

International Multidisciplinary
Research Journal

*Indian Streams
Research Journal*

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INFRASTRUCTURAL CHARACTERISTICS OF SELECTED TEA ESTATES IN THE WESTERN PARTS OF DOOARS IN JALPAIGURI DISTRICTS OF WEST BENGAL

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Abstract:- Dooars area of Jalpaiguri districts has long history of tea industry. This garden-based industry began to flourish from the late 19th century. The English traders found this part very ideal for tea plantation. They brought people of different communities to work in the gardens from the hills and from several parts of north Bihar, Chhotanagpur area and southern parts of West Bengal. Thus the tea gardens show people of mixed community. Their life pattern, including culture, livelihood and the work environment changed remarkably over the last one and a half decade. A study has been conducted here make an assessment of the infrastructural characteristics of some selected tea estates of this geographical region. The study was conducted during 2010-2014 upon three tea gardens, namely Ranicherra, Washabarie and Leesh River Tea Gardens.

Keywords: Infrastructural Characteristics , tea industry , geographical region.

DEVELOPMENT AND EXPANSION OF TEA INDUSTRY IN DOOARS

North Bengal area as a whole has as many as 450 tea gardens spread out in the Darjeeling hills, Terai and Dooars region that are registered as sellers in the Siliguri Tea Auction Centre. It is rightly said that the economy of Dooars is based on three "T"s – Tea, Tourism and Timber. The main industry of the Dooars region is the tea industry. Thousands of people are engaged in the tea estates and factories.

Various aspects of the tea industry of the Dooars area in Jalpaiguri district have been discussed and analysed by many workers (e.g., Ghosh, 1970, 1987, Mishra, 1979, Dibedi, 1999, Tea Board of India, 1995, Karmakar, 2011, Shah, 2013, Tamang, 2014, Tamang and Chattopadhyay, 2014). In the past Tea cultivation was extended to the Western Dooars from the Darjeeling district, where, as a commercial enterprise. In Dooars he industry was first established in 1856. Tea garden area continued to expand throughout the north of the Jalpaiguri district between Tista and Sankosh rivers in the areas where the land was not occupied by the reserved forest or riverbeds. It is known that the first garden in the Terai area of Darjeeling was opened in 1862 at Champta near Khaprail, by Mr. James White (cf. Jalpaiguri District Gazetteer, 1907), who had previously planted single estate near Kurseong (Darjeeling district), and by the end of 1866 several other tea gardens were also opened in the Terai. During the period of 1866 - 1874 the number of the tea gardens in the Darjeeling district increased rapidly and the area under tea cultivation increased by 82%, while the out turn was multiplied almost ten times. This inspired the tea planters at the foot hills particularly in the Western part of the Dooars to expand tea cultivation in the open areas and in 1874 a garden was opened in Gazilduba by Mr. Richard Haughton, who became known as the pioneer of the tea industry in the Jalpaiguri district. The Gazilduba tea garden was owned by Dr. Brougham. Fulbari tea garden was the next place to emerge.

EXPANSION OF TEA PLANTATION IN DOOARS

In the initial years the planters were not very optimistic about the future of tea industry in Dooars. However

it was soon found out that the climate and soil of the western of this part was suitable for the growth of tea; government offered land to the investor on the favourable terms and the industry flourished very rapidly. In 1876, two years after the Ghazildupa garden was planted, as many as thirteen more gardens were opened covering an area of 818 acres and a yield of 29,520 lbs (approx. 14,000kg) of tea. By 1881 the number of gardens increased to 55 which observed an increase of more than seven times in five years. At the time of the last settlement in 1892, 182 grants of land was leased for the cultivation of tea, comprising a total area of 139,751 acres, of which 38,583 acres were actually planted with tea. In the present time, tea-gardens extend throughout the tract of Dooars. Some of them obtain their water from springs in Bhutan and fetch it down through pipes; the plantation workers living in these areas prefer these methods as they have no trouble in getting the water.

From the year 1897 the tea industry in Dooars and Terai went through a period of depression. The high prices and general prosperity, which were the features of the eighteen eighties and early eighteen nineties, led to reckless extension of the cultivation in other parts of British India, Sri Lanka, and Java, with the result that the supply of the tea exceeded the demand. Prices fell sharply and the positions were rendered more acute by the fixing of the standard of exchange and by the dramatic increase in the duty of the tea which was imposed in Great Britain. In the initial years the natural extension of the tea trade, the opening of the new market on the continent, and the success which had followed the effort to supplant Chinese tea in Russia, America, and Australia had resulted in the great increase of demand for Indian tea and the prospect of the industry became more favourable.



Plate 1. Female workers plucking tea leaves in the tea garden of Dooars.

Identity of the three tea gardens selected for detailed study has been given below.

Table 1: An account of the three selected tea gardens of Ranicherra, Washabarie and Leesh River

Villages under Gardens	Increase in two decades during 1991 – 2011 Census years (in %)			Pattern of changes in the last two decades
	Increase in area	Increase in population	Increase in housing	
Ranicherra	2.21	66.23	13.38	<ul style="list-style-type: none"> • Negligible increase in garden area • High rate of population increase • Some increase no. of houses
Washabarie	36.52	197.75	28.52	<ul style="list-style-type: none"> • Marked increase in garden are • Very high rate of population increase • Considerable increase no. of houses
Leesh River	8.69	64.04	18.09	<ul style="list-style-type: none"> • Some increase in garden area • High rate of population increase • Limited increase in no. of houses

Source: Compiled by the author on the basis of secondary data obtained from the respective Tea Gardens

Growth of the number of tea garden workers and their category in the post-independence period

Growth of the number of tea garden workers and their category in the post-independence period has been given in the table below.

Table 2: Average number of workers employed in Tea Plantation sector during 1950-2007

Year	Category of workers				
	Male	Female	Adolescent	Child	Average
1950	-	-	-	-	9,48,598
1961	3,99,907 (49%)	3,68,464 (45%)	25677 (3%)	22012 (3%)	8,22,834 (100%)
1970	3,42,871 (45)	337364 (44)	23098 (3)	36313 (5)	759646 (100)
1980	3,72,285 (44)	384641 (45)	31351 (4)	58382 (7)	846659 (100)
1990	4,53,001 (46)	458519 (46)	24148 (2)	51113 (5)	986781 (100)
2000	5,70,267 (47)	593571 (49)	46217 (4)	0	1210055 (100)
2007	6,00,549 (48)	634214 (50)	25187 (2)	0	1259950 (100)

Source: Various issues of Tea Statistics, Tea Board of India, 2008

LOCATION OF THE STUDY AREA

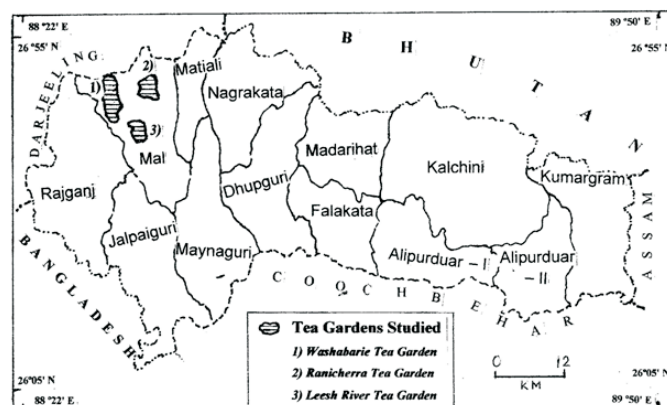
Identity of Jalpaiguri district: Jalpaiguri is situated between 26° 16' and 27° 0' North latitudes and 88° 4' and 89° 53' East longitudes (NABARD Consultancy Services Ltd, West Bengal, 2007-2012). The district was established in 1869. It covers an area of 6,245 km², and according to the census of 2011 its population is 7, 87,380 persons. Population has increased considerably in recent years. The headquarter of the district are at Jalpaiguri town, which is also the divisional headquarters of north Bengal and has its special importance in respect of tourism, forest, hills, tea gardens, scenic beauty and a wide variety of tribes like the Totos, Mundas, Adhivashis, , Totos, Metche, Santhals, Madasia and Oraons etc.

Etymology: The name Jalpaiguri came from the Bengali word Jalpai meaning "Olive" because of the Olives which grew in the town and were seen even in 1900. The suffix Guri means a place. The name can also be associated with Jalpesh, the presiding deity (Shiva) of the entire region (O'Malley, 1907).

Boundary: Being situated in the northern part of West Bengal this district has international borders with Bhutan and Bangladesh in the North and South respectively and borders with Assam and Darjeeling hills in the East, West and Northwest. The entire topography is crisscrossed with rivulets, rivers and hills. The district is primarily rural with more than 80% of rural population. It has also high percentage of SC/ST population. Relatively sizeable population resides in Tea Gardens and Forest villages which are isolated and mostly inaccessible. The district is the gateway to the entire North-Eastern States and Bhutan. Having high percentage of migrated population different cultural groups (Rajbangshis, Ravas, Totos, Metche, Santhals, Madasia and Oraons) has created a unique cultural harmony which is rarely seen in other districts of West Bengal.

National protected area networks in the region comprises Buxa National Park (which includes the Buxa Tiger Reserve), the Gorumara National Park, the Chapramari Wildlife Sanctuary, and part of the Jaldapara National Park.

For in-depth study three tea gardens have been selected. viz., Ranicherra, Washabarie and Leesh river tea gardens, all of which are located in the eastern part of the Dooars.


Figure 1: Locations of the three tea gardens selected for in-depth study

Basic infrastructure facilities in the selected tea garden villages

The three tea gardens studied are located in the Western part of Dooars in Jalpaiguri district. These three gardens were established in the early fifties of the nineteenth century and are functioning till date. They give employment opportunities to nearly 15,000 workers directly and indirectly. With the increasing number of tea gardens in Dooars, the number of workers continued to increase. This has resulted in rapid growth of population in the Western Dooars area. According to the record the first tea garden in Dooars was opened in Ghazildupa in the Western part (Grunning, 1907). The three tea gardens selected for sample survey are Ranicherra, Washabarie and Leesh River Tea Estates

Village of Ranicherra Tea Estate

Ranicherra Tea Estate, the largest of the three tea gardens selected, covers an area of 1,253.33 hectares of land. Following is the overall scenario of this tea estate.

Table 3: Land use and amenities of Ranicherra Tea Estate village (JL No. 34)

<i>Aspects</i>	<i>1991</i>	<i>2001</i>	<i>2011</i>
Total area in hectare	1,226.21	1,245.11	1,253.33
Total Population	4,593	5,634	7,635
Total No. of houses	919	972	1,043
Availability of Educational facility	Only primary	Only primary	Only primary
Availability of Medical facility	Hospital	Hospital	Hospital
Drinking water (Potable)	Yes	Yes	Yes
Nearest township	Mal	Mal	Mal
Distance of the nearest township	13km	13km	13km
Distance of the nearest market	7km	7km	7km
Approach to the village	Pacca road	Pacca road	Pacca road
Staple food of the people	Rice	Rice	Rice
Any Forest cover in the area	No	No	No
Irrigate Land	No	No	No
Unirrigated land	No	No	No
Cultivable waste	No	No	No

Source: Office of the Ranicherra Tea Estate

Overall scenario: Ranicherra Tea Estate is accessed by well built metalled road which connects National Highway No. 31 at Damdim and from there it further connects the nearby towns and cities of Mal Bazar, Jalpaiguri and Siliguri. The tea estate (Busty) has been provided with proper accommodation and electricity facilities for the garden workers by the garden authority. The garden has been provided with proper drinking water facilities form the wells and hand pumps which are constructed under the imitative of the state government.

The residential areas of this tea estate spreading over an area more than 1,200 hectares, are distributed in several parts from where the garden workers can conveniently access to the respective parts of the garden. The huts are both pacca and semi-pacca in construction. The estate authority has provided faculties of procuring water from tube wells. Sanitation conditions (with sanitary toilets) in each village are also relatively good.

The tea garden has two primary schools for basic education of the workers' children. However, they don't have education facilities at secondary and higher secondary levels. For this the Nepali speaking people mostly travel to the schools located in the nearby Darjeeling district and the non-Nepali speaking people travel to the schools located in Malbazar and Oodlabari. The tea garden authority provides the facility of school bus to the children of the workers.

The garden has a small dispensary and health centre for the workers which are run by the garden management. Since the health centre does not have adequate medical equipment, only minor ailments are treated there. For major health problems the workers have to travel to Mal sub-divisional hospital or to North Bengal Medical College Hospital which is about 70 kilometers away. The Tea Estate provides ambulance service for the patients for traveling to that distance. The following table gives details of the Ranicherra Tea Estate village.



Plate 2: An entrance to the Ranicherra Tea Estate

Changing pattern of land use and amenities of the Ranicherra Tea Estate village area

In order to detect the changes of Ranicherra the variable of land area, population and housing pattern have been considered and the pattern of changes during 1991-2011 as calculated from the Census reports have been given in the table below

Table 4: Changes in Ranicherra Tea Garden villages in land area, population and Housing

Villages under Tea Gardens	Increase in two decades during 1991 – 2011 Census years (in %)			Pattern of changes in the last two decades
	Increase in land area	Increase in population	Increase in housing	
Ranicherra	2.21	66.23	13.38	<ul style="list-style-type: none"> • Negligible increase in garden area • High rate of population increase • Some increase no. of houses

Source: Compiled from database made available from the Office of the Ranicherra Tea Estate

The significant features emerged from the study as compiled in the table above shows that: over the last two census decades there has been a) negligible increase of land in garden area, b) High rate of population increase and c) some increase no. of houses.

Village of Washabarie Tea Estate

Washabarie Tea Estate, smallest of the three tea gardens selected, covers an area of 698.18 hectares of land. Following is the overall scenario of this tea estate.

Table 5: Land use and amenities of Washabarie Tea Estate village (JL No. 5)

<i>Aspects</i>	<i>1991</i>	<i>2001</i>	<i>2011</i>
Total area in hectare	511.41	578.33	698.18
Total Population	3,241	6,724	9,650
Total No. of houses	603	670	775
Availability of Educational facility	Only Primary school	Primary & secondary schools	Primary and secondary schools
Availability of Medical facility	Hospital	Hospital	Hospital
Drinking water (Potable)	Yes	Yes	Yes
Nearest township	Malbazar	Malbazar	Malbazar
Distance of the nearest township	17	17km	17km
Distance of the nearest market	5	5Km	5km
Approach to the village	Kachha Road	Kachha Road	Semi pucca
Staple food of the people	Rice	Rice	Rice
Any Forest cover in the area	No	No	No
Irrigate Land	No	No	Yes
Unirrigated land	153.78 hec	123.32	100 he
Cultivable waste	202.34 hec	122.12	No

Source: Office of the Washabarie Tea Estate

Overall scenario: Washabarie Tea Estate which is located beside the National Highway No. 31 is very well connected with the nearby towns and cities, and the location of the Bagrakote railways station close by has also favoured the tea garden to avail good transport service. The condition of the Washabarie tea estate is much better than other tea gardens. There is better provision for electricity, drinking water, and housing to the tea garden workers. The workers in this tea garden are allowed to reorganize and make some extension of their houses which are basically provided by the garden authority (Tamang and Chattopadhyay, 2014).



Plate 3: A part of the Washabarie Tea Garden

The residential area of this tea estate is located in the eastern margin of the garden close to the tea factory from where both the garden workers can conveniently access to the respective parts of the garden as well as to the factory. The huts are well built having both pacca and semi-pacca in construction and the connecting roads are well-built. As far as the structure of the houses and road condition Washabarie has markedly better condition. The estate

authority has also provided faculties of procuring water from tube wells. Sanitation conditions (with sanitary toilets) in the village are also markedly nice.

The tea estate has two primary schools, one junior high school and one nursery school. Due to unavailability of higher education facility in the area, the children of the workers aspired for higher education has to travel for more than five kilometers for higher educational institutions. For study at the college level they have to go either to Malbazar or Siliguri. The tea estate management has provided school bus facility to the students of the garden, and there is also provision for fellowship to the meritorious students. The estate has a reasonably good hospital facility for medical treatment with ambulance facility. However, for special health care facilities the patients are sent to Mal Bazaar sub-divisional hospital or to North Bengal Medical College hospital. The following table gives details of the Washabarie Tea Estate village.

Changing pattern of land use and amenities of the Washabarie Tea Estate village area

In order to detect the changes experienced by Washabarie Tea estate village and its people the same variables as for the Ranicherra i.e., land area, population and housing pattern have been considered and the pattern of changes during 1991-2011 as calculated from the Census reports have been given in the table below:

Table 6: Changes in Washabarie Tea Garden villages in land area, population and Housing

Villages under Tea Garden	Increase in two decades during 1991 – 2011 Census years (in %)			Pattern of changes in the last two decades
	Increase in land area	Increase in population	Increase in housing	
Washabarie	36.52	197.75	28.52	<ul style="list-style-type: none"> • Marked increase in garden area • Very high rate of population increase • Considerable increase no. of houses

Source: Compiled from database made available from the Office of the Washabarie Tea Estate

A number of ostensible features have been emerged from the records as given in the table above. The most significant features emerged from the study as compiled in the table above shows that: over the last two census decades there has been a) Marked increase in garden area, b) Very high rate of population increase and c) Considerable increase in the number of houses.

Village of Leesh River Tea Estate

Leesh River Tea Estate, having a moderately large size tea garden, presently covers an area of 1,022.21 hectares of land. It is located on the west bank of Leesh River and the name of the tea estate has been taken from this river of Doora. Following is the overall scenario of this tea estate as has been obtained through collection of secondary data.

Table 7: Land use and amenities of Leesh River Tea Estate (JL No. 10)

Aspects	1991	2001	2011
Total area in hectare	940.52	982.76	1,022.21
Total Population	4,352	5,832	7,189
Total No. of houses	918	955	1029
Availability of Educational facility	Only primary school	Only primary school	Only primary school
Availability of Medical facility	Hospital	Hospital	Hospital
Drinking water (Potable)	Yes	Yes	Yes
Nearest township	Oodlabari	Oodlabari	Oodlabari
Distance of the nearest township	7km	7km	7km
Distance of the nearest market	7km	7km	7km
Approach to the village	Pacca road	Pacca road	Pacca road
Staple food of the people	Rice and wheat	Rice and wheat	Rice and wheat
Any Forest cover in the area	No	No	No
Irrigate Land	No	No	No
Unirrigated land	No	No	No
Cultivable waste	No	No	No

Source: Office of the Leesh River Tea Estate

Overall scenario: Leesh River Tea Estate, located in the part of the Western Dooars is served by the metalled road of the National Highway No. 31 which connects the nearby towns and cities. The nearest Railway station is Bagrakote located at a distance of only one kilometer from the main gate of the tea estate. The tea estate is provided with good housing, drinking water, and electricity facilities for the workers. The estate management provides all the facilities in terms of Plantation Labour Act, 1951 (Report of the Tea Board of India, 2009).

The residential area of this tea estate spreading over an area more than 1,000 hectares, are distributed in several parts from where the both the garden and factory workers can conveniently access to the respective parts of the garden as well as the factory. The huts are both pacca and semi-pacca in construction. The estate authority has provided facilities of procuring water from tube wells. Sanitation conditions (with sanitary toilets) in each village are also relatively good.

The estate has one primary school and one nursery school within its premises. The condition of the nursery school is better than the Government primary school; thus the children of the workers mostly go to the nursery school. For secondary and higher secondary education they have to travel to Bagrakote or Oodlabari, which are about two to three kilometers away. For college level education they have to travel to either Malbazar or Siliguri. The condition of the health centre in this tea estate is much better than many others in the Western Dooars area. However, the major health ailments are treated in Malbazar Sub-divisional Hospital at eight kilometers distance or in North Bengal Medical College Hospital which is at about seventy kilometers away. This tea garden is also facilitated with the Leesh River Gram Panchayat. The following table gives details of the Leesh River Tea Estate village.

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