity

K = Area, Production & Productivity at base year.

(b) CORRELATION ANALYSIS

In order to analyse the relationship between production and various other input factors in production like green leaf labour fertilizers, packaging ,Karl Pearson's coefficient of correlation was worked out mathematically specifying the degree of correlation of various factors.It is worked by using Direct method which is as follows :

$$r = \frac{\sum xy}{n \sigma_x \sigma_y}$$

r = Coefficient of correlation

x = deviation of the first variable from its mean.

y = deviation of the second variable from its mean.

xy = Total of the product of the deviation of the first and the second variable

n = number of pairs of the variable.

x = Standard deviation of the first variable .

y = Standard deviation of the second variable

c. Trend analysis

To analyse the trends in production, sale and prices of tea at national level and in Himachal Pradesh, method of least square of the time series is used. With the help of which trend line is fitted to the data to obtain the straight line curve. The line obtained by this method is called line of best fit as trend values can be obtained for all the given time period in the series.

Equation used is $Y = a + bx$

which is further expanded to find the values of a and b variable to fit the straight line trend values.

The two equations are as under:

$$\sum Y = Na + b \sum x \text{ --- (i)}$$

$$\sum xy = a \sum x + b \sum x^2 \text{ ---(ii)}$$

(d) Ratio Analysis

Ratio analysis is important tool which can be used for analysing the financial strength and weakness of the enterprises. Ratio Analysis is the process of determining and presenting in the arithmetical terms the relationship between the figures and group of figures drawn from financial statement. Although over all return on capital is an indication of efficiency, to compare results, look ahead to decide changing pattern and devise other ratios and standards to measure more precisely the efficiency in different sectors of the business, it is important that the long run return on capital earned by the industry should be

sufficient to give a fair return to share holders, provide for normal expansion of the business, provide adequate resources to maintain the real capital of business intact and above all satisfy creditors and employees.

Some of the critical ratios if appropriately used will serve to measure the financial productivity are.

1. Sales/Total Assets
2. Working capital/Total assets
3. Earning before tax & Interest to total asset.
4. Working capital/total asset.
5. Retained earning /total asset.
6. Debt equity Ratio.
7. Propretor to Fixed assest Ratio.
8. Net worth to current Assest Ratio.
9. Gross Profit\Net Profit Ratio
10. Stock turn over Ratio.

If these ratios are rising it should enhanced productivity and vice versa. In addition to this to measure the capital productivity is the working capital cycle, which is the length of time between a companies paying for materials entering into stock and receiving the inflow of cash from sales. The cycle time is calculated separately for finished product and debt turn over. The shortly the number of days greater is the productivity of the working capital and higher rotation. The longer the number of days, lower the productivity of capital & blockings of working capital.