A STUDY ON CROPPING PATTERN IN THE NILGIRI'S DISTRICT OF TAMILNADU (AGRARIAN TRANSFORMATION)

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Abstract:

Agriculture plays an important role in the national economy of our country. It is the life blood of our economy. There happened structural transformation in the Indian economy. Even within the same sector, there is a change taken place. At the time of independence, the contribution of the Agriculture sector to our economy was very high. The importance of agriculture has been disvalued and at the same time, the cultivators for pray of money, selling the lands for some other activities.

There has been vast change taking place in the agriculture sector since 90's. The globalization policy of the Government has brought many changes in the pattern of cultivation. The lands were once used for cultivating various agriculture crops like food grains and others food related crops are slowly loosing its importance and the same is used for the development of industrial and service sector activities.

Within agriculture sector itself, the lands were once used for cultivating food grains are now used for cultivating cash crops like tea, coffee and others.

The research has highlighted the problem relating to the transformation of agriculture sector particularly the transformation of lands once used for cultivating vegetables are slowly transferred to cultivate tea crops.

The researcher has taken up the issue to find out the reasons for shift in agriculture crop. He has taken up the Nilgiris district in Tamil Nadu as his study area. The Nilgiris district of Tamil Nadu once named for cultivation of various vegetables. But the trend has changed. The

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cultivators have shifted their cultivation more towards tea in place of vegetables. The acreage of land used for vegetable cultivation has decreased and the acreage of land used for cultivation of tea has increased. The research has used secondary data for his study.

Introduction:

Agriculture is the dominant sector in Indian Economy. Especially in a vast country like India when there is a population explosion, agriculture has to play a vital role. Agriculture is the largest and the most important sector in India. Nearly 75 percent of people in India depend on agriculture for their living. Nearly 13.9 percent of the GDP of India comes from agriculture and allied occupation. Out of the 8.6 percent GDP growth of our economy, about 5.4 percent is contributed by agriculture and allied activities during the year 2010-11. The same sector is expected to grow by 2.5 percent during the year 2011-12.

Profile of the Nilgiris district:

The Nilgiris district is selected for the study by the researcher because the Nilgiris the extensive cultivator of tea in all villages. The Nilgiris district is situated in the Western Ghats is the smallest in Tamil Nadu. It is located between 10 - 38 and 11- 49 North Latitude and between 76.0 and 77.15 East Longitude. The district has four blocks namely, Ootacamund(Ooty), Coonoor, Kotagiri and Gudalore.

The economy of the Nilgiris is dependent on the tea and coffee plantations. The economy of the district is also based on horticulture crops like potato, cabbage, carrot, spices and fruits. Besides these crops paddy, ragi, and samai, etc., are also grown in the district. Tea is grown in about 66% of the cropped area and it is in the mainstay of the economy of the district. The district accounts for a third of the total tea production from South India.

Tea:

Tea (Camellia spp.) is an important beverage and the world drink more of it than any other beverage. Tea is the second largest consumable beverage next to water in the world. The important tea growing countries are India, Sri Lanka, East Africa, Japan, Indonesia, China, Kenya, Argentina and others. In India, the crop is grown in Assam, West Bengal, Kerala, Tamil Nadu, Karnataka, Tripura, Himachal Pradesh and others.

The Planning Commission has announced recently that tea is going to be declared as National Drink from the year 2013.

Tea in India:

Plantation in India dates back to the cultivation of Indigo by Europeans in 1831. Tea plantation came into existence since 1834. India is the largest producer of tea in the world. The largest production of tea in India is in Assam.

Tea in Tamil Nadu:

Tamil Nadu is one of the leading producers of tea in India. Even though there are states concentrate in tea cultivation of tea which are suiting their soil, Tamil Nadu occupies second place in tea production in India next to Assam.

Tea in the Nilgiris:

In Tamil Nadu, The Nilgiris, Tirunelveli and there are some of the areas where tea is cultivate on a large scale. In the Nilgiris, tea is cultivated on a large scale. The Nilgiris ranks first both in terms of area and volume of production. This clearly indicates that the Nilgiris district has a unique place in Tamil Nadu in tea cultivation.

Reason for the study:

The research has taken up the topic in the interest of the people of the Nilgiris District that now days there is a vast change taking place in the agrarian sector. One of the factors behind the study is the conversion of vegetable lands into tea gardens and conversion of cultivable lands into buildings.

The Nilgiris district was once named for cultivating more of vegetables of all types. But there is a sharp fall in the acreage of lands used for cultivating vegetables in the district. The people of the district are motivated to fall to the pray of the land graspers and real estate people. Again the lands once used for cultivating agricultural crops are slowly converted into tea estates.

Tea cultivation has undergone revolutionary changes in India. From the position of being a crop for consumption purposes, tea has assumed the states of a commercial crop. It has a

highly profitable foreign market. Therefore, the Nilgiris district, where tea is cultivated on a large scale has a potential market.

Statement of the problem:

The present study has been undertaken to highlight the important transformation taking place in agricultural sector in the country especially in the Nilgiris district. .

Objectives of the study:

The current study on Cropping Pattern in the Nilgiris district of Tamil Nadu carries the following objectives.

- 1. To study the economic scenario of tea cultivation in the Nilgiris.
- 2. To study the relationship between demand for tea and production of tea.
- 3. To assess the relationship between the growth of real estate sector and the size of farm land.
- 4. To identify the relationship between the policy regarding tea and the size of tea farms.

Methodology:

The research has used secondary data relating to the area of tea cultivation, area of vegetable cultivation, production of tea, etc.

Limitations:

Since the study is restricted to a small geographical area, it may not be possible for generalizing results for the universe. Researcher has limitation of time and money for carrying out research on a larger scale.

Table - 1: Total Geographical Area of the Nilgiris District:

S.NO	NAME OF THE BLOCK	AREA (SqKm.)
1	Udhagamandalam (Ooty)	1094.22
2	Coonoor	263.12
3	Kotagiri	377.41
4	Gudalur	855.82
	Total	2590.57

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Source: Population census, 2011.

The above table depicts the details regarding the total geographical area of the district. The total geographical area of the district covers an area of 2, 54,381 hectares. Since the district has four blocks, the size of the land area also varies and size of the tea farms. The block has large size of land had a chance to have large acreage of lands under farm cultivation and vice versa.

Table – 2: Land use/land cover pattern in the District:

S. No.	Land use/ Land cover	Area in km2			
	Classes	1995	2000	2005	2010
1	Dense Forest	654.46	539.67	541.00	479.07
2	Open forest	456.83	325.79	389.66	323.18
3	Range land	548.56	656.00	569.63	499.82
4	Tea plantation	154.69	318.48	289.33	433.13
5	Vegetable	161.21	143.35	127.02	199.05
6	water bodies	32.66	47.43	21.23	68.84
7	Built-up area	152.89	153.89	153.90	156.74
8	Forest plantation and	431.38	408.08	500.92	432.92
	orchards		-		

Source: Land use / Land cover details of Nilgiri District obtained from Satellite Imageries

The above table clearly depicts that out of the total geographical area of the district, the area under tea plantation has been increasing since 1995 when compared to vegetable cultivation. The increase in the area under tea and vegetable cultivation is due to the reason that the area under forest has been converted into cultivable lands. This clearly shows the importance given to tea in the Nilgiris District.

Medicinal Importance of tea:

Various studies conducted in the world depict the importance of tea as far as health aspect is concerned. As tea is considered to be a healthy drink, it is consumed more by people. One of the researches depicts that on an average, people consume minimum 4 teas per day. This

clearly indicates the reason for increase in production of tea in India and also for increase in size of lands under tea farms.s

Drinking two cups of tea everyday could boost a woman's chances of having a baby. Researchers at Boston University have found that women are 27 per cent more likely to become pregnant if they drink tea regularly compared with those who don't- in fact, they say the antioxidants in the beverage actually aid fertility. Lead author Prof. Elizabeth Hatch said," We found that women who drank tea two or three times a day did have a 27 per cent increased chance of becoming pregnant.

Source: Deccan Chronicle Newspaper, 26th, March, 2012.

A new research says that drinking black tea three times can be instrumental in reducing blood pressure to a large extent. A six month study by scientists of University of Western Australia has revealed that regular consumption of the beverage can help lower systolic and diastolic blood pressure.

Source: Deccan Chronicle Newspaper, 27th, March, 2012.

Drinking one or two cups of green tea every day could help you fight bad breath and even prevent mouth and esophageal cancer, study published in the Journal Archives of Oval Biology. Green tea is rich in flavonoids and has a lot of anti-oxidants. The presence of poloyphenols makes it anti – carcinogenic and helps in preventing cancer.

Source: Deccan Chronicle Newspaper, 07th, April, 2012.

India's first ever nation wide study helmed by Tata Memorial Hospital(TMH), the centre for Global Health Research (Toronto) and various cancer institutes and organizations worked in tandem on the long term project reveals that nearly *six lakh Indian die of cancer every year*, with 70 percent of these deaths between the ages of 0-69 years.

The research analyses cancer death rates across India and shows that oral, stomach, and lung cancers are important causes of death in Indian men, while cervical, stomach, and breast cancers cause the most deaths among women. Cancer deaths accounted for six per cent of deaths across all ages.

Source: Deccan Chronicle Newspaper, 29th March, 2012.

Table - 3: Tea production in the world:

Country	2011 (P)	2010	2009	2008	2007
China	1623.21	1475.06	1358.64	1257.60	1140.00
India	988.33	966.40	979.00	980.82	986.43
Kenya	377.91	399.01	314.20	345.82	369.61
Sri Lanka	328.63	331.43	289.78	318.70	304.61
Vietnam	178.00	170.00	175.00	166.38	148.27
Turkey	145.00	148.00	153.00	155.00	178.00
Indonesia	119.65	129.20	136.48	137.50	137.25
Bangladesh	59.32	59.27	60.00	58.66	58.42
Malawi	47.06	51.59	52.56	41.64	48.14
Uganda	54.18	59.14	50.98	42.75	44.91
Tan zania	32.78	31.65	32.09	31.61	34.86
Others	345.15	349.45	342.65	328.31	345.58
Total	4299.22	4170.20	3944.38	3864.79	3796.08

(Source: ITC Annual Bulletin, 2012), (P) – Provisional

China happens to be the leading producer of tea in the world. India occupies the second place next to china. Even though there are countries in the world produce tea, there is a great demand for Indian made tea. India is able to attain this position in the world; this is because of the reason that there is an increase both in the size of area under cultivation and also increase in the size of small tea cultivators in the district. This clearly states the reason for shifting in cultivation from vegetables to tea.

Tea consumption in the world:

Tea is one of the largest consumable beverages next to water in the world. China is the leading producer and consumer of tea in the world. China produces more of Green tea for its innumerable medicinal benefits and there is a continuous demand for green tea in the domestic market as well.

More than three billion cups of tea is consumed everyday in the worldwide. As the number of countries producing tea is very small in number out of total number of countries in the

world, India had a chance to increase the size of tea cultivating area and that helped in maximizing the volume of tea also.

Table -4: Estimates of (Internal) Consumption and Per capita consumption of Tea in India:

Year	Domestic Consumption	Per Capita
	(M Kgs)	Consumption
		(Grams Per Head)
2001	673	654
2002	693	663
2003	714	672
2004	735	681
2005	757	691
2006	771	693
2007	786	696
2008	802	701
2009	819	706
2010	837	711
2011(P)	856	718

Source: www.teaboard.gov.in (accessed on December 11, 2011)

The above table regarding the consumption of tea in India indicates that starting from the year 2001 till 2011 (provisional), there is a continuous increase in the consumption of tea in the domestic market and also in the consumption of tea per head. This clearly indicates that increase in consumption of tea in the country has resulted in increase in tea production and tea cultivating areas in the country.

Real estate sector:

Real estates sector is one of the fastest growing sectors in the Nilgiris. Due to many reasons, the people want to sell off their lands to the needy people from other places. The development of the real estate sector has reduced the number of tea gardens both with the corporate sectors and with the small cultivators. The approximate data says that in the last seven

years, about 1200 hectares of lands under tea cultivation has been converted into big buildings. It also poses threat to the eco-system of the district.

As the Nilgiris district is one of the famous tourist destinations, in order to meet the basic facilities of the tourists in the district various new facilities are provided. Among those are, construction of Hotels and Resorts, Apartments, shops, etc.

To meet all the requirements, the lands which are under tea cultivation converted into big apartments. This has led to fall in the area under tea cultivation and also the employment opportunities in the district particularly to the tea garden workers.

In the last seven years, tea estates in the hills have shrunk by more than 1200 hectares. The green patches on the hills are being replaced with concrete structure at a fast pace. Many small growers are falling prey to the lure of quick money offered by real estate developers. According to records available with TOI, in 2004, small tea estates in the Nilgiris were spread across 43,699 hectares. Now it would be approximately 42500 hectares in the district.

In the year 2005, around 65,000 small farmers cultivate tea in the district. Though the number of small tea growers has gone up by about 10-15%, the area under tea cultivation has decreased significantly.

The tea directory says that in 1998, there were 160 corporate sectors owning tea estates to the extent of 17,468 hectares in the district. The survey conducted in 2011 reports that the number of corporate estate owners have decreased to 95 and size of tea estates has also decreased to 16,025 hectares.

Policy of the Government and organizations:

The government of India and Tamil Nadu were once insisting on increasing the size of tea areas in our country. This is because of the reasons that Indian made tea had good demand in most of the countries of the world. Specially, USSR was the main importer of our tea once. Still there is a demand for Indian made tea even in China even though China happens to be the largest producer of tea.

Tea Board of India framed a policy during the Tenth and Eleventh plan periods. The objectives of the policy was to replanting / replacement planting, new planting in small growers sectors in traditional and non – traditional areas etc.

This clearly depicts that the policy of the government bodies have also played a role in increasing the size of tea farms in the district.

Causes for Shift in agricultural crop:

- 1. The policy of the government regarding cultivating more of tea with the aim of meeting the demand for tea in abroad and to earn more foreign exchange.
- 2. It is the supportive policy of the Tea Board of India to increase the area under tea cultivation in the district by extending financial as well as physical assistance.
- 3. Vegetable cultivation is a short duration crop and the same to be cultivated every year. But as far as tea is concerned, it is a long duration crop. Once tea bushes are planted, it has life for about 20 years.
- 4. Even though China is the leading producer and consumer of tea in the world because of its medicinal benefits, there is a continuous demand for Indian tea in China and in other parts of the world. To meet this demand, there is a shift in cultivation towards tea.

Findings:

- 1. The high price offered by the real estate people both for uncultivated lands and lands with tea gardens has attracted people to sell off their lands and that has resulted in the reduction of lands under tea estates in the district.
- 2. The finding says that there is an increase in the number of small tea cultivators every year and a sharp decrease in the area of cultivation in the district.
- 3. Conversion of cultivable lands into buildings has resulted in the soil erosion and land slides in many parts of the district.

Suggestions:

- 1. The government should take steps to control and prevent the conversion of cultivable agricultural lands into buildings for the purpose of construction of houses, hotels, shopping malls to meet the demand of the tourists in the district.
- 2. The government should frame a suitable policy to encourage the farmers to cultivate more of traditional agricultural crops like Carrot, Potato, Beans, Beet root, Cauliflower, Cabbage and others to end the conversion of lands into buildings and to prevent the ever rising food inflation in the country.
- 3. Unauthorized selling of cultivable lands and cutting of trees should be controlled to save the ecology of the district.
- 4. As far as long term economic perspective is concerned, there is a big problem going to occur in the country relating to food requirement. As the lands are started converted into

buildings, there is going to happen with a great shortage of lands for cultivable purposes. This may end up in utter starvation and some other economic problems in the country. To overcome this problem, it is the right time for the government to take right steps to frame a policy to put an end to the conversion of cultivable lands into buildings.

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