

Tea economy: special reference from Kerala

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Abstract

Objectives: To analyse the trends and pattern of area, production and yield of tea plantation in Kerala and to study the problems and prospects of small and marginal farmers engaged in tea cultivation and sustainability of tea plantations in Wayanad District.

Methods/Statistical Analysis: Investigation is based on both primary and secondary data. The trends and pattern of area, production and yield of tea plantation Kerala and in India as a whole and studied using secondary sources like the publications of Tea board, United Planters Association of Southern India, Agricultural Statistics, Economic Review, Indian Economic Journal, Economic and Political Weekly and also web sites. The primary survey conducted in Vythiri Panchayat in Wayanad district one of the hilly districts in Kerala. A sample of 100 marginal farmers was taken for this study.

Findings: Till 2005, India was the largest tea producer in the world, but after 2005 China takes the position. Production of tea in India declined because of many reasons like price fluctuations, changes of climatic conditions, Economic crisis etc. Production of tea in Kerala and in Wayanad also declined, but now lots of small and marginal farmers came in to tea cultivation because, compared to other plantation crops like pepper, coffee, cardamom etc., the number of yield is high. That is in between three months the growers collect the tea leaves. Therefore, the major attracting factor for the new growers was the profit maximisation.

Applications/Improvements: State and local government initiatives were necessary for the better production tea in small and marginal farmers. Like other plantation crops, subsidies are necessary for more productive and profitable and it helps to change the standard living of the farmers.

Keywords: Tea Economy, Plantation crops, Small and Marginal tea growers, Production and productivity of tea, Export of Tea.

1. Introduction

Tea is one of the most important non-alcoholic beverages in the world, and is a commodity of great commercial significance. According to ancient legend, tea was discovered by chance by a Chinese emperor Shen Nung in 2737BC. Tea entered its golden age during the Tang Dynasty in the 7th century AD. The Chinese tea merchants became prosperous by selling tea to Arab, Turkish merchants and Europe had to wait till the 16th century AD to become familiar with the delights of tea drinking. When the British heard all about the tea's in China. In the case of Europe the nations like Dutch and Portuguese actively trading with China in the early 17th century. As long as Britain traded with China was very smooth and imported Chinese tea. But soon their relation got strained and Britain began to seek other location for the production of tea. Followed by this need Lord William Bentick introduced the idea of planting tea in India. Tea is one of the important plantation crops. Two major classification of tea were Black tea and Green tea.

The production and export of tea during 2016 was 5462678 million T and 1777573 million T respectively in the world. Now, China is the largest producer and Kenya is the largest exporter of tea in the world. Tea is a commodity of great commercial importance of the Indian economy. During 2016, the production and export of tea in India was 1239150 million T and 216790 million T respectively.

In India, Assam is the largest producer of tea. Kerala is one of the important tea producing states in India. Major tea producing districts in Kerala are Idukki and Wayanad. During 2016, the production of tea in Kerala was 67.7 million kg. Recently, in Wayanad large number of marginal farmers entered in this sector. The study aims to analyse the declining trend of production and export of tea since 2005 and the problems, profit earnings and socio economic conditions of the marginal farmers in Wayanad district.

The major existing studies related to the area, production and productivity of tea cultivation are provided here which help to analyse the background of tea economy in the world. In [1] pointed out that tea continues to maintain its position as one of the important commodities in the country's export trade. Tea exports have been subjected to considerable fluctuations due to fluctuations in international price. According to it, it is high time to construct an effective plan for expanding production at a faster rate to meet the growing domestic demand for tea and sustain its export.

In [2] provides a particular perspective, namely the supply response of tea production, acreage and yield rather than comprehensive treatment of India's tea economy. It pointed out that unsatisfactory export performance is the main problem encountered by the tea industry and given a rapid increasing domestic consumption. For the comparison, the study used simple linear forms of equation and the double log forms. In [3] analysed the constraints on small holders' credit investment in tea farming in South Kisii District of Kenya. Accordingly, more than 80 per cent of Kenya population lives in rural areas; where they derive their livelihood from small scale agricultural production.

2. Problem of the study

Tea has played an important role in India's economy for the several last decades. But its position has substantially declined in recent years. The tea economy shows a same situation in Kerala and in Wayanad. The sustainability of tea economy is also questionable. But, recently the participation of marginal farmers in tea cultivation increased.

It may help to enhance the sustainability of tea plantations in Wayanad district. This study aims to analyse the declining trend of production and export of tea since 2005, and the problems, profit earnings and socio economic condition of the marginal farmers and sustainability of tea plantations in Wayanad.

3. Materials and methods

The study seeks to examine the trends, pattern and production of tea from Kerala. The study was based on both primary and secondary data. The objectives like analyse the trend and pattern of area, production and yield of tea plantations in Wayanad and to analyse the trend in magnitude and direction of tea export are mainly with the help of secondary data.

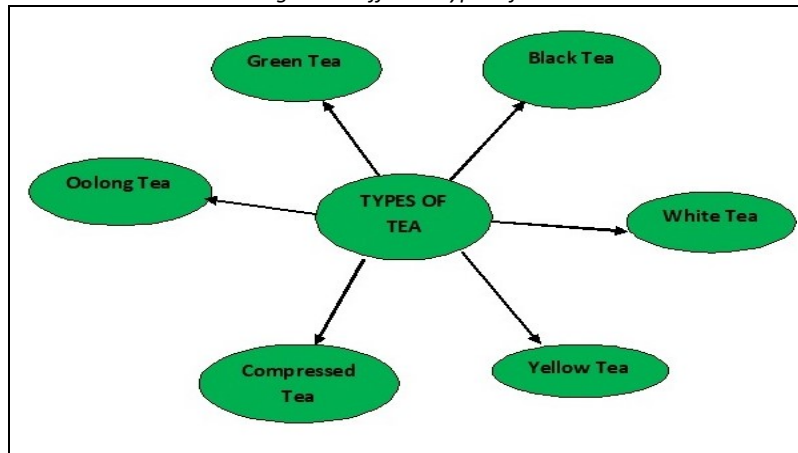
The secondary data collected from the publications of Tea board, United Planters Association of Southern India, Agricultural Statistics, Economic Review, and Indian Economic Journal, Economic and Political Weekly and also web sites. The problems and prospects of marginal farmers engaged in tea cultivation were studied with the help of primary data. A survey was conducted in Vythiri Panchayat in Wayanad district. A sample of 100 marginal farmers was taken for this study. A structure interview schedule was used for the sample survey.

4. Results and Discussion

4.1. Types of tea

All true tea comes from the "*Camellia sinensis* Plant". There are numerous types of tea producing countries. Depending on the manufacturing technique it is divided in two different types as shown in Figure 1.

Figure 1. Different types of tea



1. International profile of tea production

Tea is the world’s most popular beverage. From the North of Russia to the tip of Southern Africa, from the West coast of America to the Far East tea is enjoyed in endless different ways. Its versatility makes it as the perfect drink, adaptable to every climate and culture. Tea plantations make a vital contribution to the economy of the producing countries. The countries that produce tea are largely developing countries with large pools of low cost labour. The number of tea producing countries has been growing in the world, through of varying qualities. The major tea producing countries are: China, Bangladesh, India, Indonesia, Sri Lanka, Vietnam, Kenya, Turkey and Japan. Among all these nations, China is the largest tea producer. During the period 2010 the production of tea in China was 1370.0 million kgs followed by India. During 2016 production of tea in China increased to 2350.0 MT. This high growth of tea production in China was shown after 2005. Till 2005 India was the largest tea producer in the world [4]. As per Table 1, the world tea production during 2016 was 5462678 million kg compared 5281522 million kg reported in the year 2015, an increase of 181156 million kg. The bulk of this increase was recorded from the two major exporting countries like Kenya and Sri Lanka. The excellent weather with well distributed rainfall aided the crop increase, especially in Kenya where the crop was the highest recorded.

Table 1. Major tea producing countries

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
China	934.9	1028.1	1140	1257.6	1358.6	1370	1535	1789.7	1924.4	2095.7	2248.9	2350.0
India	946	918.8	986.4	980.8	979	966.4	1012	1126.3	1200.4	1207.3	1208.6	1239.3
Kenya	323.5	310.6	369.6	345.8	314.2	399	384	369.5	432.4	445.1	399.2	474.80
Sri Lanka	317.2	310.8	304.6	318.7	289.8	329.4	314.3	328.39	340.0	338.0	338.9	292.3
Vietnam	133.2	142.5	148.3	166.4	154	157	168	174.0	180.3	175.0	170.0	165.0
Indonesia	156.3	146.8	137.2	137.5	136.5	129.2	134	137.7	136.8	135.7	129.2	125.5
Others	150	147.6	153.1	155	156	159.3	578.3	769.4	781.2	802.7	796.3	815.8

Source: Year Book and Annual Report of UPASI, Tea Board of India

2. Tea production in India

Tea in India is not merely a refreshing drink, but it is almost part of culture. Tea or “chai” is the most widely drunk beverage in the whole world. It is one of the agro-industrial crops of India and sustains the economy of a large number of local people where this crop cultivated. Tea is considered as the cheapest beverage amongst the beverages available in India. It provides gainful direct employment to more than a million workers mainly drawn from the backward and socially weaker section of the society. It is also a substantial foreign exchange earner and provide sizeable amount of revenue to the state and central exchange. India is largest producer and consumer of black tea in the world.

Tea is grown in its state in Assam, West Bengal, Tamil Nadu and Kerala account for about 96 per cent of the total production. More than 50 per cent of the tea is being produced in Assam. Among the major tea producing countries, India has second position by producing 23.8 per cent share in the world tea production after China which has 33.7 per cent share in it. During 2013-14 the production of tea in India was 1000.0 million kg. Compared to 2012-13 there is a decline in the production of tea in India (Table 2).

Table 2. Area, production and productivity of tea in India

Year	Area (Ha)	Production (M.kg)	Productivity (kg/ ha)
1980-81	383629	569	1461
1990-91	420470	754	1794
2000	504366	846.5	1679
2001	509806	853.7	1675
2002	515832	826.2	1625
2003	519598	857.1	1690
2004	521403	820.2	1713
2005	555611	928	1703
2006	567020	955.9	1732
2007	578458	944.7	1705
2008	578458	972.77	1682
2009	579190	979.9	1704
2010	580061	966.4	1711
2011	580181	1115.7	1666
2012	600000	1126.3	1730
2013-14	600000	1000.0	1730

Source: Tea board of India, Economic review 2015

The plantations in India are mainly located in rural hills and backward areas of North-Eastern and Southern states. Major tea growing areas of the country are concentrated in Assam, West Bengal, Tamil Nadu and Kerala. Unlike most other tea producing and exporting countries India has dual manufacturing base. India produced both CTC and orthodox tea in addition to Green tea. Assam is the largest producer of tea in India. During 2012 the production of tea in whole North India was 886.9 million kg. In the same year the production of tea in South India was 239.4 million kg. The export of tea during 2012 in North India was 123.8 million kg and in South India it is 81.6 million kg. During 2013-14 the area under tea production in India was 600000 ha and production and productivity was 1000.0m.kg and 1730 kg/ha respectively. Compared to previous year the area and productivity is constant and the production of tea declined during the period 2013-14.

Table 3. Area and production of tea in India

State Name	Area(Hect)	Production (M.Kgs)
Assam	307.08	652.95
West Bengal	140.44	329.70
Other NI	12.29	25.91
Total North India	459.81	1008.56
Tamil Nadu	69.62	161.46
Kerala	35.01	56.63
Karnataka	2.22	6.46
Total South India	106.85	224.58
All India	566.66	1233.14

Source: Tea board of India

Table 3 elicits the details on Area and Production of Tea cultivation in India. The area under tea cultivation was as on 31 December 2015 and production during the period of 2015-16. In the case of North India, the major tea producing states are Assam, West Bengal and other NI states. The other NI states include Thripura, Himachal Pradesh, Uttarakhand, Bihar, Arunachal Pradesh, Nagaland, Meghalaya, Mizoram and Sikkim. Considered all

North Indian states the total area under tea cultivation was 459.81 h and production during 2015-16 was 1008.56 M.Kg. In the case of total south India, the area under tea cultivation was 106.85 h and total production was 224.58 M.Kg.

3. Export, consumption and price of tea in India

Indian tea export has been an important foreign exchange earner for the country. There was an inherent growth in export earnings from tea over the years. During 1980 the export of tea from India was 224 million kg it decreased to 193.3 million kg in 2010. During 2016 it raised 216 million Kg. Consumption and price of tea in India increased, in 1980 the consumption of tea in India was 346 million kg and price was 13.14 Rs/kg, it increased in to 653 million kg and 104.66 Rs/kg in 2010. It can be shown in Table 4.

Table 4. Export, consumption and price of tea in India

Year	Export	Consumption	Price (Rs/kg)
1980	224	346	13.14
1990	204	464	27.54
2000	207	653	51.34
2010	193.3	837	104.66
2015	201.20	-	-
2016	216.0	-	-

Source: Economic review 2011

4. Tea production in Kerala

Like Indian economy, agriculture is the main stay of Kerala economy. Agriculture is the most important source of employment and income to the people of Kerala. Due to various reasons Kerala has opted for cash crops rather than food crops. Among the plantation crops in Kerala, tea plantations are very important in terms of employment and income to the people of hilly region [5]. The total area under tea during 1989-90 was 34.60 thousand hectare which is 1.14 percent of the total cropped area in the state. Against the total area of 5.8 lakh hectare under tea in the country, Kerala accounts for only 0.37 lakh hectare. In respect of production in share of Kerala is 6.8 per cent in 2010-11 [6]. Table 5 shows that the area and yield of tea production in Kerala. In 2000 the area under tea production in Kerala was 36940 hectare, it increased 37028 hectare in 2011-12. In the case of yield during 2000 it was 1866 kg/ha, it decreased to 1564 kg/ha in 2011-12. The area and yield during 2014-15 was 30205ha and 2158 kg/ha respectively. During 1979-80 the production of tea was 54 million kg, in the same year the percentage share of tea was 9.49. In 2011 the production of tea in Kerala was 68.9 million kg, it decreased to 63.1 million kg in 2012. During the period 2015 the production of tea in Kerala was 67.7 million kg.

Table 5. Area and yield of tea in Kerala

Year	Area (Ha)	Yield (Kg/Ha)
2000	36940	1866
2001	36940	1764
2002	36967	1563
2003	36967	1569
2004	37107	1675
2005	36772	1591
2006	36236	1641
2007	37137	1507
2008	37139	1893
2009	37139	1857
2010	37139	1798
2011-12	37028	1564
2012-13	30205	2085
2013-14	30205	2084
2014-15	30205	2158

Source: Tea statistic

The production of tea in Kerala was fluctuated. In the total area of plantation crops in Kerala, the percentage share of tea was estimated to be 5.40 per cent in 2014. It shows the declining trend of tea production in Kerala. Indeed Kerala produces the lion's share of its from gardens in Idukki, Wayanad and Kottayam districts because of these districts enjoys ideal climatic conditions necessary for the production of good quality tea (Table 6).

Table 6. Tea production in Kerala

Year	Production (M KG)	Percentage share
1979-80	54	9.49
1984-85	50	8.33
1989-90	57	8.39
1994-95	65	8.78
1999-2000	69	8.2
2001	66.1	7.7
2002	59.7	7.2
2003	56.6	6.6
2004	49.7	6.06
2005	67	7.22
2006	68.8	7.2
2007	61.9	6.55
2008	51.73	5.32
2009	68.9	7.03
2010	66.8	6.91
2011	68.9	7.03
2012	63.1	5.59
2013	62.9	5.23
2014	66.6	5.40
2015	67.7	-

Source: Economic review 2011

5. Tea production in Wayanad

This high altitude district is characterised by the cultivation of perennial plantation crops and spices. Tea is one of the major plantation crops produced in Wayanad. The area under tea in Wayanad is 31792 hectare. Home stead farming assumes importance in this district. The average sizes of holding are 0.68 hectare. A variety of crops including annuals and perennials are grown in these small holdings.

Table 7. Area, production and yield of tea in Wayanad

Year	Area	Production	Yield
1981	5387	7436	1380
1985	5360	8434	1569
1991	5366	10198	1901
1995	5475	10742	1962
2001	5504	14143	2629
2005	5194	11635	2343
2007	5470	13313	2434
2008	6213	10709	1724
2009	6309	10731	1701
2010	6343	9366	1477

Source: Tea statistics

Table 7 elicits the area; production and yield of tea in Wayanad which were increased over the last 30 years. In 1981 the area under tea in Wayanad was 5387 hectare and it decreased to 5194 hectare in 2005. The production and yield of tea in 1981 was 7436 million kg and 1380 kg/ha. It increased in to 11635 million kg and 2343 kg/ha in 2005. In 2010 the area under tea production increased 6343 ha, but the production and yield declined 9366 m kg and 1477 m kg in Wayanad District. Table 8 describes Cottanad estate is the number one tea

producer in Wayanad district, followed by Kambamala and Thalamala estates. The area under Cottanad estate is 46.39 hectare and their production during 2016 may is 410 it decreased to 358 in May 2017. But the production at the end of May 2016 is 677 and increased to 723mkg in end May 2017. One of the notable features is that the area under tea cultivation in Cottanad, Kampamala and Talimalais very low but their yield per hectare is high.

Table 8. Major tea producing estates in Wayanad

Rank		Estate	Area (Ha)	2017/2018		2016/2017	
2017	2016			May	End May	May	End May
1	1	Cottanad #	46.39	358	723	410	677
2	8	Kambamala #	90.50	254	470	121	225
3	5	Talamala	68.14	282	462	129	252
4	2	Ripon	459.30	216	427	189	341
5	13	Talapoya	310.25	224	389	95	186
6	14	Chulika	140.39	243	375	110	179
7	7	Chundale	265.88	245	372	87	245
8	3	Arrapetta	620.27	173	363	137	332
9	4	Priyadarshini	110.00	187	359	159	321
10	15	Cherakara	300.13	164	349	73	169
11	12	Chelotte	110.21	199	307	106	187
12	10	Achoor	525.44	155	302	61	211
13	16	Jessie	211.7	171	255	73	155
14	11	Touramulla	142.75	68	254	83	192
15	18	Kurchermala	183.93	139	245	28	92
16	6	Tatamala	214.10	109	235	129	252
17	9	Sentinel Rock	380.28	127	212	44	219
18	17	Chempra #	276.74	NA	NA	54	96
Wayanad District			4456.40	168	315	102	235

Source: UPASI tea research centre Meppadi

6. Small and marginal farming

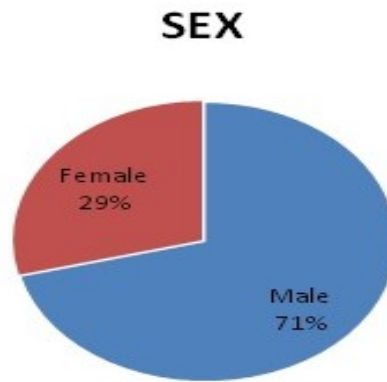
India has from the very beginning been a country where 70 per cent of the population still lives in village. Almost two-third of the workers in villages is farmers and of these large percentages are small and marginal farmers. The marginal farmers are those who have land possession of not more than four hectares. Marginal farmers cultivating their farms with the support of their family members and local labours and this type of farmers have been the most efficient for sustainable and bio-diversified way of agriculture. Recently many small and marginal farmers entered in to the tea cultivation. In this section we discussed up on the sustainability of tea cultivation in Wayanad Districts. As mentioned above majority of the farmers are used sustainable and bio diversified way for tea production. Because, they used less fertilisers and pruning techniques compared to big estates in Wayanad district. This section focused on the socio economic conditions of the small tea growers, their problems, prospects and reasons to support sustainable agriculture.

7. Profile of the study area

Wayanad district, in the north-east of Kerala was formed on November 1, 1980 as the 12th district, carved out of Kozhikode and Kannur districts. Kalpetta is the headquarters of the Wayanad district. For the smooth running of the revenue administration, the district is divided in to three Taluks i.e; Sulthan Bathery, Vythiri and Mananthavady. The major plantation crops produced in this district are coffee, tea, pepper, cardamom and rubber. The earliest plantations in this area date back to 1845, when coffee was planted here. The area under tea cultivation in Wayanad was 31792 ha depending up on the weather pattern. The tea areas in the Wayanad can be divided in to North Wayanad with low rain fall and extended drought, South Wayanad experiencing 85 per cent of south-west monsoon and 15 per cent of North-East monsoon climatically more ideal for tea than the other zone.

Now analysing the survey details of Vythiri Panchayat the analysis started with the general description of 100 small and marginal farmers. The sample surveys contain 100 small and marginal tea cultivators of the Vythiri Panchayat in Wayanad district.

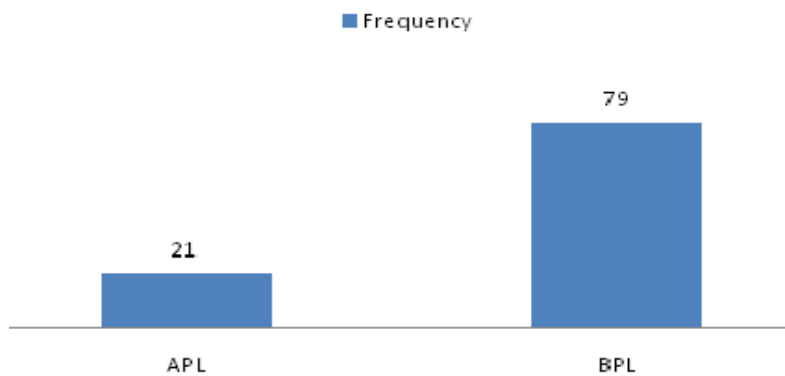
Figure 2. Sex-Wise distribution of the farmers



Source: Primary data

Figure 2 elicits that Out of 100 respondent 71 are male farmers and 29 are female farmers, and also shows that 71 per cent of male engaged in the tea cultivation and 29 per cent of female engaged in the tea cultivation. The less participation of female in this field is that, the ownership of land in the name of male heads in the family but the female actively engaged in the activities of tea cultivation.

Figure 3. Family status of farmers



Source: Primary data

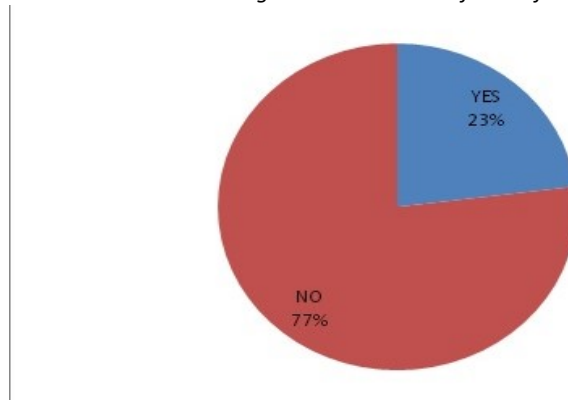
Figure 3 shows that the family status of tea cultivators in Vythiri Panchayat. Out of 100 respondents 21 per cent of farmers belong to above poverty line and 79 percentages of farmers belongs to below poverty line. Majority of the BPL household shift their agricultural productions to tea it because of the long term benefits provided by the farmers and given monthly earning compared to other cash crops produced in Wayanad district.

Table 9. Total area of land

Area of land	Frequency	Percentage
1 acre	5	5
2 to 3	12	12
3 to 5	47	47
Above 5	36	36
Total	100	100

Source: Primary data

Figure 4. Distribution of credit facility



Source: Primary Data

Table 9 describes the details of total area of land owned by the sample respondent. Majority of the respondent have 3 to 5 acres of land. Majority of the respondent said that their grandparents came here and cultivate different cash crops.

Table 10. Experience in tea cultivation

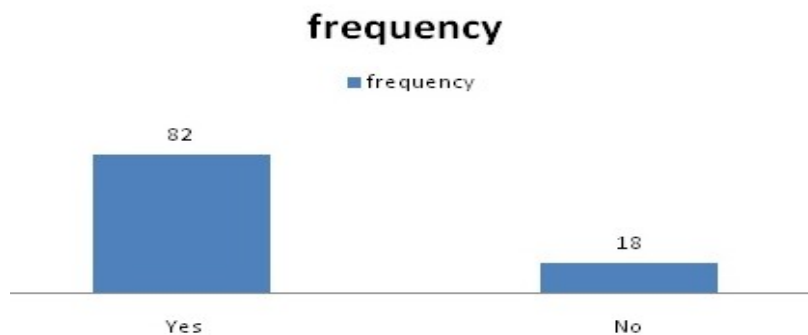
Experience	Frequency	Percentage
Less than 3 year	6	6
3-5 year	26	26
5-8 year	28	28
8-10 year	30	30
Above 10 year	10	10
Total	100	100

Source: Primary data

Table 10 elicits the details of experience in tea cultivation among the sample respondent. Majority of the farmers respond that they experienced 8-10 years in the tea cultivation. Because, hereditary got the cultivation, hence they continued it. They opined that one of the main reasons for stick on this cultivation is that, compared to other plantation crops like coffee and pepper the tea cultivation has given two or three times yield in a month.

Figure 4 shows that most of the farmers (77) have not get any financial supports from banks and other authorities. Compared to other cash crops like coffee and pepper produced in Wayanad, the tea have not get any support price or other subsidies from the part of government.

Figure 5. Support, Sustainable Agriculture



Source: Primary Data

Table 11 shows the details of tea leaf recipients and among the total 34 per cent of the farmers sell their tea leaf in near estate factories and 66 per cent farmers sell their tea leaf to intermediaries. The intermediaries collect the tea leaf and sell in to factories. They opine that the intermediates influence may affect the real price of their product.

Table 11. Tea leaf recipients

Recipients	Frequency	Percentage
Factories	34	34
Intermediaries	66	66
Total	100	100

Source: Primary data

Among the total, 71 per cent of farmers response that they get high profit in the tea cultivation and 16 per cent opine that they tradition and hereditary is the main reason for preferring tea cultivation. Their parents started this cultivation hence, they continued this.

Table 12. Reason for preferring tea cultivation

Reasons	Frequency	Percentage
Suitability of soil	5	5
Climatic conditions	8	8
High Profitability	71	71
Traditional and hereditary	16	16
Total	100	100

Source: Primary data

The suitability of soil and climatic conditions also helps them to cultivate tea plantations (Table 12). Most of the farmers response that low price of tea leaf is the major constrain of tea cultivation. As mention above some respondent are sold their tea leaf to intermediaries they may be reduce the real price of the tea leaves. Another constraint is that availability of labour. Majority opine that their family members worked in tea planted area for the reason of non availability of labours (Table 13).

Table 13. Constraints in tea cultivation

Constraints	Frequency	Percentage
High labour cost	9	9
Non-availability of labour	29	29
Incidence of pest and diseases	5	5
High price of input	4	4
Low price of tea leaf	31	31
Unfavourable weather	7	7
High cost of transportation	15	15
Total	100	100

Source: Primary data

Figure 5elicits the details of farmers view on sustainable agriculture. Majority (82 per cent) opined that they support sustainable agriculture in their tea plantation. Table 14 can see that majority (82 per cent) of the respondent support sustainable tea plantation in their field. Hence, this table elicits the reasons for support sustainable agriculture. Majority (35 per cent) said that they promote personal and public health because; majority conduct family farming and more use of toxic pesticides and fertilizers badly affect the health of their family and public also. 27 per cent respond that they gave importance to biodiversity and others said they gave importance to maintaining healthy soil and minimising air and climate pollution.

Table 14. Reasons for support sustainable agriculture

Reasons	Frequency	Percentage
Promote Personal Health	35	35
Building and maintaining healthy soil	23	23
Minimising air, and climate pollutions	15	15
Promoting Biodiversity	27	27
Total	100	100

Source: Primary Data

5. Major findings and Conclusion

India is the second largest producer of tea in the world with the production at 1239150 million T in 2016. Till 2005, India was the largest tea producer in the world, but after 2005 China takes the position. Production of tea in India declined because of many reasons like price fluctuations changes of climatic conditions Economic crisis etc. Production of tea in Kerala and in Wayanad also declined, but now lots of small and marginal farmers came in to tea cultivation. The main reason is the profit maximisation. But they are facing many problems as non-availability of labour; the main reason for shortages of labour is that, recently the MNREGP started in the Wayanad district mainly the women labours going for this work. Another reason is the price of tea leaves is very low. Most of the tea cultivators sell their tea leaves to intermediaries and they get only 8 or 10 rupees for 1 kg tea leaves. Another important problem faced by the tea cultivators is the high cost of transportation. The cultivators are mainly in hilly areas, the transport facilities are very less in this area and the climatic conditions adversely affected the tea cultivation. Mounting with these problems lots of farmers came into tea cultivation, the main reason is that compared to other plantation crops tea gives a steady monthly income to farmers. Farmers pluck the tea leaves twice in a month this helps to increase their monthly income and it is highly profitable. Most of the farmers support sustainable agriculture in their farms. So many varieties of drinks came in to our market in every day but the non- alcoholic beverage like tea is most commonly used by the mass.

6. Reference

1. The State Bank of India, economic and statistical department. Tea Position and Prospects. *State Bank of Monthly Review*. 1977; 3, 103-109.
2. T. Chiranjeevi. Tea economy of India. *Rawat Publication* Jaipur: New Delhi. 1994; 1-178.
3. Ombuki Charles. Constrains on smallholder's credit investment in the farm: a case study of tea farming in south-kisii district of Kenya. *Indian Journal of Agriculture Economics*. 2004; 59 (4).
4. Annual report of UPASI. <http://www.teaboard.gov.in/teaboardpage/ODA=>. Date accessed: 04/05/2018.
5. K. Rajan. Kerala economy trends during the post reform period. *Serial Publication*: New Delhi. 2009.
6. Economic Review 2012. State Planning Board. Thiruvananthapuram Kerala. 2013.

The Publication fee is defrayed by Indian Society for Education and Environment (www.iseeadyar.org)

Cite this article as:

S. Vidya. Tea economy: special reference from Kerala. *Indian Journal of Economics and Development*. Vol 6 (6), June 2018.