TEA CULTIVATION AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF KANGRA VALLEY

SUMMARY REPORT

SUBMITTED TO
H.N.B.GARHWAL UNIVERSITY, SRINAGAR (GARHWAL)
FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY
IN
GEOGRAPHY

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DEHRADUN
2007
ABSTRACT

Tea (Camelia Sinesis) is a very versatile plant that can grow under varying conditions. Thus, tea is grown around the world including the Indian sub-continent in India, Nepal and Sri Lanka to China, Japan, Indonesia and Vietnam, the African sub continent in Kenya and in Latin America in Argentina. The credit for creating India's vast tea empire goes to the Britishers, who discovered and cultivated tea in India. In India, the extension of Tea Industry in modern form started between 1818 and 1834. The role played by the tea industry in our national economy is very important. It occupies 3rd position by contributing 8.8 per cent of total agricultural exports.

Tea cultivation is the unique feature of the Kangra Valley. Kangra Valley is rich in natural beauty and resources. Sustainable Development of the valley can be achieved by enhancing environmental capital. Tea cultivation has been playing a pivotal role in the Sustainable Development of the Kangra Valley. Due to unique local geographical conditions, the aroma of Kangra Tea is different from the tea produced in other parts of India. Valley tea is having unique flavour which resulted in world wide fame in past. But presently it is passing through a difficult period due to certain problems and issues which need immediate attention for the development of tea cultivation and industry in Kangra valley.

In the present study the data from the sample survey of 110 small, 25 medium, 25 large tea planters, 10 privately managed and 01 cooperative tea factory was collected from four tehsils (i.e. Palampur, Baijath, Dharamshala and Kangra) of Kangra Valley. Secondary data was also used from Tea Board of India, State Agriculture Department and Department of Tea Husbandry and Technology, Chaudhary Sarvan Kumar Himachal Pradesh Agriculture University, Palampur. Simple Mathematical and statistical tools viz, averages and percentages were used for analysing the collected data. Data is presented in the form of tables and figures. Statistical data is also used in the form of graphs, charts, bar-diagrams and pie-diagrams etc. In order to examine the constraints of tea development in the study area faced by the different category of tea farm owners and whether they differ significantly, chi-square ($\chi^2$) test was applied. The calculated value for chi-square ($\chi^2$) was
24.423 which was lower than the tabulated value of 38.885 at 26 degree of freedom (df) at five per cent level of significance. Another statistical technique ‘t’-test (significance of the difference of means) was applied to determine whether a true difference exists between population means of two samples drawn from same normal population. Karl Person’s coefficient of correlation method was used for determining the degree of relationship between tea production and annual rainfall, average maximum temperature and average minimum temperature for the year 1974-2004. Tea production in Kangra Valley is negatively correlated with annual rainfall. The calculated value of r (-0.387) show that correlation is significant at the 0.05 level. It is low degree of negative correlation. The tea production decreases with increasing rainfall in Kangra Valley which show that tea production is dependent upon many other factors also due to which positive relationship was not found. In the case of average maximum and average minimum temperature no significant relationship was observed.

Analysis of the data reveals that the production and area under tea is declining in the Kangra valley whereas tea leaf quality has improved with time. Kangra valley tea lost its world market due to natural disaster, impact of GATT and increasing competition. Cooperative movement failed in the case of Kangra valley tea. Tea related cottage industry is presently at the verge of closure. The physio-climatic conditions of the Kangra valley are favorable for tea cultivation and further development. It was found that rainfall received in the valley in last thirty years is suitable for tea cultivation. In some years recorded average rainfall was found fluctuating. The average temperature record for the same period is also favourable for tea cultivation. Low level of mean relative humidity percentage specifically in the range of 35-52 per cent stress for the need of proper irrigation of tea gardens for regular returns in the Kangra valley. Most of the soils in the valley are favourable for good tea production.

Government departments and planters’ associations are putting their collective efforts to bring Kangra tea again on the world map. To boost up the tea industry, the State Department of Agriculture and Tea Board of India provide financial assistance in the form of input subsidy, managerial support
and for planting material. Tea industry in the Kangra Valley is functioning under both co-operative and private sector. Co-operatives had played a major role in making the country self reliant and co-operatives can play a crucial role and can be instrument in making available the proper information and support to small and marginal land holders. The establishment of co-operative tea factories in Kangra valley helped in providing lot of benefits to the tea growers who supply the green tea leaves to the factory on a remunerative price. But with time co-operatives failed to manage well and as a result out of four co-operative tea factories three were leased to private parties by the state government.

Views of different category of tea planters were taken regarding causes of failure of co-operatively managed tea factories in Kangra valley. Small tea planters attribute failure of co-operatives in not giving timely payments to all suppliers, poor management skills, increasing political interference and non adoption of appropriate market strategy. Middle level tea planters cited poor management, overdependence of co-operatives on loans, poor grading system, out dated technology etc. Large tea planters stated failure of tea factories to sell the produce at appropriate rates, poor quality production, out dated rules and regulations, lack of skilled labour and tea experts, lack of coordination between different factories of the valley and lack of interest of the small planters for quality enhancement as the main causes.

Study of co-operative and private tea factories was conducted and the impact of privatization on the common cultivators was also assessed. 63.8 per cent of the tea planters preferred co-operative management with strict government monitoring. The total tea production crossed the figure of 17.11 lakh kg in 1998 as against 5.5 lakh kg during 1980. In the case of the area under tea, decline was observed. But marginal increase has been observed after 1986. The maximum plantation in the valley is old plantation (98.1 per cent). This indicates low initiatives on the part of all concerned for staring new plantations and improving tea productivity. It was also found that maximum tea planters were having 25-50 per cent land share under tea plantation out of total owned land. One fourth of the tea planters were adding average 2.44 Kanal of land area to ancestral land for tea cultivation.
Tea cultivation is a regular source of income and employment to the majority of tea planters, especially small. The maximum tea planters (42.5 per cent) are receiving upto Rs. 20,000 annual incomes from tea cultivation. On the other hand, 20.6 per cent of all tea planters are not receiving any income by engaging in this activity. Respondent tea planters also reported about decrease in income from tea cultivation in last five years. Present tea leaf quality was rated very good where as most of tea planters (89.4 per cent) gave the opinion that Kangra tea was more popular in the past. In the case of market for tea produced in the valley Amritsar remained preferred market for selling green tea and Kolkata for black. Majority of tea planters were selling tea outside the state before setting of modern tea factories in the valley. Presently local tea factories are utilising maximum share of green leaf produced in the region.

Tea cultivation can be a major source of economic and social development of the region. Proper futuristic policies with active participation of local planters and continuous efforts by different supportive bodies can save the tea cultivation and industry from closure. Planters feel that environmental quality has deteriorated. The main problems faced by planters were poor marketing, rainfall and temperature fluctuations, more demand of land for other activities, lack of training opportunities, low leaf price, low subsidy, delayed payments and poor overall management. The most acute problem faced presently by 72.8 per cent of all tea factory owners is problem of market. High transportation cost to Kolkata auction centre and under utilization of production capacity of the tea factories were other main reported problems highlighted.

The factory owners were aware about improving quality of product and investing more on marketing for solving some problems. However none was interested in research aspect. World Trade Organisation (WTO) has created tough challenge for the Kangra tea also. The production cost and quality are the main concerns under present circumstances. It was found that maximum surveyed ten planters were aware about global scenario. Small tea planters were less aware in comparison to medium and large tea planters.
The study of operation wise proportion of the labour use in tea revealed that plucking and field preparation operation were consuming the major share of labour use. It was also found that highest labour use for field preparation operation was found in small tea planters’ category (30.26 per cent). The least labour use was found for plant protection (0.63 per cent) in all tea planters category.

Ecological significance of tea cultivation was assessed. It was found that tea planters agree that with time and due to other reasons, environmental quality has deteriorated. Tea planters also reported about decrease in average rainfall in the Kangra Valley. Irrigation facilities were also found negligible. Tea planters were taking needed measures for ecologically better tea cultivation. The main steps taken were using natural drainage lines for draining excess water, adding sufficient organic manures, avoiding use of chemical fertilizers and taking proper erosion prevention steps.

Establishment of modern tea factories in the region gave tough competition to the cottage industry. Maximum planters are selling green leaf directly to the tea factories instead of processing it at small scale cottage factory or household. During the primary investigation many such small cottage factories were found closed. Various suggestions for the improvement were given by the planters and tea factory managers/owners. Small tea planters suggested for complete restrictions on selling tea gardens land, increasing subsidy and loans, making proper arrangement for purchasing the produce, strengthening small scale tea industry, new variety plantation, special financial assistance for setting cottage tea processing units, increasing role of small tea planters in management of co-operative tea units, shifting towards green tea sale and new tea plantations with government help in the Kangra valley. Medium category planters suggested for providing rollers on subsidized rates, planting Darjeeling tea variety, encouraging local home units for tea processing, providing direct subsidy, catering to local consumption, state market use for tea sale and fair grading system etc. The large tea planters stressed upon implementing grading system strictly for quality enhancement, improving marketing system, increasing subsides for purchasing driers, rollers and other tea machinery, developing local market
instead of sending tea to Kolkata market, capturing European green tea market and starting crop insurance scheme for protecting Kangra tea cultivators in the case of crop failure. The efforts of the Tea Board of India, Institute of Himalayan Bioresource Technology (I.H.B.T.), Department of Tea Husbandry and Technology, Chaudhary Sarvan Kumar Himachal Pradesh Agriculture University, Palampur were appreciated by the Planters. If the tea cultivation land is shifted to any other economic activity than it will not be as sustainable and employment generating as the tea cultivation can be. So it can be concluded that tea cultivation should be continued and hurdles should be removed immediately. The main suggestions emerging out of the study are:

- Proper awareness programmes about conservation practices should be held with regular frequency.
- The old plantation needs to be rejuvenated.
- Quality improving measures should be adopted by all the tea planters and tea industry in the Kangra valley.
- Prior weather related information should be made available to the tea planters.
- Proper monitoring of the green tea leaf price should be undertaken and minimum support price like in other plantation crops should be announced on annual basis by the state government.
- Efforts should be made to arrange better marketing facilities at local level as well as national level.
- New value added products of Kangra tea should be encouraged.
- Narrow-gauge 120 Km long railway link between Jogindernagar-Palampur and Pathankot should be converted into broad guage on priority basis for proper and economical transportation of Kangra tea to Kolkata and Amritsar auction centre.
- The neglected and abandoned tea garden owners should be motivated to pay attention for making tea gardens economical.
Tea planters associations should play important role by becoming more active and continuing their on going efforts. It is also suggested that they necessarily involve the small tea planters in such programmers.

With the help of cooperation of all concerned tea industry of the Kangra valley can flourish once again and can provide help in the sustainable development of the valley in future also.