

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

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**TEA INDUSTRY IN TAMILNADU: DISTRICT WISE ANALYSIS**

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**ANANDHANADARKUDY**

**ABSTRACT**

*Tea is one of the important beverages in this world. India and China are the major tea producing countries of the world. India and China are also the major tea exporters in this world. Tea industry is playing very important role in tea producing countries because it gives major income for the country. Tea is one of the oldest industries in India and today it enjoys the status of one of the best organized industries in the country. Tamil Nadu is an important producer of tea. Nilgiris District of Tamil Nadu has the reputation of being one of the finest tea growing tracts in the World. In 1968, the Government of Tamil Nadu started implementing the Government Tea Project in the Nilgiris. The following are the important objectives of the study, to analyse the number of tea estates in Tamilnadu, to analyse the tea cultivation area in Tamilnadu, to analyse the production of tea in Tamilnadu, to analyse the average yield of tea in Tamilnadu.*

**KEYWORDS**

Tea, Tea Yield, Tea Production, Tea Yield.

**INTRODUCTION**

Tea is one of the important beverages in this world. India and China are the major tea producing countries of the world. India and China are also the major tea exporters in this world. Tea industry is playing very important role in tea producing countries because it gives major income for the country. Tea is one of the oldest industries in India and today it enjoys the status of one of the best organized industries in the country. Although tea has been known since 2737 B.C. and consumed as a beverage for 1250 years' its cultivation in India commenced very recently. The discovery of indigenous tea in Assam in 1823 led to the origin of the tea industry in India. However, the Kolkata Agricultural Society differs from the above opinion. It has consistently held that in the early 1700's, the ships of the East India Company frequently brought the tea plants in the country by way of curiosity. Col. Kyol, a resident of Kolkata and a famous botanist, saw tea plants growing in his garden in 1780. This information was sent to Sir Joseph Bank and in 1782 his garden as handed over to Botanical Garden of Kolkata. In 1788, Sir Joseph Bank recorded the existence of indigenous tea growing wild in Coochbehar and Rangpur districts of Bengal and suggested the cultivation of this plant. The wild teas of Coochbehar confirmed the first discovery of indigenous tea in India.

Tamil Nadu is an important producer of tea. Nilgiris District of Tamil Nadu has the reputation of being one of the finest tea growing tracts in the World. In 1968, the Government of Tamil Nadu started implementing the Government Tea Project in the Nilgiris. It was managed by the Forest Department as a scheme to rehabilitate the Sri Lanka Repatriates. In 1975 the Project was, brought under corporate management in the name of the Tamil Nadu Tea Plantation Corporation Limited. This Corporation is under the administrative control of Environment and Forest Department of Government of Tamil Nadu.

**OBJECTIVES OF THE STUDY**

The following are the important objectives of the study

- To analyse the number of tea estates in Tamilnadu.
- To analyse the tea cultivation area in Tamilnadu.
- To analyse the production of tea in Tamilnadu.
- To analyse the average yield of tea in Tamilnadu.

**HYPOTHESIS ANALYSIS**

The following are the important hypothesis analysis of the present study

Ho<sub>1</sub>: Average yields of tea in Kanyakumari district and Tirunelveli District are significantly same.

Ho<sub>2</sub>: Average yields of tea in Kanyakumari district and Madurai District are significantly same.

Ho<sub>3</sub>: Average yields of tea in Kanyakumari district and Coimbatore District are significantly same.

Ho<sub>4</sub>: Average yields of tea in Kanyakumari district and Nilgiri District are significantly same.

**PERIOD OF THE STUDY**

The present study covers the periods ten years from 1998 to 2007.

**FRAME WORK OF ANALYSIS**

The collected data are processed with the help of appropriate statistical tools like Index of Growth, correlation analysis and t test analysis in order to fulfill the objectives of the study.

**ANALYSIS OF THE STUDY**

This part is analyses the number of tea estates, area of tea cultivation, production of tea and average yield of tea in Tamilnadu. Nilgiris, Coimbatore, Madurai, and Kanyakumari are the important Districts are producing tea in Tamilnadu.

**TEA ESTATES IN TAMILNADU**

The following Table 1 shows the number of tea estates in Tamilnadu from 1998 to 2007.

**TABLE 1: NUMBER OF TEA ESTATES IN TAMILNADU**

YEAR	Number of tea estates in Tamilnadu	Index of Growth
1970	06450	100.00
1975	06450	100.00
1980	06725	104.26
1985	06725	104.26
1990	06816	105.67
1995	25807	400.10
1998	55841	865.75
1999	55841	865.75
2000	60618	939.81
2001	62213	964.54
2002	62213	964.54
2003	62213	964.54
2004	62213	964.54
2005	62213	964.54
2006	62213	964.54
2007	62213	964.54

**Source:** Statistical Report of Tea Board

It is clear from Table 1 that number of tea estates in Tamilnadu was 55841 in 1998. It increased to 60618 in 2000, it further increased to 62213 in 2001 and it remains same for the remaining study period up-to 2007.

**TEA CULTIVATION AREA IN TAMILNADU**

Area is the very important factor for tea cultivation in Tamilnadu. The following Table 2 shows the tea cultivation area in Tamilnadu from 1970 to 2007.

**TABLE 2: TEA CULTIVATION AREA IN TAMIL NADU**

Year	Tea Cultivation Area (Hectares)	Index of Growth
1970	34,587	100.00
1975	35,611	102.96
1980	37,030	107.06
1985	37,034	107.07
1990	38634	111.70
1995	48,958	141.55
1998	63,543	183.71
1999	69,103	199.79
2000	74,398	215.10
2001	75,625	218.65
2002	75,619	218.63
2003	75,619	218.63
2004	75,978	219.67
2005	80,939	234.01
2006	81,276	234.99
2007	80,462	232.63

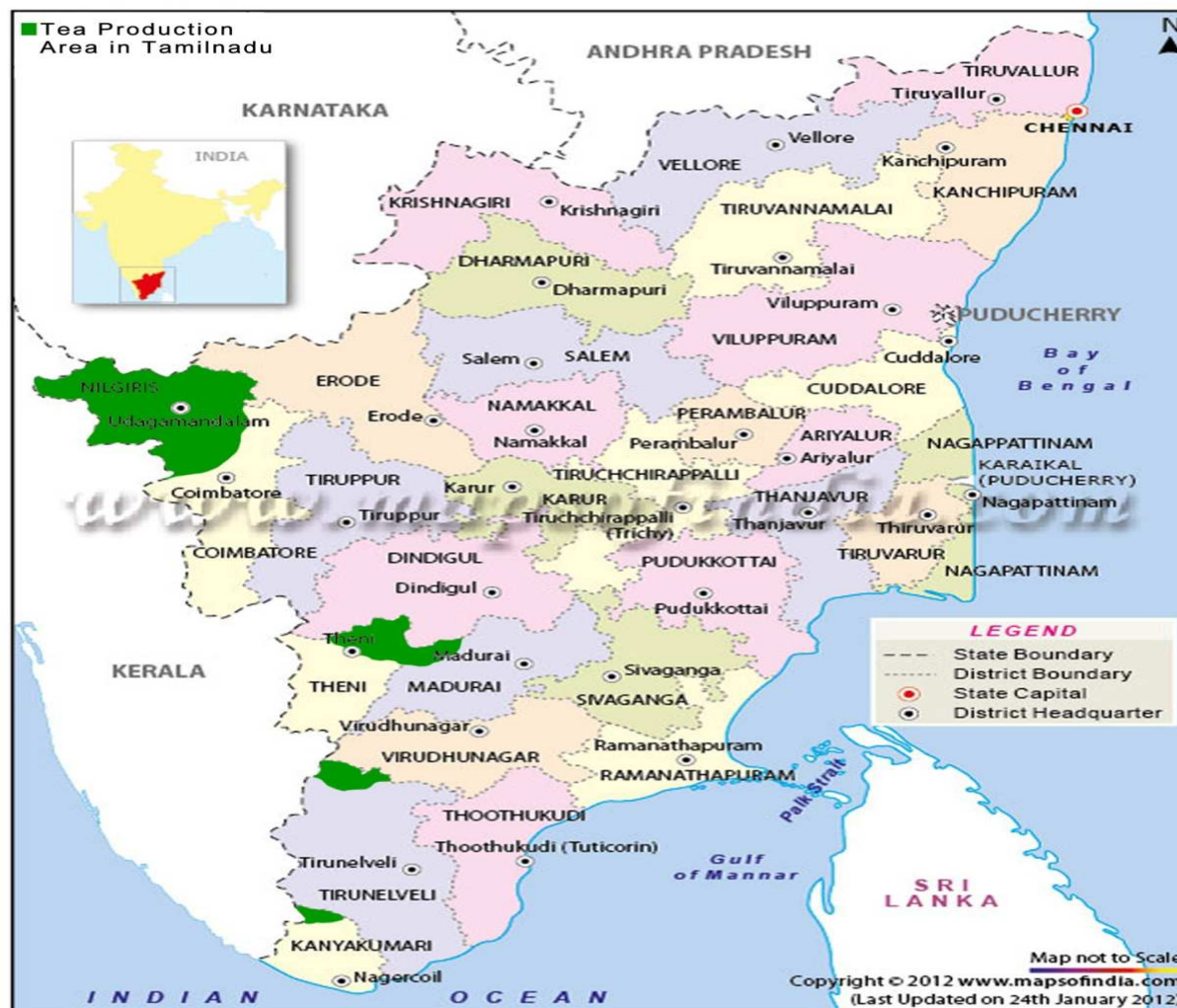
**Source:** Statistical Report of Tea Board

It is clear from Table 2 that tea cultivation area in Tamilnadu was increasing every year. In 1998 the tea cultivation area was 63543 hectares, it increased to 69103 hectares in 1999. In 2000 the tea cultivation area was 74398 hectares, and it again increased to 75625 hectares in 2001 and to 80462 hectares in 2007. The growth of tea cultivation area was remarkably increasing every year.

The tea producing areas in Tamilnadu can be known through Map 2.1



MAP 2.1: TEA PRODUCING AREA IN TAMILNADU



It is known from the Map 2.1 that the important tea producing areas in Tamilnadu are Nilgiri, Coimbatore and Madurai.

#### TEA PRODUCTION IN TAMILNADU

The following Table 3 shows the production of tea in Tamilnadu from 1970 to 2007.

TABLE 3: PRODUCTION OF TEA IN TAMIL NADU

Year	Production (M.Kgs)	Index of Growth
1970	55.557	100.00
1975	60.452	108.81
1980	74.006	133.20
1985	84.853	152.73
1990	110.576	199.00
1995	117.915	212.24
1998	132.046	237.67
1999	130.462	234.82
2000	131.812	237.25
2001	132.401	238.32
2002	128.963	232.12
2003	131.712	237.07
2004	163.056	293.49
2005	158.837	285.89
2006	163.656	294.57
2007	160.531	288.94

Source: Statistical Report of Tea Board

It is clear from Table 3 that the tea production in Tamilnadu was fluctuating every year. In 1998 the tea production in Tamilnadu was 132.046 m.kgs. It decreased to 130.462 m.kgs in 1999, and it increased to 131.812 m.kgs in 2000. It further increased to 132.401 m.kgs in 2001. Tea production decreased to 128.963 m.kgs in 2002 and it increased to 131.712 m.kgs in 2003. It increased to 163.056 m.kgs in 2004 and then decreased to 158.837 m.kgs in 2005. It increased to 160.531 m.kgs in 2007 and it reached to 170.700 m.kgs in 2010. The growth of tea production was remarkably increasing every year.

#### AVERAGE YIELD OF TEA IN TAMILNADU

The following Table 4 shows the average yield of tea in Tamilnadu from 1970 to 2007.

TABLE 4: AVERAGE YIELD OF TEA IN TAMILNADU

YEAR	Average Yield of Tea in Tamilnadu (Kg/Hectares)	Index of Growth
1970	1609	100.00
1975	1697	105.46
1980	1998	124.17
1985	2055	127.71
1990	2185	135.79
1995	2059	127.96
1998	1890	117.46
1999	1888	117.33
2000	1772	110.13
2001	1751	108.82
2002	1893	117.65
2003	2203	136.91
2004	2146	133.37
2005	2022	125.66
2006	2014	125.17
2007	1995	123.99

Source: Statistical Report of Tea Board

It is clear from Table 4 that the average yield of tea in Tamilnadu in 1970 was 1609 kgs per hectare. In 1998 the average yield was 1890 kgs per hectare, in 1999 the average yield was 1888 kgs per hectare and in 2000 the average yield was 1772 kgs per hectare. It increased to 2203 kgs per hectare in 2003. It then took a decreasing trend and reached to 1995 kgs per hectare in 2007. The growth of average yield of tea in Tamilnadu was remarkably increasing every year.

#### DISTRICT-WISE TEA ESTATES IN TAMILNADU

Nilgris, Coimbatore, Madurai, Tirunelveli and Kanyakumari are the important tea producing Districts in Tamilnadu. The following Table 6 shows the District-wise tea estates in Tamilnadu from 1998 to 2007.

TABLE 6: DISTRICT-WISE CLASSIFICATION OF TEA ESTATES IN TAMILNADU

Year	Kanyakumari	Tirunelveli	Madurai	Coimbatore	Nilgris	Total
1998	7	4	6	52	55772	55841
1999	7	4	6	52	55772	55841
2000	7	4	6	52	60549	60618
2001	7	4	5	52	62145	62213
2002	7	4	5	52	62145	62213
2003	7	4	5	52	62145	62213
2004	7	4	5	52	62145	62213
2005	7	4	5	52	62145	62213
2006	6	4	5	52	62145	62212
2007	6	4	5	52	62145	62212

Source: Statistical Report of Tea Board

It is clear from Table 6 that Nilgris District stands first in terms of number of tea estates with about 62,145 estates in 2007, Coimbatore District stands second with 52 tea estates, Kanyakumari District stands third with about 7 tea estates from 1998 to 2005 but it declined to 6 estates in 2006 and 2007. Madurai District stands fourth place with 6 tea estates from 1998 to 2000 but it declined to 5 estates from 2001 to 2007. Tirunelveli District stands the last place with 4 tea estates from 1998 to 2007.

#### DISTRICT-WISE TEA CULTIVATION AREA IN TAMILNADU

The following Table 7 shows the District-wise tea cultivation area in Tamilnadu from 1998 to 2007.

TABLE 7: DISTRICT-WISE CLASSIFICATION OF TEA CULTIVATION AREA IN TAMILNADU (Hectares)

Year	Kanyakumari	Tirunelveli	Madurai	Coimbatore	Nilgris	Total
1998	434	800	935	11008	50366	63543
1999	434	800	941	11609	55319	69103
2000	434	800	973	11764	60427	74398
2001	434	800	973	11784	61634	75625
2002	433	800	973	11734	61679	75619
2003	433	800	973	11734	61679	75619
2004	433	800	972	11734	62039	75978
2005	410	800	991	12623	66115	80939
2006	410	800	991	12623	66452	81276
2007	310	818	550	12628	66156	80462

Source: Statistical Report of Tea Board

It is clear from Table 7 that in 1998 the tea cultivation area in Nilgiri district was 50366 hectares and it reached to 66156 hectares in 2007. In Coimbatore District the tea cultivation area was increasing every year i.e., in 1998 the tea cultivation area was 11008 hectares and it reached to 12628 hectares in 2007. In other districts the tea cultivation area was almost remains same over a period of 10 years from 1998.

Tea cultivation in different districts are analysed through correlation analysis and the result of it is stated in Table 7.1 as follows:

**TABLE 7.1: DISTRICT-WISE TEA CULTIVATION AREA IN TAMILNADU (Correlation Analysis)**

District	Correlations Marked correlations are significant at $p < .05000$ (N=10)						
	Means	S. D.	Ka. kumari	Tirunelveli	Madurai	Coimbatore	Nilgris
Kanyakumari	416.50	38.685	1.000000	-0.967317	0.935537	-0.647074	-0.489930
Tirunelveli	801.80	5.692	-0.967317	1.000000	-0.990703	0.463319	0.345239
Madurai	927.20	133.778	0.935537	-0.990703	1.000000	-0.353975	-0.216850
Coimbatore	11924.10	533.812	-0.647074	0.463319	-0.353975	1.000000	0.909276
Nilgris	61186.60	5057.572	-0.489930	0.345239	-0.216850	0.909276	1.000000

It clear from Table 7.1 that there exists high positive correlation between Kanyakumari district and Madurai district as for as the area under tea cultivation in different periods. Low positive correlation existed between Tirunelveli and Nilgris districts.

It is further analysed related to t test of independent variable to know the comparative consistently in the growth over a period of time. The result of the analysis is stated in Table 7.2 as follows:

**TABLE 7.2: DISTRICT-WISE TEA CULTIVATION AREA IN TAMILNADU (t test Analysis)**

District	Test of means against reference constant (value)							
	Mean	S. D.	N	S. E.	Reference	t-value	df	p
Kanyakumari	416.50	38.685	10	12.233	0.00	34.0468	9	0.000000
Tirunelveli	801.80	5.692	10	1.800	0.00	445.4444	9	0.000000
Madurai	927.20	133.778	10	42.304	0.00	21.9173	9	0.000000
Coimbatore	11924.10	533.812	10	168.806	0.00	70.6378	9	0.000000
Nilgris	61186.60	5057.572	10	1599.345	0.00	38.2573	9	0.000000

It is clear from the table that t value is low for tea cultivation areas in Madurai districts of Tamilnadu, which shows that there is comparatively high consistency with respect to area of tea cultivation for different periods of the study.

#### DISTRICT-WISE TEA PRODUCTION IN TAMILNADU

The Table 8 shows the District-wise tea production in Tamilnadu from 1998 to 2007.

**TABLE 8: DISTRICT-WISE TEA PRODUCTION IN TAMILNADU (M.Kgs)**

District/Year	Kanyakumari	Tirunelveli	Madurai	Coimbatore	Nilgris	Total
1998	00.244	01.350	02.452	32.450	95.550	132.046
1999	00.131	01.247	02.339	32.117	94.628	130.462
2000	00.137	00.990	02.660	32.831	95.194	131.812
2001	00.117	01.779	03.152	31.261	96.092	132.401
2002	000.141	001.692	001.318	027.124	112.846	143.121
2003	000.101	001.658	002.036	029.208	133.569	166.572
2004	000.310	001.454	002.306	029.417	129.757	163.015
2005	000.472	001.660	003.098	030.927	122.680	158.837
2006	000.820	001.226	002.084	035.291	124.973	163.656
2007	000.700	001.360	002.129	032.189	124.783	160.531

Source: Statistical Report of Tea Board

It is clear from Table 8 that the tea production in Nilgri District was 95.550 m.kgs in 1998 and it reached to 124.783 m.kgs in 2007; tea production in Coimbatore District was 32.450 m.kgs in 1998 and it declined to 32.189 m.kgs in 2007; tea production in Madurai District was 2.452 m.kgs in 1998 and it declined to 2.129 m.kgs in 2007; tea production in Tirunelveli District was 1.35 m.kgs in 1998 and it marginally increased to 1.36 in 2007 and tea production in Kanyakumari District was 0.244 m.kgs in 1998 and it increased to 0.70 m.kgs in 2007.

Tea production in different districts are analysed through correlation analysis and the result of it is stated in Table 8.1 as follows:

**TABLE 8.1: DISTRICT-WISE TEA PRODUCTION IN TAMILNADU (Correlation Analysis)**

District	Correlations Marked correlations are significant at $p < .05000$ (N=10)						
	Means	S. D.	Kanyakumari	Tirunelveli	Madurai	Coimbatore	Nilgris
Kanyakumari	0.3173	0.26114	1.000000	-0.235856	-0.058934	0.558749	0.497193
Tirunelveli	1.4416	0.25267	-0.235856	1.000000	0.028862	-0.677744	0.292814
Madurai	2.3574	0.53686	-0.058934	0.028862	1.000000	0.369956	-0.337952
Coimbatore	31.2815	2.27427	0.558749	-0.677744	0.369956	1.000000	-0.246133
Nilgris	113.0072	16.07194	0.497193	0.292814	-0.337952	-0.246133	1.000000

It is clear from Table 8.1 that there exists high positive correlation between Kanyakumari district and Coimbatore district as for as the production of tea in different periods. Low positive correlation existed between Tirunelveli and Nilgris districts.

It is further analysed related to t test of independent variable to know the comparative consistently in the growth over a period of time. The result of the analysis is stated in Table 8.2 as follows:

**TABLE 8.2: DISTRICT-WISE TEA PRODUCTION IN TAMILNADU (t test Analysis)**

District	Test of means against reference constant (value)							
	Mean	S. D.	N	S. E.	Reference	t-value	df	p
Kanyakumari	0.3173	0.26114	10	0.082578	0.00	3.84241	9	0.003952
Tirunelveli	1.4416	0.25267	10	0.079900	0.00	18.04250	9	0.000000
Madurai	2.3574	0.53686	10	0.169769	0.00	13.88592	9	0.000000
Coimbatore	31.2815	2.27427	10	0.719187	0.00	43.49564	9	0.000000
Nilgris	113.0072	16.07194	10	5.082394	0.00	22.23504	9	0.000000

It is clear from the table that t value is low for tea production in Kanyakumari district which shows that there is comparatively high consistency with respect to production for different periods of the study.

#### DISTRICT-WISE AVERAGE YIELD OF TEA IN TAMILNADU

The Table 9 shows the District-wise average yield of tea in Tamilnadu from 1998 to 2007

TABLE 9: DISTRICT-WISE AVERAGE YIELD OF TEA IN TAMILNADU (kgs Per Hectare)

District/Year	Kanyakumari	Tirunelveli	Madurai	Coimbatore	Nilgiris	Total
1998	301	1455	2485	2589	1775	1890
1999	302	1559	2486	2767	1711	1888
2000	316	1238	2734	2791	1575	1772
2001	270	2224	3239	2653	1559	1751
2002	326	2115	1355	2312	1830	1893
2003	233	2073	2092	2489	2166	2203
2004	187	1818	2372	2507	2092	2146
2005	263	2075	3126	2624	1901	2022
2006	200	1533	2103	2796	1881	2014
2007	226	1663	3871	2549	1886	1995

Source: Statistical Report of Tea Board

It is clear from Table 9 that Madurai and Coimbatore districts have comparatively highest yield per hectare. In Madurai District average yield was 2485 kgs per hectare in 1998 and it reached to 3871 kgs per hectare in 2007 and in Coimbatore District average yield was 2589 kgs per hectare in 1998 and it reached to 2549 kgs per hectare in 2007. The lowest average yield per hectare was recorded for Kanyakumari District which was 301 kgs per hectare in 1998 and it reached to 226 kgs per hectare in 2007. Yield per hectare was moderate for Nilgiris and Tirunelveli districts. In 1998 the average yield of Nilgiri district was 1775 kgs per hectare and it reached to 1886 kgs per hectare in 2007. In Tirunelveli District the average yield of tea was 1455 kgs per hectare in 1998 and it reached to 1663 kgs per hectare in 2007.

Average yield of tea in different districts are analysed through correlation analysis and the result of it is stated in Table 9.1 as follows:

TABLE 9.1: DISTRICT-WISE AVERAGE YIELD OF TEA IN TAMILNADU (Correlation Analysis)

District	Correlations Marked correlations are significant at $p < .05000$ (N=10)						
	Means	S. D.	KK	Tirunel.	Madurai	Coimb.	Nilgiris
Kanyakumari	262.400	49.2188	1.000000	-0.116779	-0.189120	-0.023108	-0.659259
Tirunelveli	1775.300	334.3960	-0.116779	1.000000	-0.081443	-0.607748	0.291939
Madurai	2586.300	703.1532	-0.189120	-0.081443	1.000000	0.338856	-0.268360
Coimbatore	2607.700	153.5557	-0.023108	-0.607748	0.338856	1.000000	-0.499929
Nilgiris	1837.600	196.4667	-0.659259	0.291939	-0.268360	-0.499929	1.000000

It is clear from Table 9.1 that there exists high positive correlation between Coimbatore district and Madurai district as far as the yield of tea in different periods. Low positive correlation existed between Kanyakumari and Tirunelveli districts.

It is further analysed related to t test of independent variable to know the comparative consistently in the growth over a period of time. The result of the analysis is stated in Table 9.2 as follows:

TABLE 9.2: DISTRICT-WISE AVERAGE YIELD OF TEA IN TAMILNADU (t test Analysis)

Districts	Test of means against reference constant (value)							
	Mean	S. D.	N	S. E.	Reference	t-value	df	p
Kanyakumari	262.400	49.2188	10	15.5643	0.00	16.85904	9	0.000000
Tirunelveli	1775.300	334.3960	10	105.7453	0.00	16.78845	9	0.000000
Madurai	2586.300	703.1532	10	222.3566	0.00	11.63132	9	0.000001
Coimbatore	2607.700	153.5557	10	48.5586	0.00	53.70216	9	0.000000
Nilgiris	1837.600	196.4667	10	62.1282	0.00	29.57754	9	0.000000

It is clear from the table that t value is low for yield in Madurai district, which shows that there is high consistency with respect to yield for different periods of the study.

The researcher further analysed the district wise average yield of tea in Tamilnadu with the help of hypothesis analysis (t test). In this regard the following hypothesis are framed

Ho<sub>1</sub>: Average yields of tea in Kanyakumari district and Tirunelveli District are significantly same.

Ho<sub>2</sub>: Average yields of tea in Kanyakumari district and Madurai District are significantly same.

Ho<sub>3</sub>: Average yields of tea in Kanyakumari district and Coimbatore District are significantly same.

Ho<sub>4</sub>: Average yields of tea in Kanyakumari district and Nilgiri District are significantly same.

TABLE 9.3: ANALYSIS OF DISTRICT WISE AVERAGE YIELD (Paired Sample Test)

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	KK - Tirunelveli	-1512.90000	343.63820	108.66794	-1758.72396	-1267.07604	-13.922	9	.000
Pair 2	KK - Madurai	-2323.90000	714.09888	225.81789	-2834.73557	-1813.06443	-10.291	9	.000
Pair 3	KK - Coimbatore	-2345.30000	162.33029	51.33334	-2461.42409	-2229.17591	-45.688	9	.000
Pair 4	KK - Nilgiris	-1575.20000	231.88685	73.32906	-1741.08186	-1409.31814	-21.481	9	.000

Table value (t table) at 5% level of significant = 3.25 (9 degrees of freedom)

#### RESULT

Since the calculated value of t is high for all hypothesis, they are rejected. Hence the average yield of tea is not significantly same for Kanyakumari and Tirunelveli (Ho<sub>1</sub>), Kanyakumari and Madurai (Ho<sub>2</sub>), Kanyakumari and Coimbatore (Ho<sub>3</sub>) and Kanyakumari and Nilgiri (Ho<sub>4</sub>).

#### SALE OF TEA

The Table 10 shows the sale of leaf tea and dust tea from Coonoor auction from 1998 to 2007



TABLE 10: SALE OF TEA FROM COONOR AUCTION

Year	Quantity of Tea (M.Kgs)				Total	
	Leaf		Dust		Sales	Index of Growth
	Sales	Index of Growth	Sales	Index of Growth		
1998	58.494	100.00	12.353	100.00	70.848	100.00
1999	70.086	119.82	09.199	074.46	79.285	111.90
2000	59.069	100.98	11.898	096.31	70.967	100.16
2001	59.014	100.88	15.541	125.80	74.555	105.23
2002	47.284	080.83	13.381	108.32	60.655	085.61
2003	31.081	053.13	09.505	076.94	40.586	057.28
2004	31.436	053.742	12.843	103.96	44.279	062.49
2005	41.614	071.14	16.589	134.29	58.203	082.15
2006	37.392	063.92	15.258	123.51	52.650	074.31
2007	37.736	064.52	15.558	125.95	53.294	075.22

Source: Statistical Report of Tea Board

It is clear from Table 10 that in 1998 the total sale of tea from coonor auction was 70.848 m.kgs, and it reached to 53.294 m.kgs in 2007. Sale of Tea from Coonor Auction is analysed through correlation analysis and the result of it is stated in Table 10.1 as follows:

TABLE 10.1: SALE OF TEA FROM COONOR AUCTION (Correlation Analysis)

Types	Correlations Marked correlations are significant at $p < .05000$ (N=10)			
	Means	S. D.	Leaf	Dust
Leaf	47.32060	13.56844	1.000000	-0.272430
Dust	13.21250	2.56024	-0.272430	1.000000

It is clear from Table 10.1 that there exists negative correlation between leaf tea and dust tea as far as the sale of tea from Coonor Auction.

It is further analysed related to t test of independent variable to know the comparative consistency in the growth over a period of time. The result of the analysis is stated in Table 10.2 as follows:

TABLE 10.2: SALE OF TEA FROM COONOR AUCTION (t test Analysis)

Types	Test of means against reference constant (value)							
	Mean	S. D.	N	S. E.	Reference	t-value	df	p
Leaf	47.32060	13.56844	10	4.290716	0.00	11.02860	9	0.000002
Dust	13.21250	2.56024	10	0.809619	0.00	16.31941	9	0.000000

It is clear from the table that t value is low for sale of leaf tea from Coonor Auction which shows that there is comparatively high consistency with respect to sale of dust tea for different periods of the study.

**AVERAGE PRICE OF TEA IN TAMILNADU**

The Table 11 shows the average price of tea in Tamilnadu from 1998 to 2007.

TABLE 11: AVERAGE PRICE OF TEA IN TAMILNADU

Year	Average Price (Rs./Kg)				Total	
	Leaf		Dust		Avg. Price (Rs.)	Index of Growth
	Avg. Price (Rs.)	Index of Growth	Avg. Price (Rs.)	Index of Growth		
1998	65.99	100.00	60.63	100.00	65.06	100.00
1999	53.75	081.45	50.24	082.86	53.34	081.98
2000	39.09	059.23	38.55	063.58	39.00	059.94
2001	41.75	063.26	40.39	066.61	41.47	063.74
2002	36.57	055.41	37.55	061.93	36.78	056.53
2003	33.95	051.44	36.51	060.21	34.55	053.10
2004	42.66	064.64	44.84	073.95	43.30	066.55
2005	36.03	054.59	46.58	076.82	45.66	070.18
2006	47.77	072.38	48.55	080.07	49.55	076.16
2007	44.19	066.96	47.45	78.26	48.55	074.62

Source: Statistical Report of Tea Board

It is clear from Table 11 that the average price of tea in Tamilnadu was varying from year to year. In 1998 the average price of leaf tea was Rs.65.99, the average price of dust tea was Rs.60.63 and it reached to Rs.44.19 for leaf tea and Rs.47.45 for dust tea in 2007.

Average price of tea in Tamilnadu was analysed through correlation analysis and the result of it is stated in Table 11.1 as follows:

TABLE 11.1: AVERAGE PRICE OF TEA IN TAMILNADU (Correlation Analysis)

Types	Correlations Marked correlations are significant at $p < .05000$ (N=10)			
	Mean	S. D.	Leaf	Dust
Leaf	44.17500	9.679646	1.000000	0.906723
Dust	45.12900	7.326908	0.906723	1.000000

It is clear from Table 11.1 that there exists high positive correlation of the average price of leaf tea and dust tea

It is further analysed related to t test of independent variable to know the comparative consistency in the growth over a period of time. The result of the analysis is stated in Table 11.2 as follows:

TABLE 11.2: AVERAGE PRICE OF TEA IN TAMILNADU (t test Analysis)

Types	Test of means against reference constant (value)							
	Mean	S. D.	N	S. E.	Reference	t-value	df	p
Leaf	44.17500	9.679646	10	3.060973	0.00	14.43169	9	0.000000
Dust	45.12900	7.326908	10	2.316972	0.00	19.47758	9	0.000000

It is clear from the table that t value is low for average price of tea leaf which shows that there is comparatively high consistency with respect to average price of tea dust for different periods of the study.

**FINDINGS OF THE STUDY**

The following are the important findings of the present study.

Tea estates, tea cultivation areas in Tamilnadu are differing from year to year. Tea production was remarkably increasing every year. The growth of average yield of tea in Tamilnadu was remarkably increasing every year. Nilgris, Coimbatore, Madurai, Tirunelveli and Kanyakumari are the important tea producing Districts in Tamilnadu. Nilgris District stands first in terms of number of tea estates, tea cultivation area and tea production. Madurai and Coimbatore districts have comparatively highest yield per hectare. There exists high positive correlation between Kanyakumari district and Madurai district as far as the area under tea cultivation in different periods. Low positive correlation existed between Tirunelveli and Nilgris districts. It is clear from the table that *t* value is low for yield in Madurai district which shows that there is high consistency with respect to yield for different periods of the study. Since the calculated value of *t* is high for all hypotheses, they are rejected. Hence the average yield of tea is not significantly same for Kanyakumari and Tirunelveli ( $H_{01}$ ), Kanyakumari and Madurai ( $H_{02}$ ), Kanyakumari and Coimbatore ( $H_{03}$ ) and Kanyakumari and Nilgris ( $H_{04}$ ). There exists negative correlation between leaf tea and dust tea as far as the sale of tea from Coonoor Auction. It is clear from the table that *t* value is low for sale of leaf tea from Coonoor Auction which shows that there is comparatively high consistency with respect to sale of dust tea for different periods of the study. High positive correlation of the average price of leaf tea and dust tea. It is clear from the table that *t* value is low for average price of tea leaf which shows that there is comparatively high consistency with respect to average price of tea dust for different periods of the study.

**SUGGESTIONS OF THE STUDY**

The following are the important suggestions of the study:

Tea estates, tea cultivation areas in Tamilnadu are differing from year to year, so Government may take necessary steps through Tea Board to increasing the tea cultivation area in Tamilnadu. Nilgris district stands first place for tea production in Tamilnadu, so Tea Board may take necessary steps to increase the tea production for other districts of Tamilnadu. High positive correlation of the average price of leaf tea and dust tea. It is clear from the table that *t* value is low for average price of tea leaf which shows that there is comparatively high consistency with respect to average price of tea dust for different periods of the study.

**CONCLUSION**

Tea industry plays a significant role in the economic development and enhancing the employment opportunities and to produce the tea for the requirement of the society. It is clear from the analysis that tea cultivation area, production and yield of tea in Tamilnadu are in an increasing trend. It also shows that reasonable amount of subsidies was provided by the Tea Board to tea cultivators and tea manufacturers.

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