PROBLEMS AND PROSPECTS OF TEA INDUSTRY IN HIMACHAL PRADESH

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Abstract: The tea industry in Himachal Pradesh which held an important place in the state's economy is going through a crisis situation and is striving for its survival. The production has declined at a compound annual growth rate of -0.95 percent during the time period 1990-91-2016-17. The same is the case with the area under tea production which is declining. Many of the planters have stopped tea production and abandoned the tea estates. Majority of the bushes in the state are very old and fall in the age group of above 80 years of age which is affecting the productivity of tea leading to low quality and low price in the market. The present study also analyzed various issues faced by tea industry in the state which need immediate attention.

Index terms: Tea industry, Kangra tea, productivity, tea estates, small tea growers

I INTRODUCTION

Himachal Pradesh is one among the few states that produce tea in India. Tea production in Himachal Pradesh takes place mainly in the Kangra district which is also known as the Kangra valley. The main areas of tea production are Palampur, Baijnath, Kangra and Dharamshala tehsils. Apart from these areas tea is also produced in Mandi (Jogindernagar tehsil) and Chamba districts (Batiyat tehsils). Due to its geographical location, Kangra tea is unique in its flavor, color, and taste. The Kangra tea has acquired GIS in 2006.

The Tea Industry in Himachal Pradesh is more than 150 years old and both Green and Black variety of tea is produced. Tea is produced both in factories and households. During the reign of British Empire, Kangra tea was exported to England and other parts of Europe, America, Central Asia and Australia. Kangra tea became famous by winning gold and silver medals at London and Amsterdam fairs in 1886 and 1895.

The credit for introducing tea in Himachal Pradesh goes to Dr. Jameson, the Superintendent of Botanical Garden Peshawar, North West Province who visited Kangra in 1849 and pronounced the region ideal for tea cultivation. In the same year, China tea plants were brought from the nurseries of Almora and Dehradun and planted in three government gardens at Kangra, Nagrota, and Bhawarna. The plants showed excellent growth in Nagrota and Bhawarna but failed to thrive in Kangra owing to high temperature and scarcity of irrigation water. The successful growth of tea plants in two areas encouraged the government to establish tea industry in the valley. The first commercial plantation was established as 'Hailey Nagar Tea Estate' at Holta in 1852. Gradually by the year, 1880 many plantations were developed covering an area of 4180 hectares extending from Jogindernagar in Mandi to Shahpur in Kangra district.

The massive earthquake which hit the valley in 1905 was a turning point in the growth of tea industry in Himachal Pradesh. After the earthquake, the English planters left the valley selling away their estates to local planters. These planters could not pay much attention to the industry because of their long absence from the area. Most of the gardens are denuded of fertile soils through the process of constant soil erosion. The tea gardens are old and the tea bushes have mostly degenerated. The adverse effects of this are amply reflected in the lower yields of tea in the state. The Green tea which is popularly called as 'Kangra Tea' has now lost its value in the market.

II OBJECTIVES

The present study was conducted keeping in mind the following objectives:

- 1. To analyze the growth of production, area, and yield of tea in Himachal Pradesh.
- 2. To examine the problems faced by tea industry in Himachal Pradesh.

III METHODOLOGY

The present study is based on secondary data compiled from diverse published sources including Tea Statistics Tea Board of India, Economic Survey of Himachal Pradesh, Indian Tea Association, and Government of India Report on Tea Sector.

Compound Annual Growth Rate (CAGR) has been used to assess the growth over the given time period. The formula used was

$$CAGR = (EV / BV)^{1/n} - 1$$

Where:

EV = Investment's ending value

BV = Investment's beginning value

n = Number of periods (months, years, etc.)

IV REVIEW OF LITERATURE

Mishra and Sharma $(1994)^1$ found that the tea industry in Himachal Pradesh is in the grip of a vicious circle of low productivity, low returns, and low and low investment. There was a steep decline in the quality of tea produced and area under cultivation. The local factors for the weak condition of tea industry are poor quality manufacturer, low profit margin, shortage of labor, and lack of finance while depression in the tea markets, closure of land trade with China and Afghanistan, development of high yielding tea areas in Assam and West Bengal constitute the external factors.

Moorthi and Pathania $(1994)^2$ in their study attempted to analyze the tea industry with special focus on resource use efficiency. They classified the planters into three categories viz., small, medium and large on the basis of area under tea gardens. It was found that the labor

uses and expenses on variable inputs are important factors for explaining the variation in the production of tea. It was observed that there is scope for increasing investment in fertilizers, chemicals, and human labor. The proportion of expenditure on fertilizer and chemical is more on large farms than those on small and medium farms.

Gulati and Ravindranath (1996)³ analyzed periodical seasonal variations in infusion quality of orthodox Kangra tea over various growth flushes. Flavor quality also registered slight improvement in backed flush over the main flush. Results suggest increasing crop productivity during early and backed flushed could enhance profitability.

Sud (2007)⁴ observed that tea growers in the Kangra valley are finding it very difficult to maintain their plantations as there is no buyer for their produce. Though in the past few years the tea growers in the Kangra valley have made all efforts to improve the quality of tea manufactured to compete in the international market but because of high production cost, only a few buyers have come forward to buy the Kangra tea.

Verma and Gupta $(2015)^5$ analyzed the various dimensions of human work-force employed in tea plantation and processing in the Kangra district of Himachal Pradesh. The study showed that the education status was extremely low particularly in the case of women. Workforce engaged in processing was comparatively more qualified than those engaged in production. Most of the workforce had only traditional knowledge and skill to work in the tea plantation 80 percent of the workforce employed in tea processing was male, while 74 percent of the workforce was causal due to the seasonal requirement of the human resource in the factories.

Sood $(2016)^6$ suggested that for the development of tea industry in Himachal Pradesh government should take up more initiative. The tea industry should be modernized with the change in technique of plantation, improvement of encouragement to electronic tea auction system and managerial excellence.

Sood (2016)⁷ analyzed the effect of rainfall, temperature, and humidity on the production of tea. The study found that heavy or scanty or delayed rainfall adversely affects the growth and yield of tea.

V RESULTS AND DISCUSSION

5.1 Growth of Production, Area, and Yield of tea in Himachal Pradesh

Himachal Pradesh produces both Black and Green varieties of tea. But the proportion of black tea is more when compared to the green variety. Only the orthodox method of tea production is used in the production of tea. The share of Himachal Pradesh in the overall production of tea in the country was 0.16 percent in 1991 which declined to 0.12 percent in 2001. The share was 0.09 percent in 2011 which declined to 0.07 percent in 2016.

The share of Himachal Pradesh in the overall tea production in North India also has declined over the time period. It was 0.21 percent in 1991 which declined to 0.16 percent in 2001 and to 0.11 percent in 2011 which further declined to 0.09 percent in 2016.

The tea production in the state over the last two decades has shown a declining trend. The tea production has declined from 11.08 lakh kgs in 1990-91 to 9.21 lakh kgs in 2016-17 with a compound annual growth rate of -0.95 percent. The total tea production in the state during the time period 1990-91 to 2016-17 is presented in table 1 below.

Table 1 Production of Tea in	n <mark>Himachal Pr</mark> adesh	h during the period 1990-91 to 2016-17
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(Quanter)	in lakii itg3)		
year	production	year	production
1990-91	11.8	2004-05	6.5
1991-92	11. <mark>84</mark>	2005-06	8.57
1992-93	11.92	2006-07	8.62
1993-94	13.03	2007-08	8.03
1994-95	13.14	2008-09	8.5
1995-96	13.59	2009-10	8.49
1996-97	14.23	2010-11	8.84
1997-98	14.42	2011-12	9.8
1998-99	17.11	2012-13	8.31
1999-00	12.22	2013-14	8.95
2000-01	12.47	2014-15	9.5
2001-02	10.22	2015-16	8.6
2002-03	7.18	2016-17	9.21
2003-04	7.02	CAGR	-0.95%

(Ouantity in lakh Kgs)

Source: Tea Board of India and Economic Survey of Himachal Pradesh

As per the report of Tea Board out of the total area under tea in Himachal Pradesh, only 1150 ha area is active and the remaining area has been abandoned for various reasons and there is no commercial tea production from this area⁸. Table 2 present the scenario for the area under tea cultivation in Himachal Pradesh.

Table 2 Area under tea in Himachal Pradesh during the period 1990-91 to 2016-17

(Area in Hectares)			
year	Area	year	Area
1990-91	2063	2004-05	2348

1991-92	2063	2005-06	2348
1992-93	2063	2006-07	2348
1993-94	2063	2007-08	2348
1994-95	2063	2008-09	N.A
1995-96	2312	2009-10	N.A
1996-97	2325	2010-11	N.A
1997-98	2325	2011-12	2300
1998-99	2325	2012-13	2300
1999-00	2325	2013-14	2300
2000-01	2325	2014-15	2300
2001-02	2312	2015-16	2310
2002-03	2312	2016-17	2310
2003-04	2348	CAGR	0.44%

Source: Tea Board of India and Economic Survey of Himachal Pradesh

The area under tea in Himachal Pradesh has increased at a very low rate during the period 1990-91 to 2016-17. The area increased from 2063 hectares in 1990-91 to 2310 in 2016-17 with a compound annual growth rate of 0.44 percent. The share of the area of tea in Himachal Pradesh in the overall tea area in the country has declined continuously from 0.55 percent in 1991 to 0.45 percent in 2001 and again to 0.40 percent in 2011. The share slightly increased to 0.41 percent in 2016.

The share of the area of Himachal Pradesh in overall tea area in North India has also declined continuously from 0.67 percent in 1991 to 0.59 percent in 2001 and 0.50 percent in 2011. There is a minimal increase to 0.51 percent in 2016.

The yield of tea in Himachal Pradesh has also seen a continuous decline over the time period 1990-91 to 2016-17. Table 3 shows the average yield of tea in Himachal Pradesh over the time period 1990-91 to 2013-14.

Table 3 Average Yield of tea in Himachal Pradesh from 1990-91 to 2013-14

(Yield in kg/ha)			
Year	Yield	Year	Yield
1990-91	572	2003-04	258
1991-92	574	2004-05	262
1992-93	578	2005-06	414
1993-94	632	2006-07	379
1994-95	6 <mark>37</mark>	2007-08	328
1995-96	5 <mark>88</mark>	2008-09	N.A
1996-97	612	2009-10	N.A
1997-98	620	2010-11	N.A
1998-99	736	2011-12	N.A
1999-00	526	2012-13	N.A
2000-01	536	2013-14	105.9
2001-02	442	CAGR	-7.07%
2002-03	311		

Source: Tea Board of India and Economic Survey of Himachal Pradesh

The table reveals that Average Yield of tea in Himachal Pradesh has declined from 572 kg per hectare in 1990-91 to 105.9 kg per hectare in 2013-14 with a compound annual growth rate of (-) 7.07 percent during the period 1990-91 to 2013-14.

Table 4 shows the decadal compound annual growth rate in Himachal Pradesh over a period 1951-61 to 2011-2016.

Table 4 decadal compound annual growth rate of production, area, and yield of tea in Himachal Pradesh

Year	Decadal CAGR Production	Decadal CGAR Area	Decadal CAGR Yield
1951-1961	0.6%	1.8%	0.9%
1961-1971	-3.2%	2.2%	-3.2%
1971-1981	-4.1%	3.1%	-4.1%
1981-1991	7.7%	2.8%	16.5%
1991-2001	-1.6%	1.6%	-2.9%
2001-2011	-0.5%	3.4%	N.A
2011-2016	-0.7%	1.8%	N.A

Source: calculated from Tea Board of India and Economic survey of Himachal Pradesh N.A- Not Available

From the table, it is evident that there is a continuous decline in the tea production in the state over the time period. Only in the decade 1981-91 there was some positive growth in production with a compound annual growth rate of 7.7 percent. From that period onwards the tea production has continuously declined. In the case of the area under tea there is stagnant growth at some period there is growth while at other there is decline. The area under tea has increased in 1971-81 at a compound annual growth rate of 3.1 percent which again declined to 1.6 percent in 1991-01. In the decade 2001-2011, there is the highest growth in the area with a compound annual growth rate of 3.4 percent. The yield of tea in the state has also declined over the years, the only exception being the decade 1981-91 where the yield had a positive growth with a compound annual growth rate of 16.5 percent. Again in the decade 1991-2000, the yield declined with a negative compound annual growth rate of 2.9 percent. The compound annual growth rate for the yield of tea for the decade 2001-2011 and 2011-2016 could not be calculated due to unavailability of data from the Tea Board. The decadal growth rate for the Production, area, and yield of tea reveals that mostly the growth in all these three aspects has remained negative. Figure 1 shows that the production has continuously declined, the area has almost remained stagnant and the yield had also continuously declined.

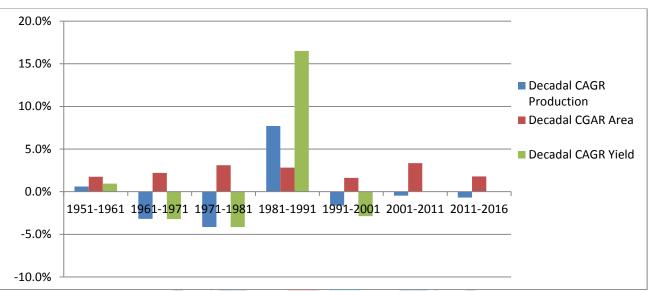


Figure 1 Decadal Compound Annual Growth rate of Production, Area and Yield of tea in Himachal Pradesh

5.2 Problems faced by tea industry in Himachal Pradesh

The tea industry in Himachal Pradesh is going through a bad phase. Himachal Pradesh, which was once a leading exporter of tea to Afghanistan and Pakistan, has witnessed a gradual decline over the time period. Below are some of the problems that the tea industry in Himachal Pradesh faces in general.

1. Decline in Area under Tea

It is observed from Table 2 that there is sharp decline in the area under tea in the state. This is because the estate owners do not find the tea business profitable and engage themselves in other jobs. This has led to abandonment of many tea estates.

2. Declining productivity and low yields

Another major problem faced by the tea industry in the state is the low productivity and yield. The yield per hectare has sharply declined. Most of the tea gardens are very old and in the age group of above 80 years of age which is affecting the productivity. According to the baseline survey conducted by the tea board in 2013-14 the average yield of tea in Himachal Pradesh is 105.9 kgs per hectare. As per the survey on 27 tea gardens it is found that 799.34 hectare area is in the age group of above 80 years. This shows that major part of the area comprises of old age tea bushes thereby leading to decline in productivity. The process of replantation and rejuvenation of the tea plants is also very negligible as this is a very costly affair the growers are not interested in focusing in this area.

3. High labour cost

Tea being a labour intensive activity requires regular supply of labour throughout the year. There is always shortage of labour during the plucking season and the cost of employing labour is very high. Most of the farmers in the state are small farmers who cannot afford to employ labour at a high cost while the profitability is already low.

4. Low price for green leaves

As the tea produced in the state fail to fetch good price at the auction, the processing units purchase the green leaves from the growers at lower rates leading to low income from tea activity. Withering and drying process during the monsoons becomes difficult as the farmers rely on the sun drying. In this situation the farmers are forced to sell the fresh leaves at whatever price they are offered leading to low income.

5. Underdeveloped local market

Since the tea produced in the state has a very minimal share in the overall tea production in the country there is no proper local market for the sale of the produce. The auction market is only in Kolkata for orthodox black tea and Amritsar for Green tea. This makes the tea growers entirely dependent on the agents to sell off their produce in these markets which often leads to low prices for the produce. Also the tea growers have no say in the market and they have to be satisfied with whatever price they get.

6. Lack of maintenance of tea estates

As the tea production business has become very unpopular due to low returns majority of the growers are moving from tea production. This often leads to no maintenance of the tea gardens. The tea bushes regularly need pruning and proper maintenance which is not been done by the growers. They mainly engage themselves in jobs other than tea production. Most of the gardens are abandoned by the growers. Further, almost all the gardens are organic and there is crop loss due to bugs and weeds.

7. Lack of institutional finance

There is lack of adequate institutional finance for capital investment and for the proper maintenance of the tea gardens. As of now bank finance is not available for capital investment owing to security-related issues. As per the land revenue Act of Government of Himachal

Pradesh land under tea plantation cannot be sold, therefore banks do not find the benefit of mortgaging these lands for the bank credit they provide to the planters.

8. Lack of proper marketing

Tea produced in the state has no well established brand as most of the tea is sold in the auction at Kolkata and often this tea is blended with some other tea. This affects the marketing of tea under a brand name and the tea fail to fetch good prices in the market. These are some of the major problems faced by the tea industry in Himachal Pradesh.

VII SUGGESTIONS

The tea industry in Himachal Pradesh, although going through a rough patch, holds immense potential to produce high quality tea in the country. Following are some suggestions that can be useful to improve the conditions of the tea industry in Himachal Pradesh.

- To provide incentives to the tea growers who have lost their interest in the business and abandoned their estates. They should be encouraged to take up tea production so that the production can be increased.
 - More focus should be given to replantation and rejuvenation of tea bushes so that the yield can be improved.
- Since most of the tea gardens are small in size it is very difficult and expensive to modernize all the farms. For this appropriate technology and techniques should be innovated according to the farm sizes.
- High labor cost can be tackled by introducing modern machinery and equipment which meet the requirements of the tea planters.
- It is very essential to create a niche market for the tea produced and the tea produced can be sold under one single brand
- The government can come forward in providing for the credit requirements of the small tea planters who fail to get the required finance from the banks.

• The condition of tea industry in Himachal Pradesh is different from other states. Most of the schemes of the Tea Board of India are designed according to states which have big tea estates and these schemes cannot be implemented in the state. Therefore, the Tea Board of India should design schemes for Himachal Pradesh separately.

• Marketing of tea is a very important aspect to improve the condition of tea industry in the state. For this the Tea Board can promote tea to the public by organizing educational campaigns, tea fairs, and advertising campaigns.

• The tea planters should be made aware of all the schemes and policies by the Tea Board and the government through conducting workshops and seminars from time to time.

• Another important aspect that needs immediate attention from the Tea Board is to maintain an adequate and up-to-date record of the data regarding tea production and related aspects. It is observed that the Tea Board did not have appropriate data after 2008, especially with regard to yield and age of the tea bushes.

These are some of the suggestions that can be used to improve the conditions of the tea industry in Himachal Pradesh. But, the success of these efforts will entirely depend upon the efficient implementation of the policies and schemes.

CONCLUSION

The present study found that the tea industry in Himachal Pradesh is striving for its survival for a long time now. There is continuing decline in production, area, and productivity of tea in the state. Most of the tea planters are small tea growers who are shying away from the tea business owing to low profitability in tea production. This has led to the abandonment of many tea estates in the state. The study also analyzed various problems that are hindering the growth of the tea industry in the state. These problems are very complex and multifaceted which can be solved only in a phased and planned manner. The Tea Board of India should come up with a target action plan to revive the tea industry, a collective effort from the Tea Board of India and the Government is called for. If the policies are implemented efficiently the tea industry can be revived and once again the lost glory of tea industry in the state can be restored.

REFERENCES

[1] Mishra, J.P and Ashwini Sharma, Revival of tea industry in weak tea estates, Yojana, Ministry of Information and Broadcasting, New Delhi, December 31, 1994.

[2] Moorti, T.V and M.S Pathania, Resource use efficiency of tea cultivation in Kangra District (H.P), Indian Journal of Economics, Vol. 80, Allahabad, July 1994.

[3] Gulati, Ashu and S.D Ravindranath, Seasonal variations in quality of Kangra tea (Camellia sinensis (L) O Kuntze) in Himachal Pradesh, Journal of Science of food and agriculture, Vol.71, Issue 2, June 1996.

[4] Sud, Ram Gopal, Tea of Himachal Pradesh, Shipra Publications, Delhi, India, 2007.

[5] Verma, Parmod and Sonika Gupta, Factors affecting socio-economic status of farm workers of tea industry in Himachal Pradesh, Himachal Journal of Agricultural Research 41 (1): 36-41, 2015.

[6]Sood, Meghna, Development of tea industry in Himachal Pradesh, International Journal on Emerging Technologies 7 (2): 44-47 (2016)

[7] Sood, Meghana, Analysis of climatic parameters rainfall, temperature & Humidity on tea leaf production: A case study of Dharamshala Tea Company, International Journal of Science Technology and Management, Vol. No. 5, Issue No.11, November 2016.

[8] Retrieved from https:// www.nabard.org.

[9] Sankhian, Anurag, "Tea Cultivation and Sustainable Development: A case study of Kangra

Valley", Unpublished Ph.D. Thesis, H.N.B Garhwal University, Srinagar (Garhwal), 2007.

[10] Economic Survey of Himachal Pradesh, Various issues.

[11] https:// www.teaboard.gov.in

[12] <u>https://indiatea.org</u>