

Displacement and Alternative Livelihoods in Closed Tea Gardens of Darjeeling Hills

A Dissertation Submitted to

Sikkim University



In the Partial Fulfilment of the Requirement for the

Degree of Master of Philosophy

By

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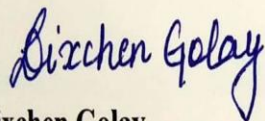
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I, **Dixchen Golay**, hereby declare that the research work embodied in the dissertation titled, "**Displacement and Alternative Livelihoods in Closed Tea Gardens of Darjeeling Hills**" submitted to Sikkim University for the award of the **Degree of Master of Philosophy**, is my original work. This dissertation has not been submitted for any other degree of this University or any other University.



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All the assistance and the help received during the course of investigation have been duly acknowledge by her.

We recommend this dissertation to be placed before the examiners for evaluation.

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“Displacement and Alternative Livelihoods in Closed Tea Gardens of Darjeeling Hills”

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Abbreviations

BJP	Bhartiya Janata Party
CBTCMU	Chya Bagan Trinamool Congress Mazdoor Union
CPM	Communist Party of India (Marxist)
DCKMSTU	Darjeeling Chai Kaman Mazdoor Sangh Trade Union
DPU	District Child Protection Unit
DTDCKMU	Darjeeling Terai Dooars Chya Kaman Mazdoor Union
DTDPLU	Darjeeling Terai Dooars Plantation Labour Union
DZCCJSS	Darjeeling Zilla Chiya Cinchona Jana Sramik Sangathan
FAWLOI	Financial Assistance to the Workers of Locked Out Industrial Units
GJM	Gorkha Janamukti Morcha
GNLF	Gorkha National Liberation Front
GTA	Gorkhaland Territorial Administration
HPWU	Himalayan Plantation Workers Union
IAY	Indira Awaas Yojana
JAC	Joint Action Committee
JAP	Jana Andolan Party
MGREGA	Mahatma Gandhi Rural Employment
NGO	Non-Governmental Organisation
NOC	Non-Objection Certificate
NPWU	National Plantation Workers Union
OBC	Other Backward Class
PDS	Public Distribution System
PMGAY	Pradhan Mantri Gram Awaas Yojana

PMGSY	Pradhan Mantri Gram Sadak Yojana
SC	Schedule Caste
SRO	Special Revenue Officer
ST	Schedule Tribe
TBI	Tea Board of India
TMC	Trinamool Congress
TRIPS	Trade-Related Aspects of Intellectual Property Rights
WTO	World Trade Organisation

Chapter-1

Introduction

1.1 Introduction

The history of Indian tea plantation agriculture is linked with British enterprise. It was started in 1839 with the establishment of the company at Assam in 1839. In the development of Indian Economy; the tea industry holds an eminent position. Tea is the oldest organised sector in India and it is both the producer and consumer of tea. In India more than the 50 percent of workforce derive their livelihood from agriculture. The tea industry also plays a vital role in terms of providing employment. Moreover, geographic factors play a significant role in the cultivation of tea. It is only grown in the regions where the geography and climate favour its cultivation.

In the developing country like India where more than half of the populace is reliant on agriculture for their income and livelihood, the tea industry plays a significant role in terms of providing employment and developing the economy of the country. The tea industry in India has undergone structural changes particularly after 1990's. In terms of production contribution there are existence of small-scale farming (unorganised) of recent origin contributing roughly in India ,50 percent of total tea production and the organised tea industry are facing challenges with this upcoming unorganised sector. It is also evident that the Tea industry faced severe crisis, during 2000-04, 118 tea gardens were closed in the traditional tea growing states of India. The closed gardens are situated in Assam (17), West Bengal (53), Kerala (38), Tripura (7) and Tamil Nadu (3) and affected the livelihood of 68,442 labourers working in these gardens only (51st Annual Report, 2005).

The Darjeeling tea plantation started in early 1800s during the British rule at the time when Dr. Campbell was appointed as the superintended of Darjeeling. Those days the tea seed for plantation was brought from China. Since the weather and topography of the Darjeeling hills favoured the growth of tea, the plantation further flourished in the region as a profitable business as commercial enterprise (Malley, 1907). During the starting period of the tea industry the region was sparsely populated so British began to recruit large number of labourers from various parts of the country as well as from neighbouring countries and urged them to settle in the plantation area (Rai, 2016). Since then, tea industry has emerged as one of the major sources of employment to locals and migrant labourers in the plantation region of Darjeeling. Much of the land is suitable for tea cultivation in the hilly slopes. Tea industry is the only industry that has flourished in the region.

The national picture of tea economy has also been experienced in Darjeeling hills over the years. Currently, 87 tea gardens are there in the Darjeeling hills recognised under GI status which is spread across approximately 19,000 hectares tea cultivated area. It employs around 52,000 permanent labourers and 15,000 agreement employees. The closed tea gardens under current research are also part of the tea crisis during 2000-2004. The Tea garden namely, *Peshok Tea Garden*, *Kalej Valley Tea Garden* and *Dooteria Tea Garden* have been closed in 2015 but it was officially declared as abandoned w.e.f. 01.10.2018. The estimated labourers affected are 1,345, 642 and 570 respectively. Since 2004, all these three gardens are managed and owned by the Alchemist Group Mumbai (Sikkim Express, September 06, 2019). As per other local reports between 2004 onwards, the Alchemist Group had acquired approximately 2,075 hectares in Darjeeling district—this included 995.23 hectares of plantation land along with a factory to process and package tea leaves, that was

divided into Peshok, Dooteria and Kalej Valley tea estates—employing approximately 2,544 permanent workers and around 800 workers on contract (Majumder, 2019). It is evident from the field that most of the labourers have out-migrated in search of employment and better opportunities in other states or another tea garden and some even to gulf countries. With this background, the present paper is an attempt to understand and study the nature and magnitude of displacement of labourers in closed tea gardens in Darjeeling hills. It has been seen that the gardens and the labourers are abandoned without prior negotiations with the stakeholders and joblessness arisen into their workplace which has impacted their survival.

1. 2. Overview of Literature

1. 2.1 Displacement

As per Attewell (1999), displaced workers face a severe dropping of self-respect, many missing their professional identities profoundly etc. The job displacement impacts the livelihood and income of the person in the long run, as it has been examined by the author that reduction in earnings ensuing displacement continue for some years even after reemployment. Displacement of job due to various reasons often leads to several crisis like financial crisis, starvation, social exclusion etc.

Hamid (1996) discusses that the enormous displacement of population goes along with harm and destruction of environment in the region. Further the displaced persons cause huge impact on the environment like, deforestation for fuelwood supply which also leads to land degradation, unsustainable extraction of ground water causing water pollution etc. and other environmental impacts of displacement are uncontrolled urban

and slum growth and population return practices is presumed to cause more environmental degradation of more vulnerable areas.

Fernandes (2006), highlights displaced faces joblessness, malnutrition and deterioration in their social status as stated by the author. The impacts are mostly seen in women and children. Mostly children are affected by displacement as access to schools are lowered which leads to increase in child labour among them. It has been termed as “new poverty” which results due to loss of land and forest that are their sustenance thus this slowly turns into joblessness, loss of income, absence of access to health, education into other forms of deprivation, increase in domestic violence as cited by the author.

Fernandes (2007), states that in India development induced displacement has existed since ancient times and it has intensified more with colonialism, post-independence plan period developments and further accelerated with liberalisation and globalisation. The process of land acquisition for development was made easier by legal changes since colonial age has been highlighted. The state has right to explain a community resolution and can even remove individuals from their property. It has been stated that most displacement was process induced which results through economic, technological, legal changes etc. As many are impoverished by displacement but most affected ones are from Dalits and tribal communities. India after the independence ensures not only to trail the colonial laws but has even toughened them to make acquisition informal as stated by the author. Large number of people is being continually displaced in the name of national development and investment in large schemes like constructions of dams, bridges, industries, power plants, mines etc.

Iyer (2007), has stated that displacement may not always be followed by resettlement does not necessarily imply the full rehabilitation of displaced person. The issues like displacement cannot be taken for granted and shared concerns and desire for equitable and just policies and solutions. Rehabilitation and resettlement are not an easy task, as people are not merely attached to land for their settlement and livelihood purpose rather; they are physically, culturally and emotionally attached to their lands and surroundings. Thus, when they are displaced by various developmental processes, they face different challenges while adapting to new surroundings.

Thus, from the above overview of article it is understood as per Hamid (1996), that the persons displaced also cause huge impacts on environment like deforestation, unsustainable extraction of grounded water, slum growth, food insecurity, soil erosion etc. Iyer (2007), argues Rehabilitation and Livelihood of displaced are not an easy task, as people are not merely attached to land for their settlement and livelihood purpose rather, they are physically, culturally and emotionally attached to their lands and surroundings. Thus, when they are displaced, they encounter various challenges. Fernandes (2007), argues that it is understood that many are impoverished by displacement but most vulnerable ones are from Dalits and Tribal communities mainly women and children. Further after independence India does not only follow the foreign rules but also has even strengthened them as stated to make acquisition easy. Miles (2019) states, the displacement of former rural people from their land uses, livelihood and natural resources has been almost compatible critique of plantation in that area. The following conclusion has been after the overview of above articles under the displacement theme. The State exhibits important jurisdiction over all biodiversity, natural resources and land. Thus, displacement leads to corporal exclusion from a geographic region and economic and social exclusion from a usual

of operative social systems. The displacement includes landlessness, homelessness, loss of common resources, loss of livelihood, income sources, malnutrition, increased domestic violence, deterioration in their social status, access of children to schools are lowered, increased in child labour etc. Further the development of mega-plantations has established plantations as presiding economic system of the rural area over South-East Asia, as plantation in this region provides a large number of livelihoods to the people.

1. 2.2 Livelihood

Livelihood situates the means of attaining necessities of life. Chamber (1995) defines, “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living’. Lack of opportunities to earn a living and deprivation often leads to poverty. As stated, poverty is not only driven by income, it has various other factors. The other elements of poverty are vulnerability, social inferiority, physical weakness, seasonality, powerlessness and humiliation among the poor which adds up to their poverty. To understand poverty in new ways, where wealth is replaced by well-being and the employment is replaced by livelihood. It is argued, to put ahead the prime concern of the poor accompanied by the involvement of plans, policies and their applications.

The term livelihood is often viewed as the ways or means of making a living. Shangpilang (2012), states, the definition of livelihood should include all the productive tasks such as finding or making shelter, transacting money and preparing food to be put on table or for exchange in the market place. Moreover, livelihood articulated as a holistic term that comprises the whole range of individuals and resources. Besides, Livelihood basically ties with the people, resources like money,

land agricultural crops, social relations and others. As stated, these resources are directly or indirectly related to the subjects and difficulties of access and shifting political, be it economic and socio-cultural situations. Thus, a thoughtful study of livelihood is essential as it elucidates about the imperative issues, the part and position of forest as a Common Property Resource in the commercial life expectancy of pastoral womenfolk as stated by the author. This study presents a connection among land resources and rural livelihoods along with growing roles of women in supporting households in deteriorating economies.

Riddell (2013) expressed, to exemplify the effect of conservation and other driving factors like commercial forestry that causes the various changes in the pursuits of the rural people's livelihood, strategies and capitals. The conservation is one of the several factors that affect people's livelihood. These changing forces often lead to change in socio-economic conditions altering the local economy, people's access to livelihoods and capital.

Strategies (2013) articulated the problems apart from decontamination that affect the rehabilitation process. Once people are evacuated from their home; they face huge difficulties in making their living. It is not easy for people to come back to their home towns and resettle. Community regeneration will only be possible with people resettling along with rejuvenation of school, hospitals, transportation system, industries, and other activities for livelihood rehabilitation. The initiation of regenerating planes essential opportunity to understand the identity of the region so that they can prepare plans to reconstruct disaster-hit areas and support the lives of the people affected.

Khatiwada et. al. (2017) articulated, to understand the domestic livelihood tactics which is crucial to reduce poverty in the less advanced regions. This study tries to gain profitable livelihood strategies. Education, land, ability training, schools, access to credit, presence of road, agriculture, marketplaces, are the vital element affecting the acquiring of high return household strategies. The findings of this article suggest that livelihood heterogeneousness to non-farm pursuit is usual among the larger number of rural households. Thus, the poverty reduction plans should stress on erection of human capital by schooling, farming, expertise training as well as building up financial capital by access to credits etc as per the author. The development projects should occur accompanied by rural credit policies that can inspire the poor to diversify the traditional livelihood occupation to more profitable business strategies. The author also highlights concluding that all these activities should go along with the investment in rural infrastructure including agriculture, roads and markets to improve the connectivity of the rural poor with the global markets.

It can be concluded from the overview of articles under livelihood that lack of opportunities to earn a living and deprivation often leads to poverty. As discussed above poverty is not only driven by income but it has various other factors like vulnerability, social inferiority, physical weakness, seasonality, social exclusion, powerlessness, humiliation etc. As well as wealth can be understood as wellbeing and employment by livelihood to better understand poverty (Chamber, 1995). Livelihood basically ties with the people, resources like money, land agricultural crops, social relations and more. As articulated these resources are directly or indirectly related to the subjects and difficulties of access and shifting political, be it economic and socio-cultural situations (Shangpilang, 2012). Thus, once people are evacuated or displaced from their home or job, they face huge difficulties in making their living.

1.2.3 Plantations

India

Bhowmik (1980) articulated, “The plantation has a distinct form of production organisation which gives rise to certain specific social relations”. He argues that most of the plantation definition has a tendency to manage these relationships which develop from plantation areas as a social system. The uniqueness of the plantation system from other industries lies in its social and production relations. The author has attempted to give an alternative sociological definition of the plantation system.

Dasgupta (1983), highlights the utmost informative case studies of the developments of plantation areas in the condition subjugated by a sustenance agricultural economy. This article tries to observe the system of land administration i.e., the condition of land before and after the beginning of the plantations. It also tries to look at the effect of this in the local agrarian economy and culture.

Bhowmik (2002), states that “the term ‘plantation’ at first referred to a group of settlers or a political unit formed by it under British colonialism, especially in North America and the West Indies according to a definition provided by the International Labour Organisation”. In India, the Plantation Labour Act of 1951, states that a plantation is defined as any property or land used or planned to be used for growing coffee, tea, cinchona, cardamom, rubber which involves five hectares or more and in which fifteen or more individuals are labouring or were hired before twelve months. Despite of the various problems faced by the labours like working conditions, in terms of wages their matters are rarely investigated.

The history of Indian tea is linked with British enterprise. In the development of Indian Economy, the tea industry holds an eminent position. Tea is said to be the

oldest organised sector in India. India is considered to be both the producer and consumer of tea. India produces 790 million kg annually making it the major manufacturer of tea in the world (Mishra et. al., 2014). Other tea growing nations are Bangladesh, Kenya and Sri Lanka.

The tea trade in India is said to be going over a crisis subsequently in the early 1990s. Due to various reasons like fall in tea auction prices, others crisis including the decline in export, abandonment, closure of tea gardens, has led to the growing labour struggles at times causing fierce protests and conflicts. This has led to reduction of wages and declining living standards, worsening human security and decrease constitutional benefits of workers, in the tea gardens. At present, the reports of closures are also continuously seen in around the tea gardens of Kerala and West Bengal. Thus, crisis in tea sector has led to labour conflict and fears concerning the scenarios of the area as well as the labours reliant on the sector (ibid.).

West Bengal

Xaxa (1985) articulated, that agrarian plantation developed by foreign investment during nineteenth century has caused structural underdevelopment in the region, presently known as North Bengal. The development of plantation economy which provides large number of employments has also led to the underdevelopment in the region compared to the other parts of Bengal. It is the new method of production in the form of capitalist plantation agriculture. This has further led to regional disparity as a result of dualist social structure which has led to the development of plantation economy and underdevelopment of sector confined to isolation and traditional ways.

Talwar et. al. (2005), has discussed that the tea gardens in Dooars region had gone through a crisis during the period of 2002 to 2004 which led to the closure of many tea gardens. Thus, various reports of deaths due to various reasons like starvation were seen. Though some plantations were reopened the conditions of the plantations and labourers were not satisfactory. In this study the matter of enormous Provident Fund dues lying with the companies of the locked tea gardens has also been highlighted. This study mainly deals with the 22 gardens in the Jalpaiguri district of West Bengal that was reported as closed by the District Magistrate, in Oct 2003.

Asopa (2007), highlights that the period of nineties was somewhat miserable for the tea industry in India. Firstly, due to the dissolving of the erstwhile USSR, which was a large market for Indian teas. Further when the tea industry was reviving during mid-nineties, the Russians were looking for cheaper tea entirely ignoring the quality. Moreover, the tea industry was cladding trouble both in the north and south India. Some industries were even closed and were sold to the traders who were unaware of the problems and plantations business. They enjoyed large profits during Kenyan decline in industry but the traders directly deserted the plantations when Kenyan was rebound in the global markets. It has also been discussed that in many places the labourers took over the production and harvested green leaves to the bought leaf tea factories. Primarily in the northwest part of the country most of the tea gardens are cladding closure due to reasons like squat production, excessive price of manufacture, reducing prices etc. In these gardens the workers' wages are unpaid and they also hold other dues under the Plantation Labour Act for many months. In the large tea producing areas of West Bengal 14 tea gardens were closed by then due to which 17,000 workers were unemployed. The stated government acknowledged deaths of 571 labourers over the 15 months. The government introduced various proposals to

intensify the production, inclusive of the replantation of tea bushes in the plains and renewal of tea gardens in the hills but not much has become better.

Ghosh (2014) highlighted that the Plantation Industry in West Bengal has been suffering from extensive sickness and closure since the economic globalisation. This article states that the workers and their families belonging to marginalised tribal community are most affected and vulnerable owing to the closure of the tea plantations. Due to this lots of exploitation, forced migration, crime among children and women are taking place in the bait of jobs. This article studies closed and 12 sick tea gardens in the district of Jalpaiguri. It tries to establish close link between forced migration, trafficking of women and children and vulnerabilities of closed tea garden.

Roy et. al. (2018), has discussed about the steady tendency of the closure of tea gardens since the nineteenth century highlighting the closure of gardens in Dooars region of West Bengal. In this article they have argued that closure of the tea gardens has made the life of the labourers vulnerable. It has not only impacted the livelihood but also schooling, wellbeing and so on as the Dooars region has been unsuccessful to instrument the requirements of Plantation Labour Act, 1951. Further, many labours in the closed tea gardens have died due to reason like joblessness, hunger, malnutrition etc.

Paul (2018), has similarly highlighted the closed tea gardens and causes of its closure in the Dooars Region. The plantation management are not able to ease their responsibility which has affected the livelihood, health, and education etc of the labourers of the Closed Tea Gardens. From the advent of Globalisation, to fit in the competition the cost minimization was done in the labour cost which resulted in the

uneven payment of bonus, gratuity, wages and so on. The labour rate establishes the maximum portion amid all the mechanisms of the cost of manufacture of tea.

As per the 4th Annual Report (2017-2018), the total number of gardens closed in India was twelve (12) and the total number of labourers of the tea gardens that were closed in overall India it was 7406 permanent and 1684 temporary workers. In West Bengal, nine (9) tea gardens were closed out of total twelve closed gardens in India and there was total 6591 permanent and 1648 temporary workers in these closed gardens altogether. And three (3) tea gardens were closed in Kerala which had 815 permanent workers.

Xaxa (2019) has discussed the unacceptable conditions of tea estate, being the major plantation industry in India can only change by altering the engraved colonial structure and character of the plantation and restructuring the whole system. Though the tea industry is a part of organised sector the workers condition remains most left out and vulnerable in the society till today. Though in post-Independence problems of the workers were looked into but the same colonial structure still exists and engraved in the tea industry of India. He has also highlighted in the article that the state releases no accountability to plantation workers in terms of education, health, poverty mitigation, employment etc compared to the welfare approaches provided to the other citizens who are outside the domain of the plantation Industry. The wages of the plantation workers are low and even lower than the minimum wages paid to MGNREGA. The author argues, the restructuring of low wage structure, wage in kind, failure of unions, worsening of welfare facilities, poor development status, Developmental state's absence etc need a fundamental restructuring and alterations of plantation system in India.

Darjeeling

As stated by O'Malley (1907) the experimental growth of tea started in 1840, when Dr. Campbell was moved from Kathmandu to Darjeeling. Moreover, at Lebong the red coloured clay in the hill was considered to be more suitable for tea cultivation compared to the black loam of Darjeeling.

The author (Lama, 2009) states that the story and growth of Darjeeling and its people is ultimately connected with the story of the tea industry in India. In ten years there 39 tea gardens were started in Darjeeling. By 1870, the number of gardens enlarged to 56 which were further increased to 79 gardens engaging more than half of the population of Darjeeling out of which most of them were Nepalese. The construction of Darjeeling Himalayan Railways intensified the growth and expansion of tea industry in the region as the transportation of packaged tea from plantation areas to plains was reduced.

As stated by Sharma et. al. (2012), Darjeeling tea industry focused more on quality rather than quantity. Moreover, the climatic factors and other geographical favoured the growth of tea industry in the region. Today, Darjeeling tea industry is facing lots of problems due to various causes like soil erosion, ageing bushes, deforestation, increasing population density, political condition etc. Hence, in Darjeeling Tea Industry the number of labourer's growth to 48,116 in 1990 with 200,065 hectares of land under tea cultivation and having the labour productivity to 301kg. Per year of made tea is said to be lowest in West Bengal.

Rai (2019), states that tea plantations embraces dwelling of self-importance in Darjeeling hills. It has been highlighted that the growth of the Darjeeling is stimulated

by the tea industry but presently the tea industry faces growing crisis and inactivity. The existing tea estates faces regular labour struggles and even some have been locked out for substantial period of time. It has also been discussed as many individuals are only reliant on tea gardens for their living after the lockdown of the gardens many workers even committed suicide which presents the unpleasant situation of thee workers in the Darjeeling tea industry. The author also highlights the need of the structural readjusment in the tea industry to protect the right of the tea garden workers and equpp them with works and new liveihood strategies.

Thus, from the above overview of articles it is understood that the plantation industry in West Bengal has been also suffering from extensive sickness and closure (Ghosh, 2004). Many tea industries are even closed due to reasons like production, excessive price of manufacture, reducing prices, unpaid wages of the workers etc. (Asopa, 2007). Like before even after independence in 1947 the rights of the tea garden workers were unheard and denied. They are granted with housing but they have no legal rights over the land. Further labourers holds various grievances against due to various issues like ill sanitation, improper water supply, inadequate medical supply and the workers used to run away from the gardens. Till now the tea industry in Darjeeling suffers from different problems (Das et. al,2012). Overtime various forms of protest in Plantation Areas for example in Assam aroused against their various grievances. Though the tea industry is a part of organised sector the workers condition remains most left out and vulnerable in the society till today (Xaxa, 2019). Many people in the region are solely dependent on tea gardens for their livelihood. Thus, tea industry encounters growing crisis and inactivity affecting the livelihoods of the people. Moreover the existing tea garden meets regular labour struggles and even have been locked out for significant period of time (Rai, 2019).

1. 3 Therotical Framework and Approaches:

Sen's Capability Approach:

Sen, highlights that the famine in the society is not only due to lack or shortage of food but it is also due to the unequal disseminations of rights and capabilities. Thus, if poverty and its causes is to be understood we should look into the dispersal of right and capabilities. As the author has stated poverty is not only income centred but also not being able to have the opportunity to enjoy basic amenities of life. However, Sen constructing the concept of Capability Deprivation defines poverty not only in relations of little income but poverty as an inability to get the indispensable commodities, and to alter the existing condition. Thus, the investment of human capital like on health, education, skill improves the capacity of individual and thereby enhances the people choices and capabilities. Since plantations are an old organised industry and employ large volume of workforce, therefore investing on their health education, better wage facilities would enhance the capabilities of workforce. The trade unions and bargaining systems are also likely to improve by promoting grassroot level organisations.

Chamber's Livelihoods Approach:

As argued by Chamber(1995), that income is important but the other characteristics of well-being, quality of life like health, right to educate, self-esteem, security, impartiality, opportunities, admittance to goods and services, family, societal life, creativity, celebrations, etc are also necessary. The ownership and access to the resources like Land, forest, water bodies, village commons, and sharing for public good provides better sustainability to the communities living in a locality or region. The closed tea estates, the management and company is absent for years in managing

the continuity of production system and abandoned their workforce depriving regular jobs, reduced their bargaining strength, loss of regular income and livelihood opportunities. Since the land including other resources like water bodies, the forest, village commons are owned and leased out to the management company by the states and the labouring communities hardly have any formal access to these resources. This situation further aggravated in closed tea gardens as the labouring community finds absence of management to look after them and are not allowed to access resources formally. Therefore, alternative livelihood options to the labouring community within the closed gardens support their sustenance and decent living.

David Harvey's Accumulation by Dispossession:

The approach of Harvey(2003), is an stimulation from Marx's analysis of primordial accumulation- "the historical process of divorcing the producer from the means of production". It states that there is centralisation of wealth and power in the hands of a limited people by dispossessing the mass of their wealth or land. The idea of neo-liberal state and its policies are guided by the forces of privatisation, financialisation, management and manipulation of crisis and state redistribution. They not only loose their land but they also loose their livelihood. In this context, the labourers in the closed tea gardens are likely to be dispossessed of their formal employment and loss of livelihoods, living rights on habitat and housing, inability of access to health and educational facilities and CPRs etc.

Virginious Xaxa's Restructuring of Colonial plantaions

The Professor Xaxa(1985) argues that colonial modes of production system in tea economy, labouring conditions and management pattern seems to be unsuccessful to

distribute better health, education and livelihood opportunity in a win win situation between management and plantation labour. After independence the Tea Act 1953, Plantation Labour Act 1951 etc. enacted through parliament of India to serve the interest of tea economy in general and plantation labour in particular. Despite all these legal protections there is a series of crisis occurred in past in tea economy and at times good number of tea gardens were closed down in main tea producing states i.e. Tripura, West Bengal, Assam, Tamil Nadu and Kerala. Therefore it is understood that the existing model of tea economy have failed to protect either the interest of the company or the plantation labour. It is a prime concern that organised tea industry provides employment and livelihoods of 2.50 million of people in India (Hannan, 2017). Hence the restructuring approach proposed by Xaxa sounds evident for deeper understanding of tea economy in general and existing closed tea gardens in particular.

1. 4 Statement of the Problem

The colonial plantation which was established during nineteenth century in different parts of the world including India provided large number of employments but it has also led to underdevelopment in the plantation region (Xaxa, 1985). Lack of opportunities to earn a living and deprivation often leads to poverty. Poverty is not only driven by income but it has various other factors like vulnerability, social inferiority, landlessness, loss of common resources, loss of livelihood, income sources, displacement, physical weakness, seasonality, social exclusion, powerlessness, humiliation etc. Livelihood basically deals with the people, their resources such as land, money, agricultural crops, social relationships money, social relationships and more. Thus, they are very much related to the subjects and difficulties access and shifting political, economic and socio-cultural situations

(Shangpilang, 2012). Moreover, like before even after independence in 1947 the rights of the tea garden workers were unheard and denied. They are granted with housing but they have no legal rights over the land (Lama, 2009). However, the tea trade in India is said to be going under a severe crisis since 1990's. The worst bearers are women and children in the plantation's areas. This crisis has led to curbing of wages, decreasing constitutional benefits, falling living standards, deteriorating human safety, lack of drinking water, health and other facilities, living conditions, starvation and even deaths are caused due to closure and abandoning of tea estate (Mishra, 2012). Many tea industries are even closed due to reasons like production, excessive price of manufacture, reducing prices, unpaid wages of the workers etc. (Asopa, 2007). Similarly, in West Bengal the plantation industry has also been suffering from extensive sickness and closure (Ghosh, 2004). Many tea industry in Darjeeling also suffers from different problems as people in the region are solely dependent on tea gardens for their livelihood. Thus, tea industry encounters growing crisis and inactivity affecting the livelihoods of the people. Moreover the existing tea garden meets regular labour struggles and even have been locked out for significant period of time (Rai, 2019). Thus, the present study examines the effect of the closure of tea gardens on the livelihood displacements of labourers in closed tea gardens of Darjeeling hills, their educational opportunities, health care facilities and available alternative livelihoods.

1. 5 Objectives and Research Question of the Study

Objectives of the Study

1. To study the Geo-Environmental settings of the three closed tea gardens of Darjeeling Hills.
2. To examine the existing working conditions of labourers in the closed tea gardens and asses the nature of their displacement from regular employment¹.
3. To investigate the pattern of alternative livelihoods and identify the survival strategies adopted by the labourers in the closed tea gardens.

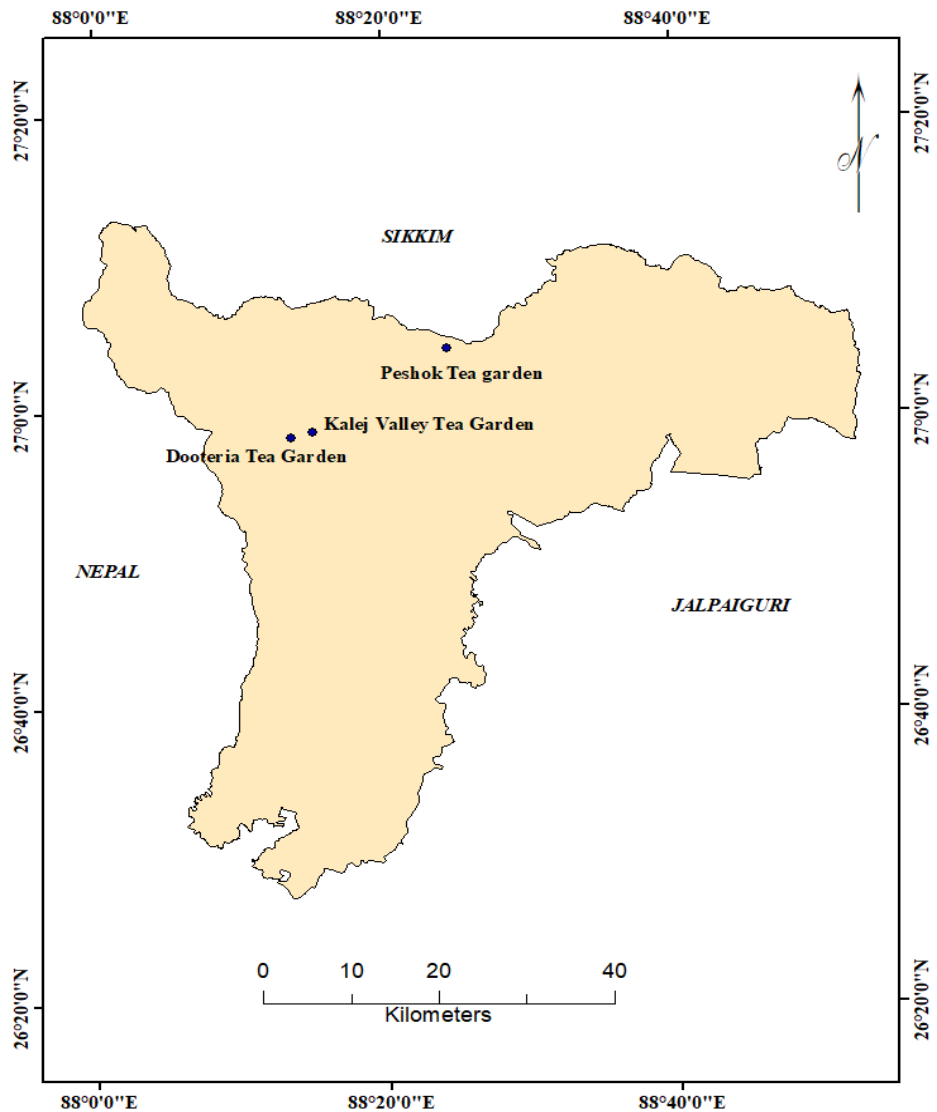
Research Questions

- a) What is the nature of displacement of employment in closed tea gardens and how agencies of state respond to the crisis?
- b) How the labourers in closed tea gardens are rehabilitated and provided alternatives?

1. 6 Study Area: This study focuses on three closed tea gardens of Darjeeling Hills i.e., *Peshok Tea Garden*, *Kallej Valley Tea Garden* and *Dooteria Tea garden* situated in Sukhia Pokhari Development Block and Rangli-Rangolit Development Block.

¹The tea gardens are considered to be organised sector and provide regular employment to the labourers throughout the year. After closure of the tea gardens under the present study labourers derive their livelihood from various means and sources using local avenues and resources. The Government of West Bengal, Tea Board of India and other agencies of the state are yet to decide their formal position and declare their policies of reopening of the Closed Tea Gardens. The labourers are in a state of transition and neither they have formal regular employment nor alternative plan is announced so far for them. Hence, they are dependent on alternative sources by their own efforts and do not enjoy the regular wage and benefits as existed before the closure of the garden.

Figure- 1.1: Location of Closed Tea Gardens



Boundary Source: District Census Handbook, Darjeeling, Census 2011

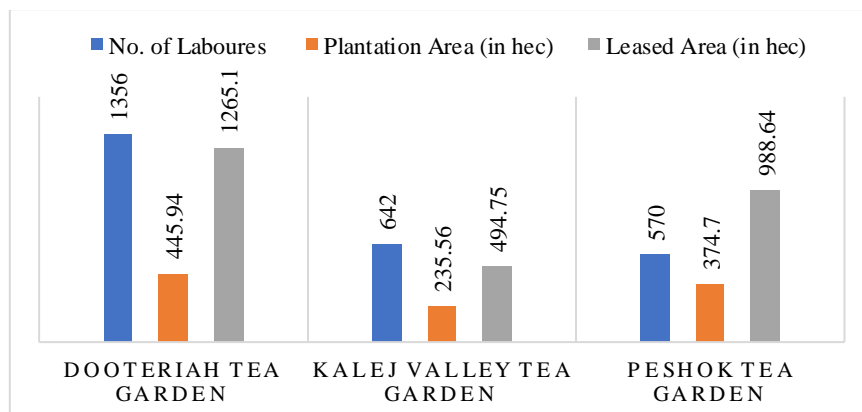
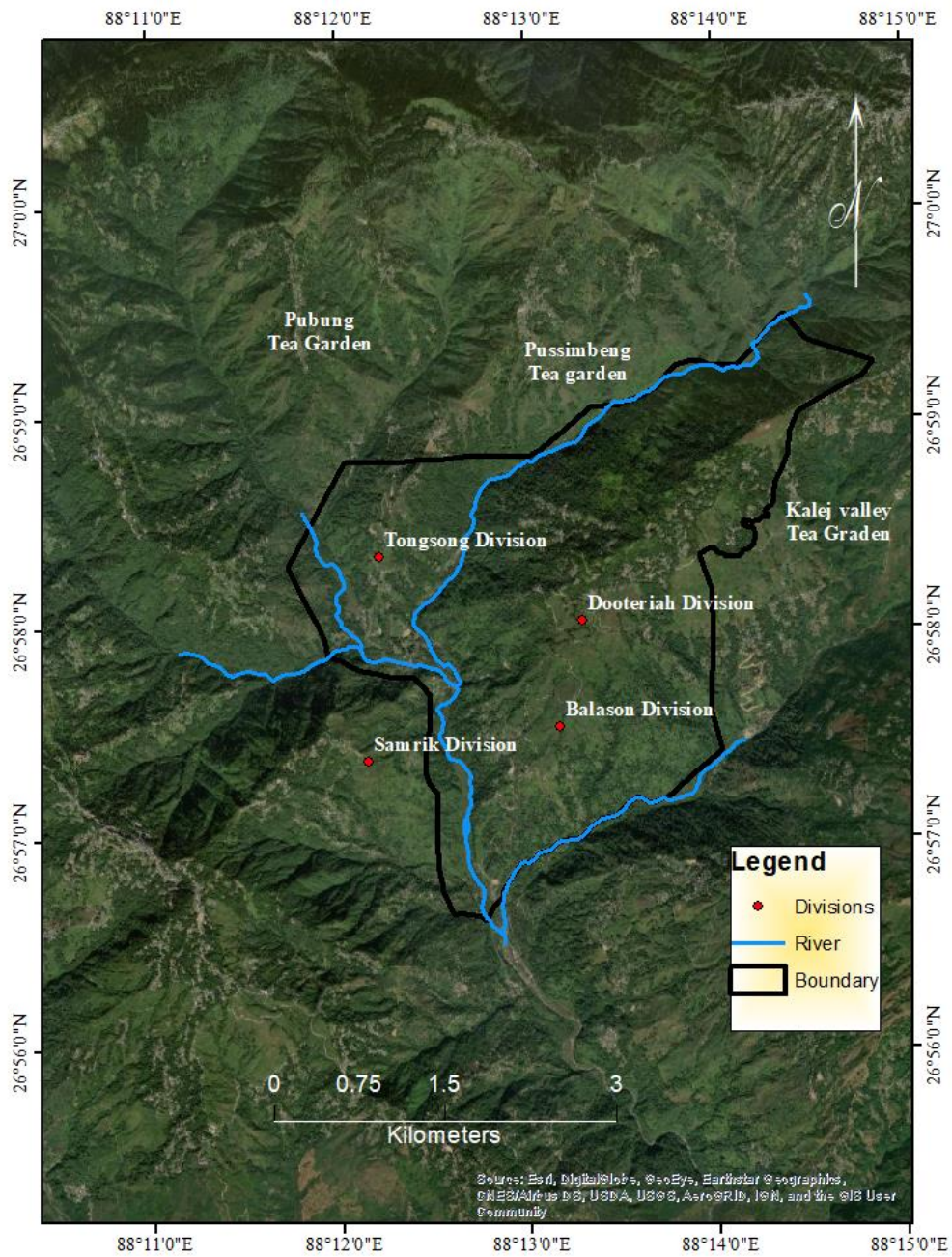
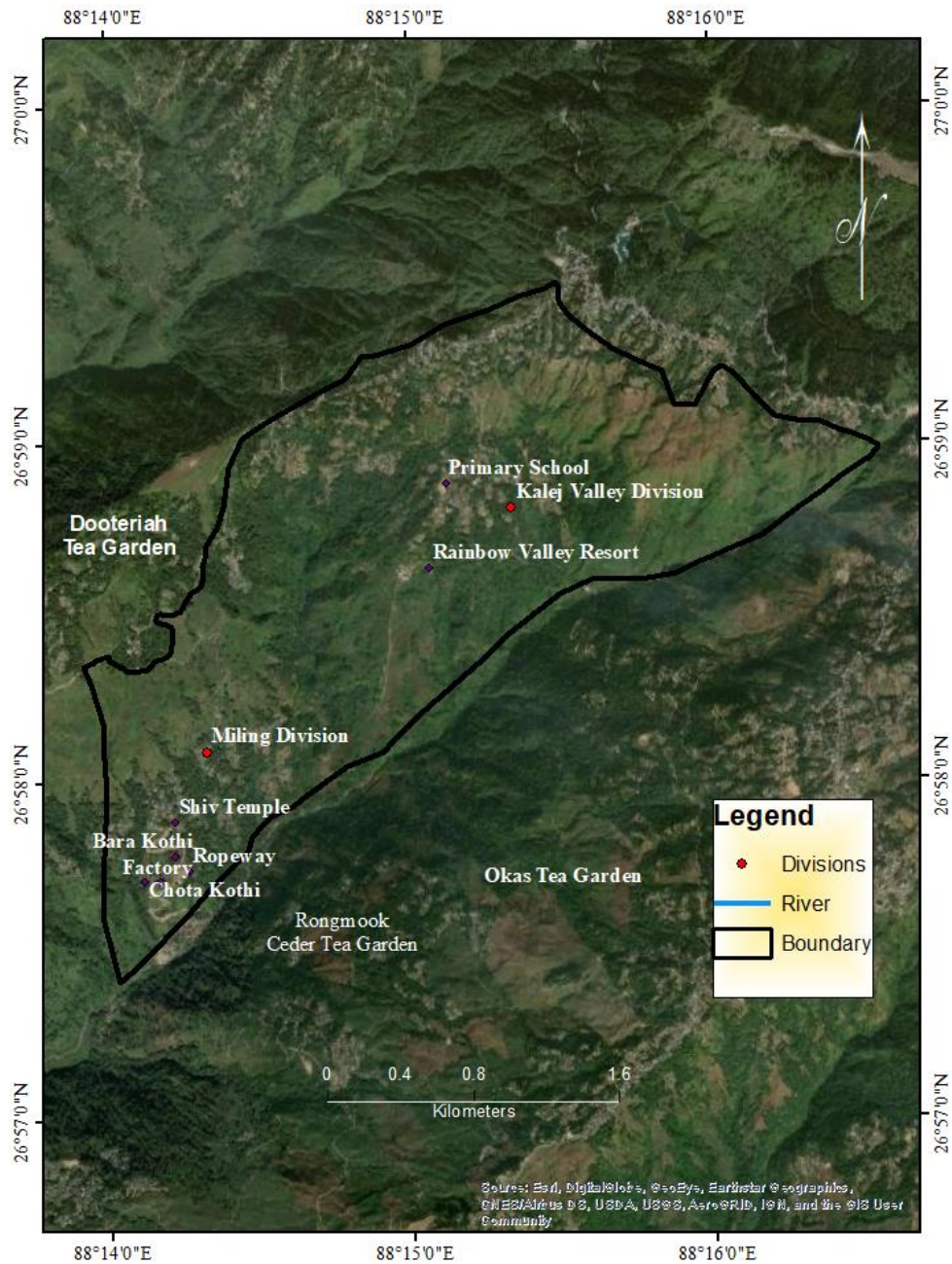


Figure- 1.2: Location of Dooteriah Tea Garden



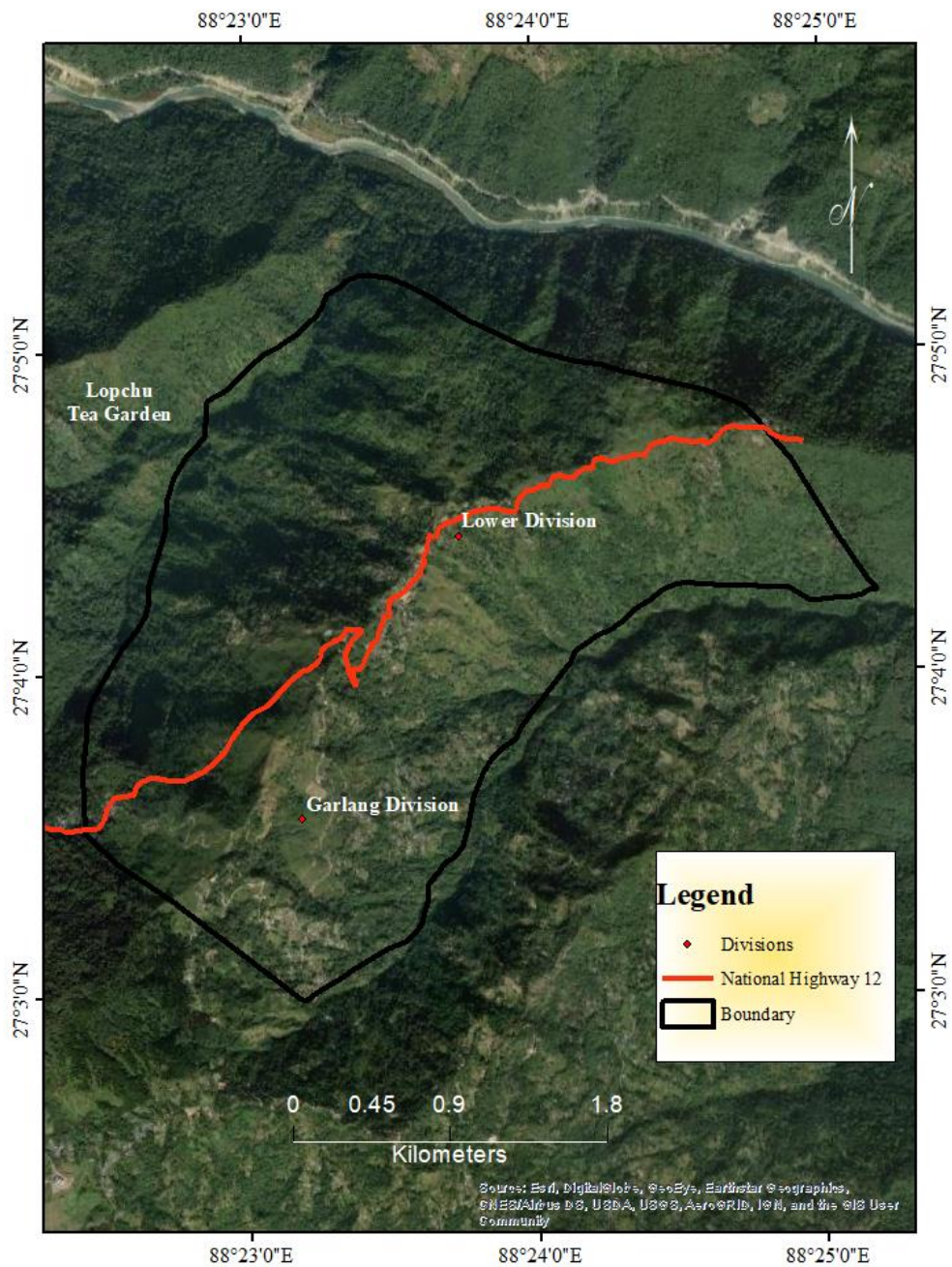
Source: Boundary adapted District Census Handbook, Darjeeling, Census of India 2011 and Mauja Map collected from Land Reform/Touzi Department (Based on Survey date-1926), Garden Sketch Map, Google Earth Imageries (14 Nov, 2019) and ESRI Arc Imageries (14 Nov, 2019)

Figure- 1.3: Location of Kalej Valley Tea Garden



Source: Boundary adapted District Census Handbook, Darjeeling, Census of India 2011 and Mauja Map collected from Land Reform/Touzi Department (Based on Survey date-1926), Garden Sketch Map, Google Earth Imageries (14 Nov, 2019) and ESRI Arc Imageries (14 Nov, 2019)

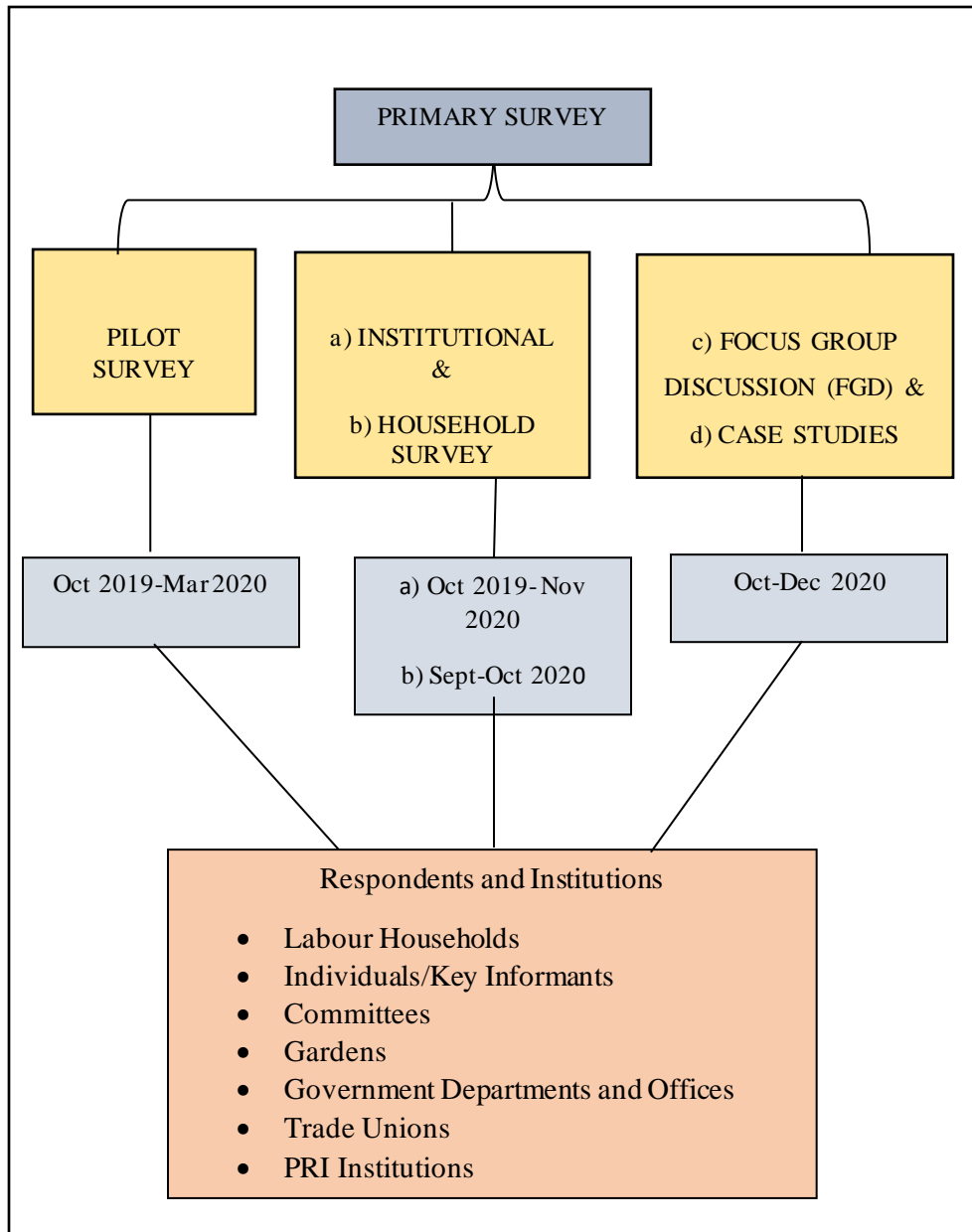
Figure- 1.4: Location of Peshok Tea Garden



Source: Boundary adapted District Census Handbook, Darjeeling, Census of India 2011 and Mauja Map collected from Land Reform/Touzi Department (Based on Survey date-1926), Garden Sketch Map, Google Earth Imageries (14 Nov, 2019) and ESRI Arc Imageries (14 Nov, 2019)

The Field Survey includes three components: Pilot Survey, Institutional and Household Survey and Focus group Discussions.

Figure- 1.5: Schematic diagram represents the steps followed during the present research



I. 7 Sources of Data, Methods and Techniques of Enquiry

1.7.1 Secondary sources: Two types of secondary data are used to fulfil the objectives of the study: a) Spatial: Arc G.I.S Imageries, Google Earth Imageries, SRTM DEM etc. b) Numerical: It includes published and unpublished sources from various government agencies namely Tea Board of India, Census of India, Ministry of Commerce and Industry, Government of India, Labour Department of Government of West Bengal etc. The major sources are listed below:

Table- 1.1: List of Secondary Sources

Name of Documents	Types of Data used	Sources	
District Census Handbook, Darjeeling	Area, Population, No of Household, Main worker, Total Worker, Non-Worker, Literacy, SC and ST population etc.	Census of India, 2001	
District Census Handbook, Darjeeling		Census of India, 2011	
Tea Statistics 2001-02	No. of Tea Gardens, No. of Labourers, Area Under Tea, Production, Yield, District wise Area and Production of Tea, State-wise Production and Area Export, Production, Internal consumption, Wage Structure etc.	Tea Board of India, Kolkata	
Tea Statistics 2002-03			
Tea Statistics 2003-04			
Tea Statistics 2005-06			
Tea Statistics 2019			
Tea Digest 2004			Auction (Domestic), Export Prices, Area Production Yield.
Tea Digest 2008 and 2009			
Annual Report 2004-05			Production and Export, Status of Closed Tea Gardens, No. of Closed Tea Gardens, Labourers etc.
Annual Report 2015-16			
Annual Report 2017-18			
Annual Reports 2018-19			
Area, Production and Labour Statistics 2019	Production, Area, No. of Staffs and Labourers, wages, Name of Abandoned/ Closed Industrial Units etc.	Darjeeling Tea Association, Darjeeling	
Crop and Rainfall 2000-19			
Wage of Daily Rated Workers (1974-2017)			
Report on the status of Closed Tea Gardens in Darjeeling Sardar Sub-division	Area, No. of Labourers, Date of Abandonment/closure etc.	Assistant Labour Commissioner, Darjeeling,	

1.7.2 Primary Sources and Research Design

Phase- I

Pilot Survey:

To overcome the gaps of understanding of theoretical perspectives and field information, a pilot survey of institutions and in-depth interviews were conducted in frequent field visits during the months of Oct 2019-March 2020 and Oct 2020-Dec 2020. The officials of the District Magistrate and District Touzi office (Land Reform), Labour Department, Darjeeling Tea Association, Panchayat Office, Schools, Trade Union Office etc. were interacted and unpublished data were gathered. The land use data and distribution of resources, sansad (village) wise number of labourers, job provided under MGNREGA during closure of tea gardens, list of managers during British and post-independence period, unpublished government reports of the closed tea gardens etc. have been collected, compiled and analysed.

Phase-II: Institutional and Household Survey

a) Institutional Survey:

The primary data is collected through in-depth interviews and interactions with officials of garden management, Gram Panchayat officials, Labor Department Government of West Bengal, Trade Unions of different political Associations, Tea Board Regional office and former employs and officials of closed tea gardens, teachers and headmasters of the school, ration dealers etc. The lived-in experience and observation of the researcher is an additional support to authenticate and substantiate the current research.

Table- 1.2: List of Interview/Interaction of Key Informants

Date of Interview	Name and Designation	Place of Interview/Interaction	Rational behind the selection of individuals
12/10/2019	Mr. Sumal Moktan (Manager of Tea Gardens)	Rangbull, Darjeeling	Manager of all the three closed gardens and he has widespread information concerning about all the three gardens.
6/11/2019	Mr. Prabhat Tamang (Clerk of Tea garden)	Milling, Lower Kallej Valley.	He was working as a clerk in the tea garden of Kallej Valley and he has immense knowledge about the region and the tea garden so for the local information the interview was conducted.
15/12/2019	Mrs. Prakriti Tamang (Health Centre worker)	Upper Kallej Valley	She is one of the health centre workers in the region and provided health related information.
16/03/2020	Mr. Rajen Chhetri (Office-staff)	Labour Commissioner Office, Darjeeling	He is the office-staff of Labour commissioner office, Darjeeling.
13/01/2020	Mr. Tshering Sherpa (Special Revenue Officer)	Touzi office, Darjeeling	He is the Special Revenue Officer and Officer in charge in the Touzi department (Land Reform office), thus an interview was conducted to know the land ownership pattern in the tea estates of Darjeeling.
15/01/2020	Mrs. Nima Tamang (Field Worker)	Dooteriah	She is the local resident of Dooteria tea garden and she has been the field worker in the garden, hence to

			understand the perspective of worker and to gather field information the interview was conducted.
12/03/2020	Ashis Tamang (Clerk)	Tungtung	He was the factory babu (clerk) and he has enormous valuable information about the Dooteriah Tea Garden.
12/03/2020	Harkaman Tamang (Office Staff)	Peshok	He was the office staff of the Peshok tea garden and presently he is the member of the JAC, he has vast knowledge about the Peshok Tea Garden history and the present condition.
16/03/2020	Mr. Dip Narayan Bhandari (Assistant Labour Commissioner, Darjeeling)	Labour Commissioner Office, Darjeeling	As the Assistant Labour Commissioner of Darjeeling, he has extensive information about the tea gardens and the labours hence the interview was conducted.
25/10/2020	Sunil Thapa (Office staff)	Miling (Bich Goan)	He was the office staff of the Kalej Valley Tea Garden and he know the necessary details about the garden.
4/11/2020	Dipen Gurung (Ration Dealer)	Dooteriah	He is the ration dealer of the Dooteriah Tea Garden and has information about the ration system, card holders etc.
9/11/2020	Mr. Bhakta Tamang (Head Master)	Dooteriah Primary School	He is the resident of Dooteriah and he has immense knowledge about the impact and condition of the

			education after the closure of the garden.
10/11/2020	Binod Gurung (Local Contractor)	Green Valley Resort	He is the local contractor of the Kalej Valley Tea Garden and provides alternative sources of livelihoods in the region.
23/11/2020	Mr. Sandeep Mukherjee (Secretary)	Darjeeling Tea Association	Since he is secretary of the DTA, and he has extensive idea and experience about the tea industry in Darjeeling.
24/11/2020	Bharat Thakuri (General Secretary)	Trade Union Office	He is the member of the DTDPLU, and he has lots of information about the roles of trade unions, institution and the status of Darjeeling Tea industry.
29/11/2020	Jyoti Kumar Rai (Lawyer and Assistant General Secretary)	Telephone	He is the member of the Trade Union (DTDPU) and he has immense knowledge and information about the land rights and issues of the Darjeeling tea industry.

b) Household Survey (Telephonic)

The primary survey at household level was carried out in all the three gardens where the labourers were the respondents. Since, the pandemic and the ICMR health guidelines was in force it was difficult to carry out household survey physically. In that light a telephonic survey was conducted. A snowball sampling technique² was applied to identify the targeted samples i.e., labourers and their phone numbers for the current research. A total of 129 labourers out of total labourers' i. e., 2568 is considered to fulfil the objectives of the current study. Therefore, the total no of workers in *Dooteriah tea garden* is 1356, and the sample size is 68, *Kalej Valley* out of 624, the sample size 32 are chosen and in *Peshok tea garden* out of 570 and the sample size is 29. A schedule (Annexure-I) was prepared consisting of labouring issues and working conditions e.g., health care, educational facilities, availability of ration provided by the garden management or PDS of the Government of West Bengal, Government Compensation, alternative livelihoods and Job card under MGNREGA, seasonal outmigration for work, access to housing and land, monthly income and consumption expenditure before and after the closure of the tea garden, availability and access of CPRs in the villages, etc. was enquired and documented through telephonic survey. The schedule was finalised and tested during pilot survey, March 2020. The final survey was executed during the months September and October 2020.

²Naderifar et. al. (2017), Snowball Sampling is useful when samples with the broad attribute are not simply reachable. Thus, Snowball sampling is a resolute method of data collection in qualitative research. It can be efficiently used to examine helpless groups or individuals and disposed populations. As stated by Polit-O'Hara and Beck, this method is also known as "Chain method", is systematic and is affective to access people who would or else very hard to find.

c) Focused Group Discussions (FGDs): In the Closed Tea Gardens three FGDs was conducted consisting of five to seven members during the month of October 2020. The hamlets were selected based on local level information gathered through interaction with key informants like managers, trade union leaders, activists etc.

Table- 1.3.: Focused Group Discussions in the Closed Tea Gardens

FGD Location & Date	Site/Hamlet of FGDs & No. of Participants	Rational for selection	Broad Themes of FGDs
FGD-1 Dooteriah Tea Garden 24.10.2020	Tungsung (Six Participants)	Social Activists and Civil Society Organisations are situated in these hamlets.	<ul style="list-style-type: none"> • Role of Institutions • Housing and Habitats • Access to Land Resources and CPRs • Social Security measures, alternative livelihoods and Government compensation • Current situation and future perspectives and suggestions.
FGD-2 Kalej Valley Tea Garden 25.10.2020	Milling (Five Participants)		
FGD-3 Peshok Tea Garden 22.10.2020	Garlang (Seven Participants)		

d) Case Studies: A total number of 12 case studies of labourers, health workers, teachers, contractor etc. relating to death case, housing, ration, education etc. have been conducted during Oct-Dec 2020 and analysed in various chapters.

1.7.3 Methods/Technique of Enquiry and Analysis

- a) The Geo- Environmental settings of the closed tea gardens like plantation area, drainage, forest, settlement, locations of factory, health centres, primary schools etc. is attempted to understand the space relationship of displaced labourers and their existing livelihood patterns. The application of spatial techniques, image data analysis is done through usage of ArcMap Imagery having resolution of 0.5 metre in ArcGIS 10.2 Software. The Arc G.I.S imageries (14 Nov 2019) and Google Earth Platform (14 Nov 2019) is used for the study. Demarcation of boundary was done from District Census Handbook, Darjeeling, Census of India 2011. Elevation, slope and aspect³ of the study area was derived by using Spatial Analyst Tool and it was obtained from SRTM DEM. Different LULC classes were digitized manually using Arc G.I.S Imageries and Google Earth Platform, spatial reference used for mapping was UTM 45°N Projection and WGS 1984 Datum.
- b) Kundu (2010) in his article on “Spatial and Social Inequalities in Human Development: India in the Global Context” used various statistical techniques like mean, standard deviation, Coefficient of Variations (CV), Coefficient of correlation(r) etc. to show cross-country and inter-state variations of indicators like, health, education, income etc. The similar methods are attempted considering each closed tea gardens as unit of observation and analysis. To show the garden-wise variations of indicators by using the Statistical techniques like mean, standard deviation, Coefficient of Variations (CV), coefficient of Correlation (Pearson’s), F- values etc.

³Aspect is the direction of the slope, it can have a strong effect on the temperature, local climate, soil nutrient, vegetation characteristics etc. (Yang et. al., 2020)

Formulas:

$$\text{Mean: } x = \sum \frac{xi}{n}$$

$$\text{S.D (Standard Deviation)} = \frac{\sqrt{\sum(xi-x)^2}}{n}$$

$$\text{C.V (Coefficient of Variation)} = \left(\frac{SD}{mean}\right) \times 100$$

$$\text{Coefficient of correlation}(r) = \frac{\sum (xi-x)(yi-y)}{\sqrt{\sum(xi-x)^2 \sum(yi-y)^2}}$$

The results of statistical analysis are represented with suitable cartographic techniques, maps, frequency distribution and descriptive statistics like tabulating the data, showing trends and patterns by graph, charts etc.

1.8 Organisation of the Study

Chapters	Description
Chapter-1	Introduction, Overview of Literature, Study Area, Statement of the Problem, Objectives, Research Questions, Data Sources and Methodology, Organisation of the Study, Limitation of the study
Chapter-2	Tea Economy in India with reference to Darjeeling
Chapter-3	Geo-Environmental Settings of the Closed Tea Gardens
Chapter-4	Employment and Livelihoods in Closed Tea Gardens
Chapter-5	Summary and Findings

1.9 Limitation of the Study:

Some of the data were inaccessible in the Government institution as they are not published so far or they are not permitted for the public use. Thus, the researcher could not incorporate the some of the data. The Garden Level data were not available as most of the information and facts has been destroyed as the whole factory and office of Dooteriah tea Garden was burnt down in Feb, 2020. Likewise, all the data and figures of the Kalej Valley Tea Garden factory and office have also been ruined after the closure of the garden.

Difficulties were also faced in getting the telephonic numbers of the respondents as most of them do not use mobile phones. The labourers usually have busy schedule during day time so the survey had to be conducted only during the evening time.

The Land Use and Land cover map of the Closed Tea Gardens has been prepared by the researcher using Arc G.I.S 10.2 Software, to understand their Geo-Environmental setting. Similarly, the Land Use and Land Cover Map of different years can also be prepared to see the variation and the comparative analysis can also be done.

Chapter- 2

Tea Economy in India with reference to Darjeeling

2.1 Tea Industry in India

The tea plantation in India started in 1839 with the establishment of the company at Assam in 1839. Apparently, the tea plant growing wild in Assam was discovered earlier by Major Robert Bruce in 1821 and in 1824 by Mr. Scott (Malley, 1907). Further the tea industry started flourishing during the colonial period. Currently, the main tea producing regions in India are Assam, Tripura, West Bengal, Tamil Nadu and Kerala. As stated, the history of Indian tea is linked with the British enterprise and in the development of Indian Economy, the tea industry holds an eminent position. Besides, tea is said to be the oldest organised sector of the country. Around 790 million kgs of tea was produced annually making it the largest producer of tea in the world, as cited by the author (Sharma et. al, 2012). Other tea producing countries are Bangladesh, Sri Lanka, China, Kenya and others. The tea sector provides large number of exports, income and employment to the people of the country. India is considered to be both the producer and consumer of the tea due to its large domestic demand.

2.1.1. Area, Yield, Production and number of tea gardens in India

The table- 2.1, presents the available data of the number, area, production and yield of tea gardens in India since 1994-2018. The total area of tea plantation India was 425966 hectares during 1994 and it has gradually increased to 504366 hectares in 2000 which has remained constant till 2001 and after which slight increase can be seen till 2004.

The total area as per 2018 is 636557 hectares. Likewise, the production has also increased progressively from 1994 to 2001 i.e., 752895 thousand kgs to 853923 thousand kgs respectively after which there is sudden decrease in production in the year 2002 as per the calculated growth rate it was -1.81 percent. It is also noticed that there is decrease in the yield from 1999-2004 as compared to previous years if we refer the calculated annual growth rate. Besides, the period from 2000-2004 is the crisis years of the tea industry in India as number of tea gardens were closed (refer table 2.10). But no greater impact is seen in the area, production and yield. The gradual increase in the number of tea garden is noticed from 1994-2018, this may due to the increasing in the number of the unorganised sector in the tea industry which has led to the increase in production as well.

Table- 2.1:Growth of No of Gardens, Tea Area, Production and Yield of Tea in India

Years	Growth of Gardens, production & Yield				Growth Rate (%)			
	No. of Tea gardens	Area (Ha)	Production (in Th. Kgs)	Yield (in Kg/Ha)	No. of Tea gardens	Area (Ha)	Production (in Th. Kgs)	Yield (in Kg/Ha)
1994	35116	425966	752895	1768	-	-	-	-
1995	37319	427065	756016	1770	6.27	0.26	0.41	0.11
1996	38705	431204	780140	1809	3.71	1.23	3.19	2.22
1997	38707	434294	810031	1865	0.01	1.96	3.83	3.10
1998	88115	474027	874108	1844	127.65	11.28	7.91	-1.13
1999	98867	490200	825953	1685	12.2	15.08	-5.51	-8.62
2000	112010	504366	846922	1679	13.29	18.41	2.54	-0.36
2001	116659	509806	853923	1675	4.15	19.68	0.83	-0.24
2002	127801	515832	838474	1625	9.55	21.10	-1.81	-2.99
2003	129027	519598	878129	1690	0.96	21.98	4.73	4.00
2004	129027	521403	892965	1713	0.00	22.40	1.69	1.36
2005	140713	555611	945974	1703	9.06	30.44	5.94	-0.58
2006	143217	567020	981805	1732	1.78	33.11	3.79	1.70
2007	249114(E)	578458	986427	1705	73.90	35.80	0.47	-1.56
2015	249114(E)	566663	1208660	2133	73.90	-0.25	2.82	3.14
2016	249114(E)	577477	1267360	2195	73.90	1.91	4.86	2.91
2017	249114(E)	599684	1321760	2204	73.90	3.85	4.29	0.41
2018	211794	636557	1338630	2103	-14.98	6.15	1.28	-4.58

[Note: Period of crisis in Tea Sector during 2000-2004 so continuous data is taken during the reference period; from the year 2007-2018, Tea Statistics are not published and latest Tea Statistics is available in 2019 only, hence in the data gap in the above table an estimated value (E) is taken from 2007-2017 for the no. of gardens by adding the data of 2006 & 2018 and dividing it by two.]

Source: Computed from Tea Statistics, 2003-2004, 2005-06 and 2019

2.2 Tea gardens in North and South India

The tea plantation areas of India are divided into North and South India. The major tea producing states are Assam, West Bengal and Tripura in North India and Kerala, Tamil Nadu and Karnataka in South India. The area and production of tea is found higher in North India as compared to South India, whereas yield per hectare is higher in South India as per table- 2.2. In 2000-02 little decrease in the growth of production and yield is found as per the calculated growth rate. But no significant impact on the area and production during the crisis year i.e., 2000-2004 was seen in both north and South India although during that time period a lot of gardens were closed in the country. The major tea growing states in North India shows continuous increase in the in terms of area and production and in South India it has remained almost stagnant. This may be due to the increase of number of unorganised sectors of tea in post 1990s in North India. As articulated, there exists 161238 numbers of Small Tea Growers with tea plantation area of 164396 hectares adding around 30-35 percent of tea production of the country (Hannan, 2017). As per 2015-2018 data both the regions display steady increase in the area, production and yield.

Table-2.2:Regional Pattern of Area, Production and Yield in North and South India

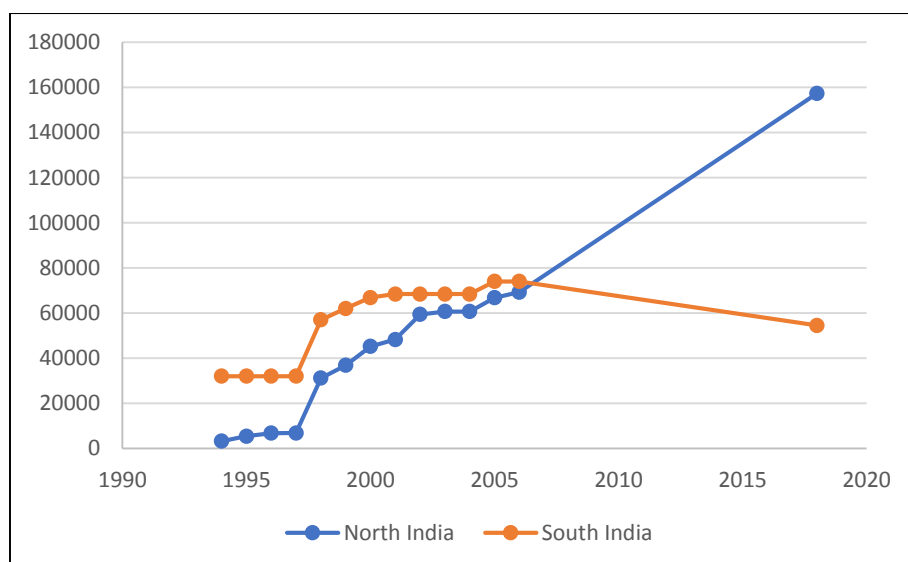
Years	North India			Growth Rate (%)			South India			Growth Rate (%)		
	Area (Ha)	Production (in Th. Kgs)	Yield (in Kg/ha)	Area (Ha)	Production (in Th. Kgs)	Yield (in Kg/ha)	Area (Ha)	Production (in Th. Kg)	Yield (in Kg/ha)	Area (Ha)	Production (in Th. Kgs)	Yield (in Kg/ha)
1994	338200	567955	1679	-	-	-	87766	184940	2107	-	-	-
1995	339233	568631	1676	0.31	0.12	-0.18	87832	187385	2133	0.08	1.32	1.23
1996	343359	598141	1742	1.22	5.19	3.94	87845	181999	2072	0.01	-2.87	-2.86
1997	345702	604697	1749	0.68	1.10	0.40	88592	205334	2318	0.85	12.82	11.87
1998	371631	670658	1805	7.50	10.91	3.20	102396	203450	1987	15.58	-0.92	-14.28
1999	382130	623259	1631	2.83	-7.07	-9.64	108070	202676	1875	5.54	-0.38	-5.64
2000	390906	640756	1639	2.30	2.81	0.49	113460	206166	1817	4.99	1.72	-3.09
2001	395113	650807	1647	1.08	1.57	0.49	114693	203116	1771	1.09	-1.48	-2.53
2002	401118	631748	1575	1.52	-2.93	-4.37	114714	206726	1802	0.02	1.78	1.75
2003	404884	648277	1601	0.94	2.62	1.65	114714	229852	2004	0.00	11.19	11.21
2004	406190	662184	1630	0.32	2.15	1.81	115213	230781	2003	0.43	0.40	-0.05
2005	435788	718420	1649	7.29	8.49	1.17	119823	227554	1899	4.00	-1.40	-5.19
2006	447371	753243	1648	2.66	4.85	-0.06	119649	228562	1910	-0.15	0.44	0.58
2007	458718	764742	1667	2.54	1.53	1.15	119740	221685	1851	0.08	-3.01	-3.09
2015	459815	981090	2134	0.03	3.54	3.50	106848	227570	2130	-1.35	0.33	1.88
2016	476658	1054510	2212	3.66	3.66	3.66	100819	212850	2111	-5.64	-6.47	-0.89
2017	498064	1087110	2183	4.49	4.49	-1.31	101620	234650	2309	0.79	10.24	9.38
2018	535629	1113760	2079	7.54	7.54	-4.76	100928	224870	2228	-0.68	-4.17	-3.51

Source: Computed from Tea Statistics, 2003-2004, 2005-06 and 2019

2.2.1 Trends of Tea gardens in North and South India

The Figure-2.3 presents the total number of Tea gardens in north and south India separately. From the following data we can analyse that there was more no of tea garden in south India as compared to North India. The growth in the number of tea gardens has been gradual in North India but in South India the growth in the number of gardens has been stationary since 2001-2004. Besides the no. of gardens are also increasing in North India mainly after the post-reform period this may be due to the increase in number of Small Tea Growers (ibid.). The growth in the number of gardens in South India is not much as compared to North India as the unorganised or small sectors of tea has existed in South India since 1960s. There has been neither growth nor decrease in the numbers of tea gardens in South India during that period. As on 2018 the number of gardens has increased to 157290 in North India and it has decreased to 54504 in South India.

Figure- 2.1: Total number of Tea gardens in India (1994-2018)



Source: Computed from Tea Statistics, 2003-2004, 2005-2006 and 2019

II.3 Major Tea Producing States in India

As discussed, earlier tea industry in India generates a large number of employments to the people. It is one of the most flourished plantation industries in the country. Major tea growing states are West Bengal, Assam, Tripura in North India and Karnataka, Kerala and Tamil Nadu in South India. The table- 2.3 gives the data of area, yield and production in the main tea growing states from 1994-2018. As per the data below Assam shows the highest share in the area of tea plantations in North India which is followed by West Bengal and then Tripura. Tamil Nadu has largest tea plantation area, followed by Kerala and Karnataka in South India. The production and yield of tea in these states also varies with their area of plantation. The data also gives the yield and production of tea indifferent tea growing states of India that is West Bengal, Assam, Tripura, Kerala and Tamil Nadu. The data revels that the yield was much higher in the South Indian states compared to the North during 1994-2007. Besides in North India the state of West Bengal has shown gradual increase in yield competing the South Indian states. The location of large number of tea gardens is mainly found in state of Assam and West Bengal may be due to the huge supply of labours and its soothing geographical conditions which is essential factor for the tea industry to flourish.

Apart from these States tea is also grown in some other states of India like Bihar, Himachal Pradesh, Nagaland, Manipur, Mizoram, Uttaranchal, Meghalaya, Sikkim, Orissa and others.

Table- 2.3: Area (Ha) Production (Th. kgs) and Yield (Kg/Ha) in Major Tea Producing States in India

States		Years										
		1994	1999	2000	2001	2002	2003	2004	2005	2006	2007	2018
Assam	Area	227120	258455	266512	269154	270683	271589	271768	300502	311822	321319	337690.4
	Production	400732	437324	449219	453587	433327	434759	435649	487487	502041	511885	691910
	Yield	1764	1692	1686	1685	1601	1601	1603	1622	1610	1593	2048.94
West Bengal	Area	99967	107430	107479	110820	113113	113351	114003	114525	114788	115095	148121.7
	Production	158825	175975	181536	186840	188021	200635	214541	217546	237106	236344	394000
	Yield	1589	1638	1689	1686	1662	1770	1882	1900	2066	2053	2659.97
Tripura	Area	5938	6482	6623	7200	7591	8268	8268	8710	8710	8962	8311.33
	Production	5827	6385	6431	9841	6632	8577	7168	7515	7272	7856	-
	Yield	981	985	971	564	874	1037	867	863	835	877	-
Kerala	Area	36817	36845	36940	36940	36967	36967	37107	36772	36236	37137	35871.16
	Production	63127	66833	68947	65151	57772	58012	62146	58502	59462	55966	60820
	Yield	1715	1814	1866	1764	1563	1569	1675	1591	1641	1507	1695.51
Tamil Nadu	Area	48854	69103	74398	75625	75619	75619	75978	80939	81276	80462	62885.13
	Production	117520	130462	131812	132401	143121	166572	163015	163676	163656	160531	158860
	Yield	2406	1888	1772	1751	1893	2203	2146	2022	2014	1995	2526.19
Karnataka	Area	2095	2122	2122	2122	2128	2128	2128	2112	2137	2141	2171.74
	Production	4293	5381	5407	5564	5833	5268	2476	5376	5444	5188	5190
	Yield	2049	2536	2548	2612	2741	2475.56	2641	2545	2547	2423	2389.78

Source: Computed from Tea Statistics, 2003-2004, 2019 and Tea Digest 2008 & 2009

2.4 Trends of Wages (₹) in Tea Plantations in India

The table- 2.4 represents the wages (in ₹) of the labourers in the major tea producing states of India. The wages vary among these states, the wages of the labourers seem to be much higher in South Indian states as compared to the North India. Among the North Indian States, the wages of the labourers in West Bengal are higher i.e., ₹ 176 per day which is lower than minimum wages of the agrarian labourers i.e., ₹ 206. There decrease in the number of labourers in the gardens due to the improvement in the unorganised sector. This shifting of labourers to the unorganised sector is mainly caused due to closure of the tea gardens.

Table- 2.4: State-wise wages of Tea Garden Labourers

Region/State		2005-2006		2018-2019	
		No. of Labourers	Daily Wages (₹)	No. of Labourers	Daily Wages (₹)
Assam	Assam Valley	619743	58.50	733647	167.00
	Cachar		48.65		145.00
West Bengal		262039	58.00	340635	176.00
Tripura		11631	-	11250	105.00
Tamil Nadu		266385	78.65	37394	311.83
Kerala		90148	88.76	35135	333.56
Karnataka		4540	71.00	2650	324.62
All India		1259500	-	1165815	-

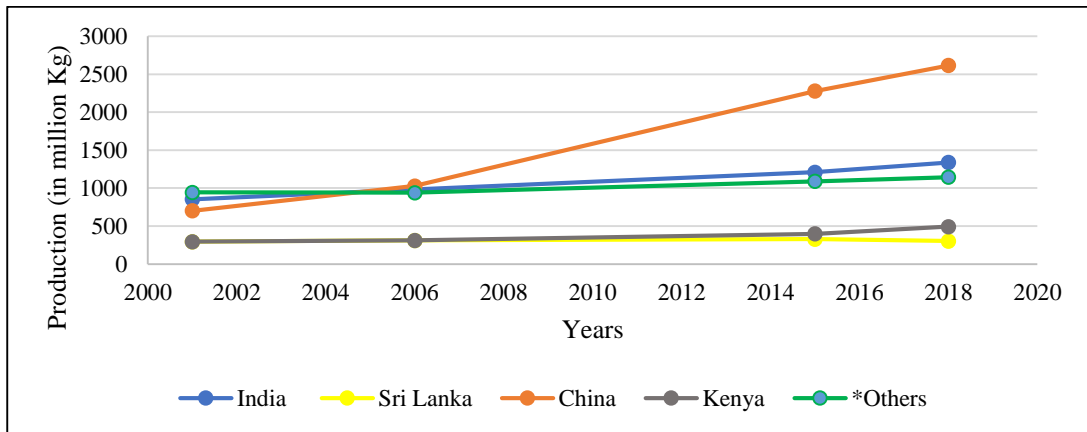
Source: Computed from Tea Statistics 2005-2006 & 2019

2.5 Production and Export

The major tea growing and exporting countries in the World are China, India, Kenya and Sri Lanka. There are also other tea producing and exporting countries in the world namely, Indonesia, Bangladesh, Vietnam Turkey, Malawi, Tanzania, Argentina etc. According to the figure 2.2 during 2001, India was the largest grower of tea among the major tea producing countries of the world. As discussed above the period

between 2000-2004 falls under the crisis year in the tea industry of India thus, since 2006 (refer figure 2.2) India has been replaced by China in the production of tea and have secured the position till 2018.

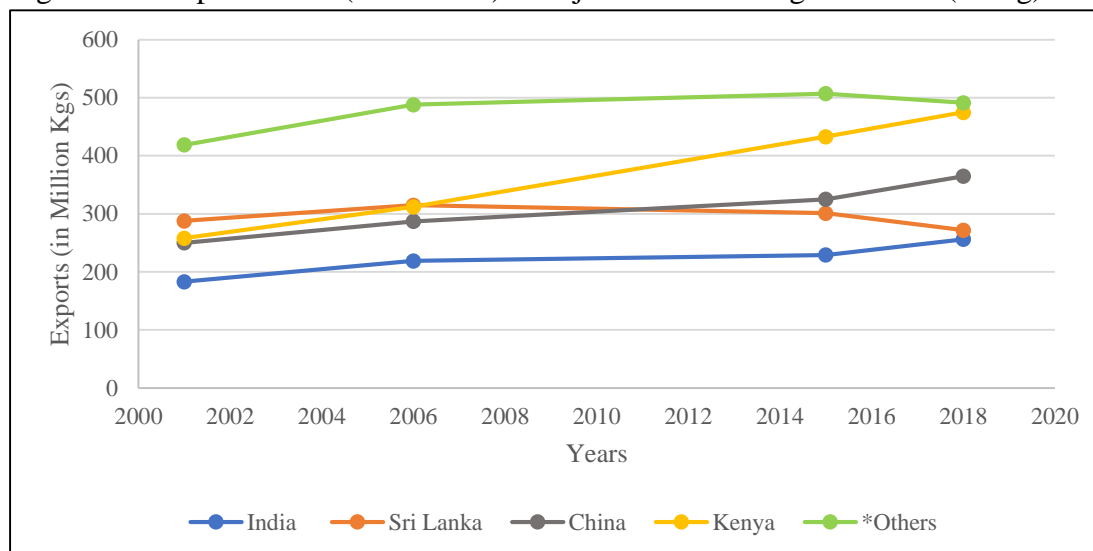
Figure- 2.2: Production trends (2001-2018) in major Tea Producing Countries (M. Kg)



Source: Tea Statistics 2000-01, 2005-06 and Annual Report 2015-16 & 2018-19

The export of tea from India is less compared to its total production (refer figure 2.2 & 2.3) may be largely due to the high demand in domestic market. During 2001, Sri Lanka was the largest exporter of tea followed by Kenya, China and India respectively. Since 2006, Sri Lanka has been replaced by Kenya in terms of total export till 2018. India ranks lowest in the total export of tea among the major tea exporting countries.

Figure- 2.3:Export trends (2001-2018)in major Tea Producing Countries (M.Kg)



Source: Tea Statistics 2000-01, 2005-06 and Annual Report 2015-16 &2018-19

2.6 Internal consumption of tea in India

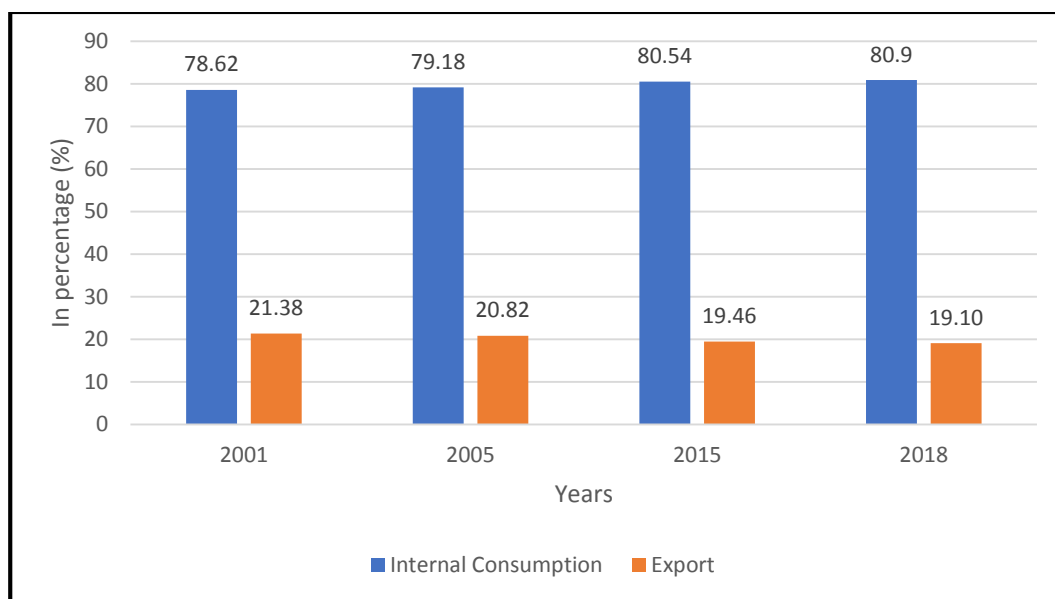
The following chart shows the trends of growth in the internal consumption of tea in India. It is worth mentioning that India is one of the largest producers and also the major consumer of tea in the world. The figure: 2.3 shows the amount of internal consumption of tea in India from 1995-2004. India has the largest domestic market for tea. It is the most common beverage among the people of the country. May be due to higher quantity of internal demand the export of tea is less compared to its production. Sometimes the tea has to be imported from neighbouring countries due to domestic demand in India (ibid.).

Table- 2.5: Consumption Pattern in India

Years	InternalConsumption	Export	Share of Production(in %)	Share of Export (in %)
2001	673	183	78.62	21.38
2005	757	199	79.18	20.82
2015	948	229	80.54	19.46
2018	1084	256	80.90	19.10

Source: Computed from Tea Statistics, 2000-01, 2005 06, Consumption website_pdf3308.pdf (Accessed on: Feb 2021)

Figure- 2.4:Pattern of Internal consumption and Export of tea in India (1994-2019)



Source: Computed from Tea Statistics, 2005-2006 & Tea Board of India

2.7 Export Trends and Price Realisation of Indian Tea

The following table shows the Quantity in million kgs and Values in crore Rs. and Unit Price in ₹ Per Kg. from 1994-2019, it includes the data available during the year. The per kg unit price of tea has been declined during 2000-2007 in the domestic and export prices. The total quantity exported from India during 2001-2004 was lower compared to the previous year i.e., 206.82 in 2000. The lowest amount of unit price was ₹ 87.23 in 2003 almost ₹ 15 less than the unit price of 1999. The unit price was improved from 2008.

Table-2.6: Pattern of Auction (Domestic) and Export Prices in India (1994-2018)

Years	North India		South India		Indian Export		
	Qty. in Th. Kgs	Avg. Price in ₹ /Kg	Qty. in Th. Kgs	Avg. Price in ₹ /Kg	Qty. M. Kgs	Value (Cr. ₹)	Unit Price (₹ /Kg)
1994	316363	43.88	111940	31.38	150.69	989.14	65.64
1995	298757	50.92	129611	41.25	168.00	1202.01	71.91
1996	313370	51.82	129746	41.42	161.70	1246.87	77.11
1997	305731	70.69	153295	59.31	203.00	1774.77	87.43
1998	295680	80.22	146679	68.78	210.34	2309.43	109.80
1999	32589	80.56	159179	57.09	191.72	1965.86	102.54
2000	337154	70.34	170373	44.64	206.82	1898.61	91.8
2001	305020	69.8	158668	46.02	182.59	1682.11	92.13
2002	311030	62.66	145519	41.63	201.00	1759.98	87.23
2003	359818	61.31	117953	39.93	173.68	1590.21	91.56
2004	338549	71.57	135805	47.01	197.67	1841.14	93.14
2005	374808	63.61	135426	42.67	-	-	-
2006	364510	71.62	134562	50.79	218.73	2006.53	91.73
2007	381870	73.37	132534	49.7	178.75	1810.11	101.26
2008	390279	95.27	156069	66.27	203.12	2392.91	117.81
2015	427709	137.44	134284	83.21	228.66	4355.32	190.47
2016	393859	143.96	126500	104.04	216.79	4327.04	199.6
2017	465417	143.77	138305	97.26	251.91	4987.59	197.99
2018	466318	150.09	129211	96.98	249.11	5132.37	206.03

Source: Computed from Tea Digest 2008 & 2009 and Tea Statistics 2019, Source: Computed from Tea Digest 2008-2009 & <http://www.teaboard.gov.in/TEABOARDPAGE/Ntg>, Dec 2020

2.8 Tea Industry in West Bengal

After the commencement of tea plantation in 1839 at Assam thereafter three decades the plantation was started in the state of West Bengal. The tea growing conditions and environment was found to be similar with that of Assam. Mitra (2019), articulated that the supply of cheap labourers was made from the Chotanagpur plateau luring them with better livelihood conditions in the plantation areas. The exploitation of the labourers has been prevalent since earlier days though some acts were passed in favour of the labourers' aftermath the colonial era. Likely, statutory minimum wages were fixed in 1952 for the plantation labourers, the Plantation Labour Act in 1951 etc. which settled some facilities to the labourers.

Among the major teas producing states of India, West Bengal is one of the major states employing a large number of labourers. It ranks second in the production of tea among other tea producing states of the country. In West Bengal the tea plantation area is spread in the two districts namely Darjeeling and Jalpaiguri. They altogether produce 20 percent of total manufacture of tea in India (ibid.). Sheereen, (2016) has articulated that the number of tea gardens are about 450, employing 6 lakh people and 6.50 million people are the estimated number of dependents.

2.8.1 Total Area, Production and Yield in West Bengal

The major tea producing regions of West Bengal is Darjeeling, Terai and Dooars which are located in the northern part of the state. Darjeeling regions mainly comprised of the hilly tracts and the Terai and Dooars region is comprised of the plain areas in the Darjeeling district of West Bengal. Out of the three regions, the largest tea plantation area is found in Dooars region which is followed by Terai and then Darjeeling as per data given below during the year 2004 (refer table-2.6). This may be

due to their local geographic conditions. All the region has showed growth in area as well as production and yield according to the data (refer table-2.6). It can be analysed that the tea plantation covers a large area in these regions thus it is one of principle source of economy and employment found there. As highlighted by Das et. al (2012), the labourers are reliant on the tea gardens for sustaining their livelihood. The socio-economic settings of the tea garden workers in the state of West Bengal are better understood if the West Bengal Plantations Labour Act of 1956 is referred which is said to be framed in the light of Plantation labour Act of 1951. It includes seven chapters. Its chapter discusses definition of the Plantation Labour Act, 1951, the power and functions of Inspecting Officer, the duties of certifying surgeon, health aspects of the workers, construction and maintenance of drains, distribution of water, latrine accommodation, education facilities for workers' children, housing accommodations of workers etc. as discussed by but its implications in the plantation areas are rarely seen.

Table- 2.7: Area (in hectares), Production (in thousand Kgs) and Yield (in Kgs/ hectare) under tea in West Bengal (in hectare)

Years	Area			Production			Yield		
	Darjeeling	Terai	Dooars	Darjeeling	Terai	Dooars	Darjeeling	Terai	Dooars
1994	19280	12908	67779	11092	24636	123097	575	1909	1816
1999	17604	20118	69708	8653	42521	124801	492	2114	1790
2000	17228	20548	69703	9281	43291	128964	539	2107	1850
2001	17453	21258	72109	9841	46395	130739	563	2161	1867
2002	17463	22858	72792	9180	53606	125235	526	2345	1720
2003	17580	22971	72800	9582	59786	131267	545	2603	1803
2004	17522	23598	72883	10065	69239	135237	574	2934	1856
2005	17539	24313	72673	11312	77078	129156	645	3170	1777
2006	17542	24340	72906	10854	87064	139188	619	3577	1909
2007	17818	24359	72918	10007	87502	138835	562	3592	1904
2008	17818	-	-	11586	-	-	650	-	-
2017	-	-	-	3210	161720	219580	-	-	-
2018	-	-	-	7690	160200	226110	-	-	-

[Note: The production of tea in Darjeeling Hills is affected during the years of 2017-18 due to hundred days strike. The closure of tea gardens has also affected the production level.]

Source: Computed from Tea Digest, 2008 & 2009, Datta, T. K. (2010), Darjeeling Tea in India, P. 138

2.9 Tea industry in Darjeeling

O'Malley (1907) has highlighted the experimental growth of tea started in 1840 when Dr. Campbell was transferred to Darjeeling from Kathmandu. Moreover, at Lebong the red coloured clay of the hill was well-thought-out to be more suitable for tea cultivation compared to the black loam of Darjeeling. Whereas in the lower region of Kurseong and Pankhabari, Mr. Martin established the plantation of both coffee and tea. The industry began to develop and thrive by 1856 on a large scale mostly on the lower slopes. By the end of that year plantation has been started through Mr. Masson at Takvar, by Mr. Smith at Kurseong, at the Hope Town and Canning plantations by the firms close to those places. On the Kurseong by Mr. Martin, and between Pankhabari and Kurseong by Mr. Samler as stated by the author.

By the Darjeeling and Kurseong Tea Company, Alubari tea garden was started in the same year, and by the Darjeeling Land Mortgage Bank, one more on the Lebong. Further in 1859, the Dooteria garden was opened by Dr. Brougham and four gardens between 1860 and 1864 was started at Ambutia, Phubsering, Takdah and Ging by the Darjeeling Tea Corporation. The Lebong Tea Company started gardens at Takvar and Badamtam. During that initial stage additional gardens which were established are presently known as Steinthal tea estates, Pandam, and Makaibari. After hill the planter started their experiment of tea cultivation in the Terai region. At Champta and Khaprail the first garden was started by Mr. James White in 1826 who had also established Singel tea estate near Kurseong, is considered one of the major gardens in the district (ibid.). In the end of 1864, altogether 113 gardens were established in Darjeeling tea industry which was further increased to 117 in 1891. They focused more on quality rather than quantity. Moreover, the climatic factors and other geographical favoured the growth of tea industry in the region. Thus, a large number

of employments is generated by tea industry in Darjeeling hills and it has also paved way for tourism to flourish in the region.

The figure-2.8 presents the number of tea gardens in Darjeeling tea industries, it can be analysed that the number of gardens has remained constant since 1999 in Darjeeling compared to the overall scenario of the tea producing regions of West Bengal. Out of total number of tea gardens in West Bengal that is 8790 gardens only 85 gardens are located in the district of Darjeeling (Tea Statistics 2003-2004) may be due to their geographical condition and location. Total area under tea in Darjeeling was 19280 hectares, production of Darjeeling was 11092 in thousand Kgs and yield was 575 kg per hectare during 1994 (refer table- 2.6).

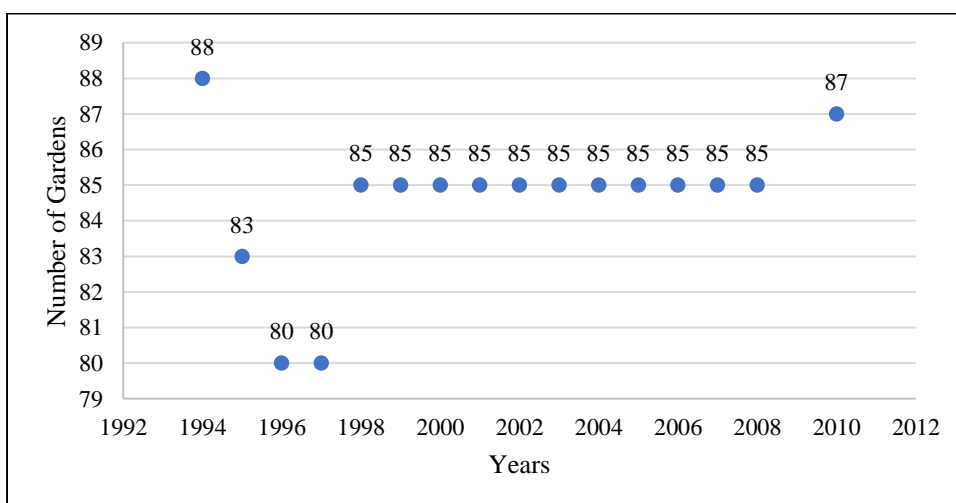
Datta, et. al. (2010) articulated that all the tea gardens of Darjeeling Hills are owned by the State Government of West Bengal which can be either sold or leased out. Basically, the tea gardens are leased out to the tea planters for a least period of 30 years and an extreme period of 99 years which can be renewed after the expiry of the lease date. It is also stated that presently there are 87 gardens in the Darjeeling Hills (ibid.).

Presently there is 87 tea gardens in Darjeeling tea industry, every year it grows 10 million kgs of tea and it covers 17,500 hectares of land and at several elevations from 600 to 2000 meters. Tea is the first merchandise to be listed under the Geographical Indication of Goods since 2004 in Darjeeling. As per Tea Board, the quality and flavour of tea of Darjeeling is unique and better than other teas. The Tea Board and the Ministry of Commerce under the standards of the TRIPS Agreement of the WTO protects that anywhere in the world Darjeeling tea cannot be grown or produced. Under the Tea Act, 1953 all the tea growing areas along with Darjeeling is managed

by the Tea Board as a geographical indication. The quality, status, flavour, aroma and all is credited to its geographical origin (ibid.).

Darjeeling is world-wide famous for its high-quality tea and has large domestic and international market. Most of the high-quality product are exported and remaining products are sold in the local markets and are consumed by the locals. The main objective of Tea Board, Government of India and all the other members is to protect the name and reputation of Darjeeling and Darjeeling tea, as in many countries its name is being misused in several ways (ibid.). Although now Darjeeling tea is protected by many authorized tools like authorization mark, geographical indication, collective mark, etc., the misapplication of its name is still taking place which is affecting its market in the long run. As per the member of the Joint action committee of Dooteriah 24/10/2020, in name of Dooteriah Tea a large proportion of Ilam, i.e., Nepal tea was being supplied recently. Thus, the GI registration should be implemented properly even at the local level.

Figure- 2.5: Number of tea gardens in Darjeeling Tea Industry



Source: Computed from Datta, T. K. (2010), *Darjeeling Tea in India*, P.138

As articulated by Xaxa, (2019) the labours in eastern India that is in West Bengal and Assam labour earlier came from Bihar, Uttar Pradesh and West Bengal. Later, labour was provided from the plateau regions of eastern and central India which are occupied by various tribal groups. Even in the south the labour was supplied from outside the area. The table-2.9 reflects the average daily number of labours employed in the Darjeeling district and total of West Bengal . Out of total figure of labours working in tea plantation of the state of West Bengal, 20.32% were employed in Darjeeling tea plantations during 2004. The number of labourers has increased to 340635 as on 2018. We can also analyse the growth in the number of workers, as pointed out by Das et. al.(2012) it is due to the fact that area under plantaion enlarged and request of Himalayan workers union which urged to employ additional workers in the tea gardens because of the hilly and tough topography. It has been argued that this might be the cause for the current land-man-ratio that is 1:4 in maximum of the plantations in the area. The history of the Darjeeling tea industry seems to be linked to the poor working settings of the workers but in reality it is related to the sense of denial of a ethnic community by the outside management personnel as they are least concerned about the wokers(ibid.).

Table- 2.8: Average No of Labourers in Tea Industry in Darjeeling and West Bengal

Region \ Years	1994	1999	2000	2001	2002	2003	2004	2005	2006	2018
Darjeeling	58814	50964	51515	50938	52671	52547	53363	53412	53492	-
West Bengal	258448	251012	253459	255569	259182	260336	262672	262702	262039	340635

Source: Computed from Tea Statistics, 2003-2004 & 2005-2006

2.10 Closed Tea Gardens in India and Regional Perspective

India

The data analysed above indicates that the tea industry in India has been undergoing crisis in post-reform period and the situation was aggravated during 2000-2004 (Tea Board, 2005). Mishra et. al, (2014) has also highlighted that the tea industry in India is facing crisis due to decline in exports, low production, closure of gardens etc. As number of tea gardens are being closed the labourers are facing displacement of livelihood. It is difficult for them to move out of the tea gardens to find alternative sources of livelihoods as they usually unskilled labourers. Their issues remain marginalised in the developing and globalising India.

In the post-independence period in India laws was made acquaint particularly with the plantation areas which basically aimed at protecting the interest of the plantation labourers. Out of all, the Plantation Act of 1951 is the utmost significant act which looks at the different structures of plantation labourers. However, many more labour laws have been passed from time to time for the plantation labourers. Though many laws have been passed but still the labourers are suffering and their condition are pitiable.

In early 2000s, there was emergence of the crisis in tea industry in India owing to low price realisation of tea in the market and several plantations were declared sick, abandoned and many of them were declared closed. As articulated by Ansari (2016), in 2005, China attained the number one position and retained it. Mishra et al., (2014) also stated that the high labour cost along with the rise in national demand and decrease in export of tea from India is a rising emergency of the tea industry. The tea sector is undergoing a deep crisis mainly after the fragmentation of the Soviet Union,

who was one of the main tea importers of the country. Besides the internal consumption of tea has also increased than production. The continuous rise in internal demand and the incapability of tea industry to improve production has bring about a waning in exports of tea. The situation is aggravated after the imports of low-priced tea from Bangladesh and Sri Lanka, was permitted by the Government (ibid.).

It is actually the inefficient management of the budget and finance in a tea favourable area has also led to the decline in the number of employments to the local people of that particular area which has caused low intensity of tea production due to insufficient working hands. Today, the world has changed tremendously in all its aspects, be it politically, economically, socially and culturally. With the dramatic increase in the price tags of the necessary items and cost of the facilities, the labourers have been facing the challenge to meet their basic needs in their everyday life. The specific conditions under which they live and work within the plantations that are often isolated from, and poorly connected with, the local economy and society impact upon their work opportunities as well as their bargaining power. Thus, the tea garden labourer faces marginality at several levels and these multiple marginalities tend to reinforce the occupational mobility of tea plantation workers in all over India (ibid).

One vital issue which needs highlight is the unemployment and displacement of the labourers in tea industry especially women. The tea industry constitutes the largest female participation among the organized sector. Due to the shutting down of the tea industries around the country, the female participants are the most vulnerable ones to the consequences. The female workers who are basically confined and dependent on the tea industry faces various problems due to the closure of tea industry. The female tea labourers who are mostly illiterate cannot go for alternative jobs and faces discrimination and ill-treatment. Mostly, women are reluctant to travel to far off

places due to their household chores. Due to lack of any other means of earning the livelihood in some of the cases, they are also forced to sell their bodies to earn the living which is a crucial issue which demands proper insight. As brought forth by the authors, despite the protection of laws and the presence of trade unions in plantations, the tea labour force in Assam is among the most vulnerable sections of India's organised labour class(ibid.). The same picture can be seen in the other tea plantation regions of the country.

There is also a lack of advanced and sophisticated tools and machines due to the mismanagement of the budget in the industry which has contributed to the steady decline in the tea production. As cited, the additional variables such as failure to enlarge the area under plantation, ageing bushes, inadequate replanting of bushes, insufficient investments in replantation and labour welfare procedures, unsuccessful management practices have also subsidized to the stagnation and decline of production (ibid.).

Therefore, due to fall in tea auction prices, others crisis including the decline in export, abandonment or closure of gardens, has led to the growing labour conflict causing to many fierce objections and clashes. This has led to curbing of wages and decrease statutory benefits of workers, decreasing living standards and fading human security in the gardens. As cited, the tea gardens in India faced closures and abandonment especially during the years 2002-04 in West Bengal, Kerala with a less extent in Tamil Nadu and Assam. There are also reports of nonstop closures of the tea gardens in Kerala and West Bengal till present. As stated there have been reports of strikes, unrest and even cases of violent confrontations between workers and management personals. Thus, crisis has affected the tea industry as a whole and as well as the labourers (ibid.).

As the tea estates provides subsidies under the Provisions on the PLA, 1951 to the workers like drinking water, housing, ration, health, and additional amenities by the company, the living conditions of the workers have stood drastically affected by the abandoning and closing of the tea garden. The present tea crisis suitably fits the work of Amartya Sen's capability deprivation. There is drop-outs of children from the school, women labourers are moving out in search of employments and alternative livelihoods etc malaria, epidemics, deteriorating health conditions, malnourishment, hunger and even deaths have been reported from the gardens. Deprivation of food water and have allegedly caused the demises of about 350 people in four tea gardens of Doors, in the year 2003 i.e., within six months. Similarly, as stated, in Kerala more than 12 cases of hunger, malnourishment, deaths and self-annihilation are also reported. Since all the garden health centres have closed the workers are not getting any form of medical help. The lower literacy, large number of drop-outs of the children and heavy drinking habits have more worsen their crisis (ibid.).

The tea industry plays an important role in terms of providing employment and livelihoods to the rural areas in plantation regions of the country. It is a prime concern that organised tea industry provides employment and livelihoods of 2.50 million of people in India (Hannan, 2017). The tea industry in India have undergone structural changes particularly after 1990's and the current situation the tea gardens in India are dealing with the problems of sickness and abandonment which has caused threat to the socio-economic conditions of the tea garden labourers (Roy, 2017). It is reported that a total of 118 tea gardens were closed in the traditional tea growing states spread over Assam (17), West Bengal (53), Kerala (38), Tripura (7) and Tamil Nadu (3) and the livelihood of 68,442 labourers working in these gardens (51st Annual Report, 2005). The states which faced the greatest number of close gardens were West Bengal

(53 percent) followed by Kerala (32.20 percent) and Assam (14.40 percent). The issues like fall in the price, declining exports, low domestic intake and mismanagement of gardens, old bush age etc caused the crisis. By the end of 2004, 94 gardens were reopened and 24 remained closed in India. In West Bengal alone 47 gardens were reopened and six remained closed. The number of labourers in remaining closed gardens were 15655 persons collectively in 24 gardens. In Tamil Nadu all the garden reopened. This situation resulted into litigation by the civil society organisations for protecting livelihoods of the labourers in closed tea gardens.

Table- 2.9: Status of Closed and Reopened Tea Gardens in India (2000-2004)

State	Overall Closed Gardens		Reopened closed Gardens		Remaining closed gardens	
	No. (%)	No. of Labours (%)	No. (%)	No. of Labours (%)	No. (%)	No. of Labours (%)
Assam	17 (14.40)	10134 (14.80)	14 (14.89)	6313 (62.29)	3 (12.50)	3821 (37.70)
West Bengal	53 (44.91)	43590 (63.68)	47 (50)	39245 (90.03)	6 (25.00)	4345 (9.96)
Tripura	7 (5.93)	466 (0.68)	6 (6.38)	394 (84.54)	1 (4.16)	72 (15.45)
Kerala	38 (32.20)	11829 (17.28)	24 (25.53)	4412 (37.29)	14 (58.33)	7417 (62.70)
Tamil Nadu	3 (2.54)	2423 (3.54)	3 (3.19)	2423 (100)	-	-
India	118 (100.00)	68442 (100.00)	94 (100.00)	52787 (77.12)	24 (100.00)	15655 (22.87)

Source: Computed from 51st Annual Report 2004-2005, Tea Board of India, P. 23

As a consequence, the Hon'ble Supreme court of India in a *Writ Petition* © No. 365 of 2006 and *Contempt Petition* © No. 16 of 2012 (Judgement dated April 04, 2018) states that, “theworkmen, who worked for about 20 years have not been paid their wages...their condition is pitiable and some of them have resorted to commit suicide. In some cases, these workmen are part of an unorganized Sector”. In the state of West

Bengal alone rupees 30 crores were unpaid to the labourers working in the 45 tea gardens as per the Central Government affidavit. Seeing the difficulty and the miserable condition of the labourers various orders were passed by the Hon'ble Supreme Court to provide justice to the labourers. However, as indicated in the order, in West Bengal there were 19 running but stressed tea gardens, nine tea gardens which were non-functional but getting FAWLOI⁴ and three tea gardens which were not getting FAWLOI. The total number of labourers engaged in these gardens are 33,799 altogether. Similar cases in the states of Assam, Kerala and Tamil Nadu have also been highlighted in this order. Even after the ongoing litigation and judgement (2018), the closure of the tea gardens has been a continuous process and several gardens were closed which were not a party in the original Writ Petition filed before Hon'ble SC in 2006. In fact, there is a lack of proactive action and coordinated efforts are absent in reopening the gardens and restoring livelihoods of labourers among the state agencies like Tea Board of India and the State Governments. As a result, the process of the closure of tea gardens has been continuous till date as evident from field and media reports.

Similarly, as per the 64th Annual Report (2017-2018) of Tea Board, the total number of gardens closed in India was twelve (12) and the labourers affected were 7406 permanent and 1684 temporary workers. In West Bengal, nine (9) tea gardens were closed out of total twelve closed gardens in India affecting livelihoods of 6591 permanent and 1648 temporary workers. The other three (3) tea gardens are situated in Kerala having 815 permanent workers. These gardens are not included in the

⁴ The FAWLOI stands for *Financial Assistance to the Workers of the Locked -Out Industrial Units* and under this scheme, a financial assistance of rupees 1500/- per month is given to the unemployed labourers of the closed tea gardens by the government of West Bengal as interim sustenance.

original Writ Petition (2006) of the Hon'ble Supreme Court. This proves that even after the order of the Hon'ble Court the situation of Closed Tea Gardens and fate of affected labourers has not changed and there is policy silence to re-open the gardens.

West Bengal

The data analysed above indicates that many industries in the state of West Bengal have become sick and are closed making the condition of the labourers more pathetic. The facilities, benefits, bonus, wages etc. has stopped after the closure of the garden affecting the health, education, livelihood etc. of the labourers. As per the table-2.10 the total no. of gardens closed in West Bengal was 53. Moreover in 2007, 13 tea gardens were abandoned and closed in the Jalpaiguri district. This has led to increase in health issues, malnutrition, many death cases among the labourers of the closed tea gardens (Mitra, 2019). It is noticed during the field survey that the *Goalgach Tea Garden* under Duncans Industries Ltd. in Chopra block of Uttar Dinajpur West Bengal is closed since 2016 but it is yet to be notified by the Government. The labourers have not been listed under FAWLOI. The garden has a planted area of 473.72 hectares, 88 staffs, 1153 permanent workers and 400 temporary workers. As per Annual report 2017-18, total 9 tea gardens were closed in West Bengal, namely Dekhlapara, Bundapani, Dharanipur, Redbank, Surrendranager, Madhu, Panighatta, Manabari and Kumlai affecting 6591 number of permanent workers collectively. The foremost explanations for the closure of garden are poor yield, ageing of bushes, insignificant uprooting or replanting, lack of proper garden administration practices, failing quality and value, lack of expansion practices, highly debt-oriented funding approach, ownership disagreements etc., (Report, 2017-2018). Thus, to comprehend the present scenario understanding of the history is utmost importance. Darjeeling tea industry is facing lots of problems due to various causes like soil erosion, ageing

bushes, deforestation, political instability etc(Das, et. al., 2012). It has also been stated that the commercial plantations developed by foreign investment during nineteenth century has caused structural underdevelopment in North Bengal (Xaxa, 1985). As on Dec, 2003, a total of 22 number of gardens in the Dooars region were listed closed or sick or abandoned (Talwar et. al.,2005). It is also highlighted that three gardens *Kathaguri Tea Garden*, *Bandapani Tea Garden* and *Dhumchipara Tea Garden* were closed in the Dooars region during 2002, 2013 and 2015 respectively affecting a large number of labourers (Roy et. al, 2018). The tea industry and its management are not able to provide better health, education, livelihood security etc. to the labourers due to which there is frequent occurrence of labour unrest, closure and suspension of work in the tea gardens. The national picture of crisis in tea economy is also being experienced in Darjeeling hills over the years. The Tea gardens namely, *Peshok Tea Garden*, *Kalej Valley Tea Garden* and *Dooteria Tea Garden* have been closed since 2015 and the labourers affected are 2568 altogether. It is evident from the field that most of the labourers have out-migrated in search of alternative employment and better opportunities in other states or another tea garden and some even to gulf countries.

Table-2.10: Closed Tea Gardens⁵ in West Bengal (As on 26.08.2019)

Name of the Tea Garden or Company	District	Suspension of Work / Abandonment	Date of Suspension of Work / Abandonment	Labour
Pacific Cot spin Limited	Jalpaiguri	Suspension of Work	12. 08. 2016	345
Raipur Tea Garden	Jalpaiguri	Abandoned	12. 09. 2018	617
Peshok Tea Garden	Darjeeling	Abandoned	10. 01. 2018	1354
Kallej Valley Tea Garden	Darjeeling	Abandoned	10. 01. 2018	642
Dooteriah Tea Garden	Darjeeling	Abandoned	10. 01. 2018	570

Source: Computed from unpublished data collected from DTA, West Bengal, Mar 2020

Darjeeling

The tea industry in Darjeeling is facing lots of problems due to various causes like soil erosion, ageing bushes, deforestation, increasing population density, political condition etc. (Das et. al,2012). As articulated Xaxa, 1985 that the agrarian plantation developed by foreign investment during nineteenth century has caused structural underdevelopment in the region. As per the interview/interaction with the members of the Trade Union (Nov, 2020), the present condition of the Darjeeling Tea Industry is not good. The situation started to deteriorate since post-Independence period and its intensity has increased with economic liberalisation. Similarly, Ghosh (2015) articulated that the Plantation Industry in West Bengal has been suffering from

⁵The closed gardens are those gardens which are closed by the management after following certain procedure of law and notifying the functioning labour unions and the labour department about the closure of the garden. On the other hand, the abandoned gardens are those where the management doesn't follow any such procedure for closure and they give reasons like financial crisis for leaving the garden in the state of abandonment (Talwar et. al, 2005).

extensive sickness and closure since the economic globalisation. Thus, due to various crisis in the tea sector the closure and abandonment of tea gardens has been frequent in the region mostly affecting the livelihood, economic and social condition of the labourers. The company leaders claim they don't have good production, export, profit etc. and they are forcefully trying to prove that these things are actually happening. The company leaders are only after profit and they don't care about labourer's welfare who are the main bearers of the tea garden. As per the labour Act, the Fringe benefits (Firewood, drinking water, labour quarter, umbrella etc.) which should be provided to the labourers are not given in most of tea gardens of Darjeeling hills and even if it is provided in some of the gardens it is never given on time. There are also some good companies like Goodridge, Luiwa etc. which provide construction of new houses, repairment of old houses etc. of the labourers but other companies don't provide any such facilities. Thus, due of various reasons like due payments, lack of management, bonus issues, lack of facilities etc a number of tea gardens are being closed, locked out or abandoned in Darjeeling Hills. Out of the total gardens, Vah Tukvar and Peshok tea garden was closed during 2000 to 2004 and during 2001 their leaf was transferred to Tukvar tea garden and to Arya, Chongtong and Okayati tea garden respectively. Likewise, in 2000 Gayabari tea garden was also locked out in 2002 at Amboik there was suspension of work, in 2005 Gille and Jogmaya tea garden was locked out in 2015 Panighatta and Tukvar tea garden was locked out, as per the data collected from the field (DTA, Nov, 2020) and recently the North Takvar (Singla) tea garden is under suspension due to the same issues as mentioned above as per the interaction in the field. The gardens under the present study are *Dooteriah, Kalej Valley and Peshok Tea Garden* this garden have been closed since 2015 and the labourers affected are 2568 altogether.

As per the interaction with the member of the Trade Union office, the production has gradually declined in the Darjeeling Tea industry compared to earlier days. As people today have shifted towards organic plantation and hence, they use cow dung and have reduced or stopped the use of chemical fertilizers and insecticides. This has resulted with infected plants and various other diseases leading to less production of tea in the region.

As articulated by Talwar et. al, (2005), the wages in the Northern Bengal are fixed over an industry wise wage agreement that takes place each year. Further, it has been stated that the wages in the tea industries are comprised of both cash and subsidised food grains. The table 2.12 presents the data of wage rate and annual growth rate of wage from 2000-2015 with 5 years interval, 2018 and 2019. The total no. of workers in all these four divisions of Darjeeling is 44456 and their wage is ₹ 176. The total number of the staffs is 5258 and their salaries are ₹ 15000 per month (as per Trade Union study, Darjeeling). Though in the tea gardens the labourers have permanent employment they are daily rated workers and they are paid as per the number of days they work. Due to low wages labourers cannot afford the basic necessities of life often leads to poverty, hunger, illiteracy etc which is further aggravated due to the closure of the garden (Sheereen, 2016). As per the notification/report, in 2021 the wage rate has increased to ₹202.

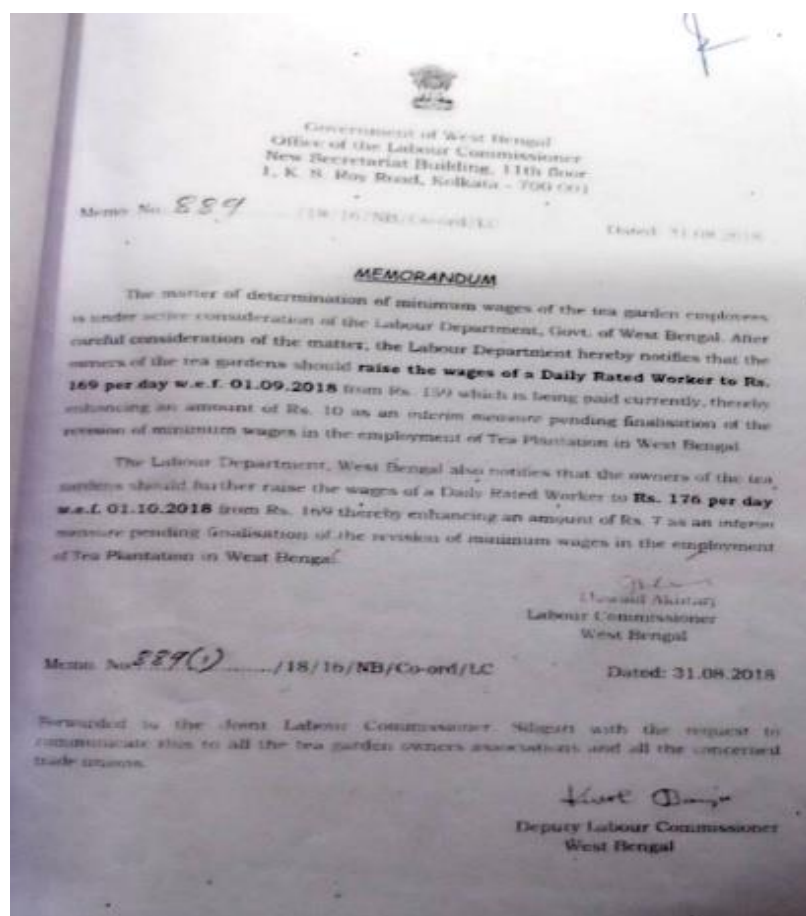
Table- 2.11:Wage structure in Darjeeling (2000-2018)

Period	Daily Wage Rates (in ₹ /day)	Annual Growth Rate of Wages (%)
01.04.00	37.8	
01.04.05	48.4	5.61
01.04.10	67	7.69
01.04.15	122.5	16.48
*01.10.18	176	14.56
*01.10. 19	202	14.77

[Note- The annual growth rate has been calculated by subtracting the present year value with previous year value and dividing the output with previous year value. The it is multiplied with hundred and again divided with the number of years.]

Source: Computed from unpublished data, Darjeeling Tea Association, March 2020

Figure-2.6: Wage memorandum (2018)



Source: Unpublished data collected from Darjeeling Tea Association, March 2020

2. 10 Spatial-Aspects of Darjeeling Tea Industry

The 87 gardens of Darjeeling Hills are spread over four geographic divisions i.e., 43 gardens are situated in Darjeeling division having 23371.34 hectares of grant area, 10773.16 hectares of plantation areas employing 24202 labourers and 2982 staffs and sub-staffs. In Kurseong division 28 gardens have 15944.56 hectares of grant area, 5988.09 hectares of plantation area employing 11623 labourers and 1285 staffs and sub-staffs. In Mirik division, 10 gardens have 5148.66 hectares of grant area, 2303.43 hectares of plantation area employing 6039 labourers and 750 staffs and sub-staffs. Lastly, in Kalimpong division six gardens have 2996 hectares of grant area, 1376.36 hectares of plantation area employing 2792 labourers and 241 staffs and sub-staffs. All the four division have micro-regional differences in their physical characteristics like slope, altitude and climatic characteristics which are likely to impact the production process of the tea sector in Darjeeling hills.

Further the tea industry in Darjeeling District has been further divided into 7 division based on the sub-division and their direction of location (DTA). They are Darjeeling East, Darjeeling West, Teesta Valley, Mirik, Kurseong North, Kurseong South, Rungbung Valley. A few numbers of gardens have not reported and accordingly there is lack of their data. Thus, the table- 2.11 presents the total 87 gardens which is divided into four sub-divisions. Other aspects like per unit labour absorption, land productivity, production per unit of land, labour and staff ratio, land and labour ratio, land and staff ratio has also been calculated. Labour Productivity and production both are more in Darjeeling division i.e., 4756.79 as there is a greater number of labourers employed and greater number of tea gardens lies in this division compared to other divisions. The labour productivity in Darjeeling Tea Industry as a whole is 124.63, it varies in the different division. It also depends on the working condition of the

labourers. Per unit production of land has also been calculated i.e., 272 it may vary in among the divisions based on their geographical factors, climatic condition, age of the bush etc. The Labour staff ratio is 1:9 in the industry collectively. The land labour ratio of the four division is calculated which may determine the wages of the labourers, if more land is available per labourer, they will be able to produce more output adding to their wages and vice versa. The land labour ratio in Darjeeling Tea Industry is 1:2 i.e., one labour covers two hectares of land. The land and staff ratio are 1:4 i.e., one hectare of land has four number of staffs in the industry.

Table- 2.12: Spatial Dimension of Darjeeling Tea Industry, 2019

Name of Divisions	Grant Area (in hec)	Plantation Area (in hec)	No. of Gardens	Production (in Kgs)	No. of Labourers	No. of Staff and sub-staff	Total Workforce	Labour productivity	Production per unit of Land	Labour and Staff ratio	Land and Labour ratio	Land and Staff ratio
Darjeeling	23371.34	10773.16	43	2594994	24202 (54.19)	2982 (56.71)	27184	107.22	240.87	1:8.11	1:2.25	1:3.61
Kurseong	15944.56	5988.09	28	1027519	11623 (26.03)	1285 (24.43)	12908	88.40	171.59	1:9.05	1:1.94	1:4.66
Kalimpong	2996	1376.36	6	407429	2792 (6.25)	241 (4.58)	3033	145.93	296.02	1:11.59	1:2.02	1:5.70
Mirik	5148.663	2303.43	10	1535339	6039 (13.52)	750 (14.26)	6789	254.24	666.54	1:8.05	1:2.62	1:3.07
Total	47460.56	20441.04	87	5565281	44656 (100.00)	5258 (100.00)	49914	124.63	272.26	1:8.49	1:2.18	1:3.89

[Note: Labour productivity is calculated by dividing total production by no. of labourers. Production per unit of land is calculated by dividing production of area. Labour and staff ratio is calculated by dividing no. of labourers by no of staff. Land labour ratio is calculated by dividing no. of labourers by plantation area. Land and staff ratio is calculated by dividing plantation area by no. of staff.]

Source: Computed from the data collected from Trade Union Office and DTA, Darjeeling, Dec 2020

2. 12 Conclusion

In the foregoing discussion, it can be summarized that there has been a shift in tea economy during 1990s in North and North-East India. A sizable proportion of area and production is being contributed by the Small Tea Growers popularly known as Unorganised Sector. The per kg unit price of tea has been declined during 2000-2007 in the domestic and export prices. This has also affected the tea industry and it coincides with the closure of tea gardens in major tea producing states of India and as many as 118 gardens were closed during the year 2000-2004. A writ petition was also filed before the Hon'ble Supreme Court of India which consequently given the judgement and an order in April 2018. The implementing and monitoring agency like Tea Board of India and the States of Assam, West Bengal, Tamil Nadu and Kerala were instructed to comply such order and asked for interim compensation. Yet it is found that there have been inadequate measures on the part of Tea Board of India as well as State Governments. Consequently, this resulted in continuity of closure of tea gardens across states. The State of West Bengal is having highest numbers of gardens closed and the same is being continuing till date despite orders of the highest court of the country. In the following chapter, the three closed tea gardens of Darjeeling Hills i.e., namely *Dooteriah*, *Kalej Valley* and *Peshok Tea Garden* which has displaced 2568 labourers from their regular employment since 2015. This has adversely affected the labouring community. Out of 118 closed gardens in India which affected 68442 labourers collectively, 53 gardens were closed in West Bengal alone impacting 43590 labourers. The condition of the workers was miserable and reports of deaths and suicide were captured in media too. There is lack of proper implementation of the regulatory orders and laws due to which the process of closure of tea gardens is ongoing.

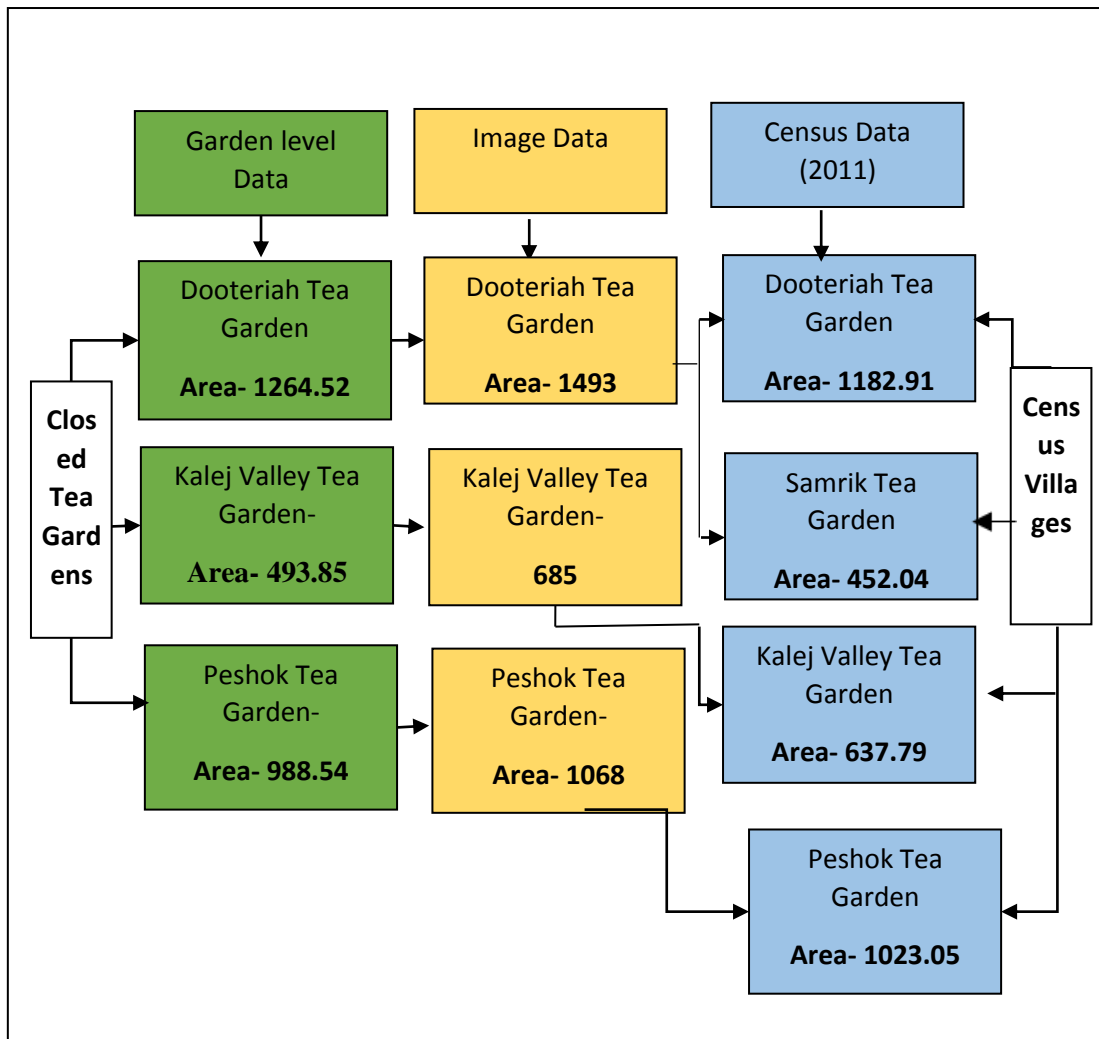
Chapter-3

Geo-Environmental Settings of the Closed Tea Gardens

3.1 Land Resources in Closed Tea Gardens

Land is an essential resource in any production process. The availability of land, labour, capital and institutions plan is an important role in locating an industry and Darjeeling tea industry is not an exception. The tea industry started during British period in India with the availability of abundance of waste land followed by cheap labour brought from Chotanagpur plateau and adjoining areas. In the present study, the availability and utilization of land resources in three closed tea gardens investigated through three sources: Garden level data, Image data and data from Census of India (2011). As per the Garden level data gathered from their offices during field survey, the grant area of Dooteriah tea garden is 1264.52 hectares, 493.85 hectares in Kalej Valley and 988.54 hectares in Peshok. While analysing image data, the area of Dooteriah tea garden is covered up to 1493 hectares. It may be due to addition of Samrik Tea Garden in later period. The Dooteriah Tea Garden has four geographic divisions, they are *Dooteriah*, *Balasan*, *Tong Sung* and *Sumripani*. As per the interaction of the manager and available sources, *Sumripani* (Samrik Tea Garden) was a separate garden and had a factory of its own but later on in 1900, it was merged with Dooteriah Tea Garden. The area of Kalej Valley is 685 hectares and Peshok is 1068 hectares as per image analysis. All the three gardens are situated and spread over four Census villages in Darjeeling hills and the area of Dooteriah village is 1182.91 hectares and Samrik is 452.04 hectares while Kalej Valley is having 637.79 hectares and Peshok is with 1023 hectares (Census of India, 2011).

Figure- 3.1: Catchment of Closed Tea Garden in Darjeeling Hills



3.2 Types and Pattern of Settlements in Closed Tea Gardens

The settlement area in these closed tea gardens is mainly developed near the plantation areas and the roadways. In the Closed Tea Gardens hamlets have developed basically in clustered and linear patterns. The households are located in close proximity having same cultural backgrounds and economic conditions. Besides due to road network, gentle sloping and services of health centre, primary schools and panchayat office plays major role of such type of settlements. The hamlet is mainly separated with small jungles and streams. These hamlets are named after the

communities or social groups found in the region (Tamang Goan), depending on the local language they speak, based on their location (Bich Gaon), as per location of specific public structure (Gumba Dara) etc.

The Dooteriah Tea Garden has four geographic divisions, they are Dooteriah, Balasun, Tong sung and Sumripani. As per the sources earlier Sumripani was a separate garden and had a factory of its own but later in 1900, it was merged with Dooteriah Tea Garden. The tea area ranges from lowest altitude of 2600 ft to as high as 5600 ft as per the information from the field. The factory of the garden is located in Tungsung Division (Tungsung means cluster of Bamboos in Lepcha Dialect). Balasun is one of the smallest Division of Dooteriah Tea Garden. The total number of hamlets in Dooteriah is 37 including the hamlets of the all the four division as per table 3.1. The settlements are mainly found in area having 10° - 20° slope. Similarly, Kalej Valley has two division, they are Upper Division known as Kalej Valley and the Lower Division known as Milling. The total number of hamlets is 10 and the hamlets are located mainly between 20° - 30° slope. Peshok Tea Garden also has two division upper division and lower division and it has 17 numbers of hamlets. The maximum hamlets are located in between 10° - 20° slope and they are also found at 20-30 (degree slope).

Table- 3.1: Local Geographic Conditions in the Closed Tea Garden

Items	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden
No. of Divisions	4	2	2
No. of Hamlets	37	10	17
Name of Divisions	Dooteriah, Sumripani, Tungsung and Balason	Kalej Valley Upper Division and Miling Lower Division	Garlang Upper Division and Lower Division
Names of Hamlets	<p>Dooteriah: <i>Solaikar Goan, Khaituri Goan, Sukrabare Goan, Munshi Goan, Bari Goan, Office Goan, Neej Goan, Pandhuray, Mangar Goan, Gumba Goan</i></p> <p>Tung sung: <i>Paila Gaon, Dara Gaon, Gairi Gaon, Kirkit Gaon, Pandhra Aker, Rani Ban, Char number. Gaon, Lila Dara, Ek Number Goan, Dui Number Goan, Pach Dhure, Gudam Gaon, Tin (3) No. Gaon</i></p> <p>Balason: <i>Pul Goan, Ganti Line, Zumla Goan, Pandhra Line, Upper Pandhra Line, Batasai Goan</i></p> <p>Samrik: <i>Bich Goan, Naw Number Goan, Pandhra Number Goan, Satra Number Goan, Cha Number Goan, Das Number Goan, Chawda Number Goan, Char Number Goan</i></p>	<p>Upper: <i>Office Gaon, Mandir Gaon, Pandhuray, Bich Gaon</i></p> <p>Lower: <i>Dara Gaon, Gairi Gaon, Bich Gaon, Okhora, Lamba Gaon, Gurung Gaon</i></p>	<p>Upper: <i>Garlang, Mini Village, Rakti Villa, Mangar Gaon, Dak Fatak, Chapleti, Gumba Dara</i></p> <p>Lower: <i>Dak Bungla, Forest Busti, Goat Goan, 8 No. Kothi Dara, Gurung Gaon, Gaja Bari, Gairi Gaon, Himali Gaon, Bhatti Dara, Pankhare/Punkhare Gaon, Mane Dara, Satraman Dhura, Dong Busti.</i></p>
Altitude (MSL)	827 meters (Min)-1848 meters (Max)	961 meters (Min) – 2126 meters (Max)	366 meters (Min) – 1679 meters (Max)
Slope Variations	10 ⁰ (Lowest) - 30 ⁰ (Highest)	10 ⁰ (Lowest) - 30 ⁰ (Highest)	10 ⁰ (Lowest) - 30 ⁰ (Highest)
Location of Settlements	10 ⁰ (Lowest) - 30 ⁰ (Highest)	20 ⁰ (Lowest) - 30 ⁰ (Highest)	10 ⁰ (Lowest) - 30 ⁰ (Highest)

Plate A: Settlements



Dooteriah Tea Garden



Kalej Valley Tea Garden



Peshok Tea Garden

Source: Field Survey, Oct-Nov 2020

3.3 Population Composition

Table- 3.2 highlights the population characteristics of the closed tea garden of two decades i.e., 2001 and 2011. It depicts that the total number of households, total population total literacy etc. has increased gradually since 2001 to 2011. As calculated from the data the total number of households increased is 170 in Dooteriah and Samrik, in Kalej Valley tea garden 66 number of households had increased and 128 number of households had increased in Peshok tea garden during that decade. Moreover, the hike in population share of ST category can be seen in from 2001-11 compared to the total growth of population. This is due to some changes in the enumeration of schedule tribes in the states/union territories during the last decade (Ministry of Tribal affairs, 2013).

As per the Census of India, 2011 the percentage of female population is more in Peshok tea garden whereas, in Dooteriah, Samrik and Kalej valley the percentage of male and female is almost fifty percent. This has resulted to more female workforce in closed tea gardens and as a result women labourer condition is worse as compare to male counterpart due to the closure of the garden (refer table 3.2). The composition of ST and SC population is around 30 percent and six percent. There is a literacy gap of female population and they are lagging behind of 10⁰ -15⁰ percent. After the closure of the garden there is increase in number of schools drop-outs. Roy et.al (2018) highlighted that in the closed tea gardens the education of the children of the labourers have been adversely affected, partially for the youths the dropping out from education has become the common tactic to back up their household and avoid starvation. The parents are enforced to send their children outside to the nearby towns to work which is similar in the closed tea gardens of Darjeeling Hills.

Table- 3.2: Population Compositions of Closed Tea Gardens

Name	No. of household		Male Population		Female Population		Total Population		SC Population		ST Population		Male Literacy		Female Literacy		Total Literacy	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
Dooteriah and Samrik	1423	1593	3215 (50.42)	3567 (51.03)	3152 (49.43)	3422 (48.96)	6376	6989	393 (6.16)	428 (6.12)	207 (3.24)	1878 (26.64)	2526 (58.90)	2721 (53.94)	1762 (41.09)	2323 (46.05)	4288 (65.83)	5044 (70.66)
Kalej Valley	530	596	1212 (48.83)	1311 (49.66)	1216 (48.99)	1329 (50.34)	2482	2640	183 (7.37)	207 (3.24)	16 (0.64)	741 (28.06)	853 (33.64)	1058 (57.31)	606 (41.53)	788 (42.68)	1459 (58.79)	1846 (69.92)
Peshok	782	910	1741 (49.51)	2040 (48.57)	1801 (50.85)	2160 (51.43)	3542	4200	115 (3.24)	100 (2.38)	67 (1.89)	1556 (27.52)	1122 (31.67)	1552 (55.09)	817 (42.13)	1256 (44.58)	1939 (54.74)	2817 (67.07)

Source: Computed from Census of India, 2001 and 2011

3.4 Workforce Distribution in the Villages under the Closed Tea Gardens

As evident in table-4, the percentage of total workforce out of total population is 33 percent in Dooteriah and Samrik, 45.11 percent in Kalej Valley and 36.45 percent in Peshok. As per Census of India definition “other work” is relating to place of work, nature of industry, trade etc. therefore this region is tea garden area, the other workers represent the tea garden workers. Thus, the percentage of cultivators, agricultural labourers and household industrial workers is very low within the category of main workers and the percentage of other workers is relatively high i.e., 98 percent in Dooteriah and Samrik, 99 percent in Kalej Valley 99 percent and 89.99 percent in Peshok Tea Garden. Besides, the percentage share of female labourers is more than male in the category of other workers which indicates that the number of female labourers is more. In terms of marginal workers out of the total work force the percentage share of female is low compared to male. Thus, a large number of workforces in the region are dependent on the tea garden. The closure of the garden has affected a large number of labourers and their families as the percentage of non-workers (dependents) are also high in these closed gardens i. e., 62 percent in Dooteriah and Samrik, 55 percent in Kalej Valley and 63 percent in Peshok tea garden. Besides the percentage of female non-workers are more in all the three gardens i.e., 72 percent in Dooteriah and Samrik, 60 percent in Kalej Valley and 71 percent in Peshok signifying that there is a greater number of female dependents in these Closed Tea Gardens.

Table- 3.3: Workforce Distribution in Closed Tea Gardens

Types of Work Force		Dooteriah and Samrik			Kallej Valley			Peshok		
		Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total	Male (%)	Female (%)	Total (%)
Main workers	Cultivator	28 (2.38)	6 (0.64)	34 (1.61)	1 (0.24)	-	1 (0.12)	44 (8.15)	15 (3.04)	59 (5.84)
	Agricultural Labourer	2 (0.17)	3 (0.32)	5 (0.23)	2 (0.48)	1 (0.27)	3 (0.38)	13 (2.51)	3 (0.60)	16 (1.58)
	Household Industries	6 (0.51)	1 (0.10)	7 (0.33)	7 (1.69)	-	7 (0.89)	19 (3.67)	7 (1.42)	26 (2.57)
	Other Workers	1140 (96.93)	921 (98.92)	2061 (97.71)	403 (97.57)	369 (99.72)	772 (98.59)	441 (85.29)	467 (94.91)	908 (89.99)
	Sub-total	1176 (87.11)	931 (96.57)	2107 (91.05)	413 (62.10)	370 (70.34)	783 (65.74)	517 (57.50)	492 (77.35)	1009 (65.73)
Marginal		174 (12.88)	33 (3.42)	207 (8.94)	252 (37.89)	156 (29.65)	408 (34.25)	382 (42.49)	144 (22.64)	526 (34.26)
Total Workers		1350 (37.84)	964 (28.17)	2314 (33.10)	665 (50.72)	526 (39.57)	1191 (45.11)	899 (44.06)	636 (29.44)	1535 (36.54)
Non-Workers		2217 (62.15)	2458 (71.82)	4675 (66.89)	646 (49.27)	803 (60.42)	1449 (54.88)	1141 (55.93)	1524 (70.55)	2665 (63.45)
Total Population		3567	3422	6989	1311	1329	2640	2040	2160	4200

Source: Computed from Census of India, 2011

3.5 Land use and Plantations in Closed Tea Garden

In all the three closed gardens the land resources are provided by the Government on lease for a period of 30 years or in some cases 100 years on an annual rent of Rs. 30/ hectare. The grant area of land in the tea gardens area are 1265.1-hectare, 494.75 hectare and 988.64 hectare in Dooteriah, Kalej Valley and Peshok respectively. The grant area to the tea gardens may be divided into two groups. One may be considered as essential requirement of land to run a tea garden like tea planted area, factory area, labour and staff quarters, land under roads and connectivity within tea garden etc. The other group consisting jhora, forest, fallow land, grave yards may be considered as additional or extra land and without which the tea garden can be managed as commercial enterprise and business activity. Therefore, a close introspection of garden management and land use within closed tea gardens is necessary which has circumstantial relations with the labourers and labouring conditions. Ideally, in a running garden the labouring households do not face much crisis for their survival and sustaining livelihoods. But when a tea garden is closed and the labourers are out of job to gain their day-to-day earnings and food security, the additional land or extra land play an important role for deriving livelihoods. In this context the land which are not directly in use by the closed tea estate brings a debate of redistribution and social justice. In light of that if all the three gardens are viewed having a comparative picture of land use under direct use by the tea garden and not used by the tea garden need reimagination of land granting policies of the government of West Bengal and the regulatory bodies like Tea Board under the Tea Act, 1953 and the Plantation Labour Act, 1951.

The table-3.4 validates the distribution of land use in three closed tea gardens under six sub themes. It is found that the plantation area is less than 50 percent of the total

leased land i.e., 35 percent in Dooteriah, 48 percent in Kalej Valley and 32 percent in Peshok. It is apparent that after the total plantation area the second largest area is covered up by the factors like jhoras, fallow, forest, thatch, land slip and vested land i.e., 30 percent in Dooteriah, 23 percent in Kalej Valley and 25 percent in Peshok Tea Garden. The land use pattern developed in these gardens is shaped by the slope and elevation of the region.

Table- 3.4: Land Resources and Land Use Pattern in Closed Tea Gardens

Items	Land Class	Dooteriah (1986)		Kalej Valley (1986)		Peshok (1976)	
		Area (ha)	(%) Share	Area (ha)	(%) Share	Area (ha)	% (Share)
Plantation Associated Activity	Tea	444.94	35.19	235.56	47.51	314.70	31.83
	Cardamum	126.31	9.99	-	-	-	-
	Bamboo	46.52	3.68	-	-	-	-
	Labour Line/Busti	169.16	13.38	47.45	9.57	-	-
	Roads	22.38	1.77	-	-	-	-
	Village Land			-	-	422.65	42.75
Other than Plantations	Jhoras	18.25	1.44	-	-	-	-
	Forest	139.79	11.05	-	-	-	-
	Jungle	78.20	6.18	100.84	20.34	-	-
	Fallow, Dang & Khet Land	152.84	12.09	-	-	-	-
	Grave Yard	0.05	0.00	-	-	-	-
	Thatch	38.30	3.03	-	-	-	-
	Land Slip	27.78	2.20	-	-	-	-
	Others (Waste Land, Jhoras)	-	-	111.90	22.57	-	-
	Vested Land (Jungles)	-	-	-	-	251.19	25.41
Total Grant Area	1264.52	100.00	495.75	100.00	988.54	100.00	

Data Source: Dooteriah Tea Garden (1986), Kalej Valley Tea Garden (1986) and Peshok Tea Garden (1976).

[Note: The demarcation of the areas in the tea gardens was done when the gardens came into existence i.e., before independence and it was formalised after independence (Darjeeling Tea Association, Feb 2021)]

3.6 Dooteriah Tea Garden

3.6.1 Elevation, Slope and Aspect

The elevation of Dooteriah is moreover hilly. The elevation of the garden varies from 827 to 1848 meter high (see figure- 3.2). The higher elevation is mainly covered by forest. The tea plantations are mainly found in low elevation. Thus, the forest areas at these elevations are mainly cleared for tea plantations and settlements. The slope of the garden varies between less than 10° to above 30° slope. The plantation areas are mainly found in between 10° to 30° slope and the forest cover is found at above 30° slope (refer figure- 3.3). The maximum area of Dooteriah tea garden has slope ranging between 10° to 30° slope. Due to the stiff slope opening a large industry in the region a challenge. The roads are found in lower elevation areas. The aspect of the slope face in all the directions i.e., northeast, north, east, northeast, southwest, southwest, south and west (refer figure- 3.4).

3.6.2 Land Use and Land cover

The land use and land cover of Dooteriah is covered mostly with forest and plantation areas. The main land use land cover detected in the region is forest, plantation area, settlement areas, heliport, rivers and roads (refer figure-3.5). As per the image data the plantation areas cover only 29 percent Dooteriah Tea Garden i.e., less than 50 percent of the total lease land. Forest area and others i.e., jhoras, agricultural lands, fallow lands, jungles etc cover 69 percent of the area, settlement cover 1.34 percent and the helipad cover 0.2 percent area of the garden (refer table 3.5). As the garden is closed from 2015, the bushes of the tea have grown tall and turned into small jungle in the areas having plantations which has led to the increase in wild attacks in farm lands of the labourers. Besides it has also led to the minimisation of the plantation

area and posing challenges to the reopening of the garden. The neighbouring gardens of Dooteriah is Kalej Valley and Pussimbeng Tea Garden. Large number of streams (jhoras) are flowing through the garden, which ends up joining the Balason river. The streams and springs form the main source of drinking water in these tea gardens. They are used for drinking, domestic purposes and other use by the garden community including for irrigation, agriculture etc.

3.6.3 Drainage and Sources of Drinking Water

The drainage system mostly found and observed in the households was open kutchra. In Dooteriah tea garden 57 percent of the labourers are dependent on spring/stream, 4 percent are dependent on PHE department, only 1 percent are dependent on the water supply by the garden and 26 percent labourers are dependent on the other sources like water supply by NGOs, Panchayat etc as the source of drinking water. Remaining 10 percent of labourers have no proper source of Drinking water. They are basically dependent on the neighbouring households for the supply of drinking water. As per interaction with the labourers of “Dara Goan” they said that their source of water was destroyed by the landslide so they have no water supply now. Whereas in Munshi Goan, the labourer has one source of water for one hamlet which includes 6-7 households. They face water crisis during winters when the water of the spring dries up. The names of the water source are Dhan Bari, Nal Khola, Thal Jhora, Dharen, five number Dhara, Naag Dhara etc. Thus, the provisions of Plantation Labour Act, 1951 for the drinking water facilities to all the labourers is totally absent in this garden. In the tea gardens the labourers themselves have constructed small tanks at water source with the help of NGO’s.

Plate B- Drinking water and Sanitation

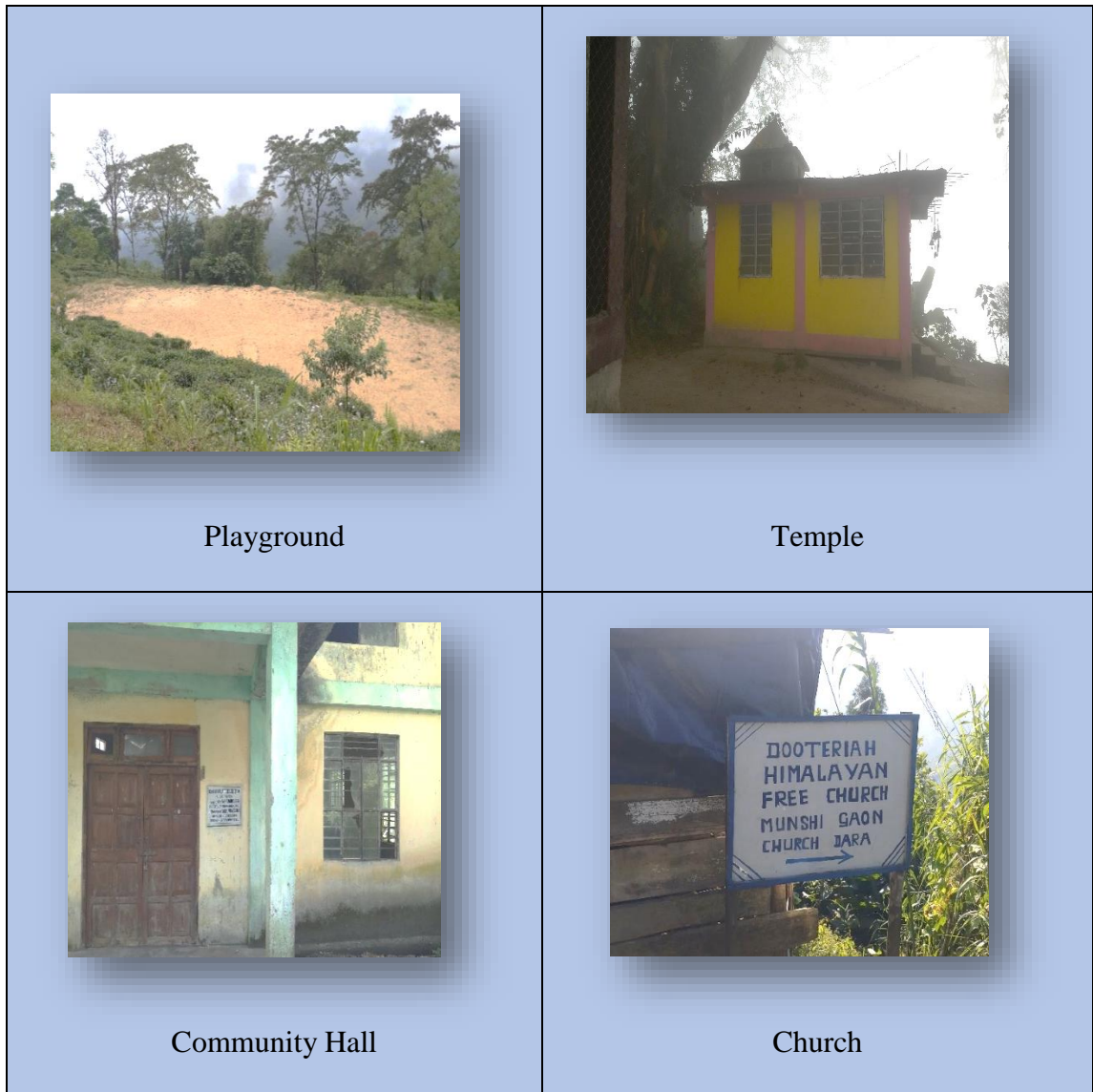


Source: Field Survey, Oct-Nov 2020

3.6.4 Village commons

The Dooteriah Tea garden have common structures like community hall, playground, factory, school, temple, panchayat office, monastery, church etc. Various sports, community festivals, cultural programme etc. are conducted in the playgrounds annually and during festivals like Dussehra and Diwali. It is mainly organised by the youth and locals of the area under different clubs like #Darjeeling, Friends Group etc.

Plate C: Village Commons



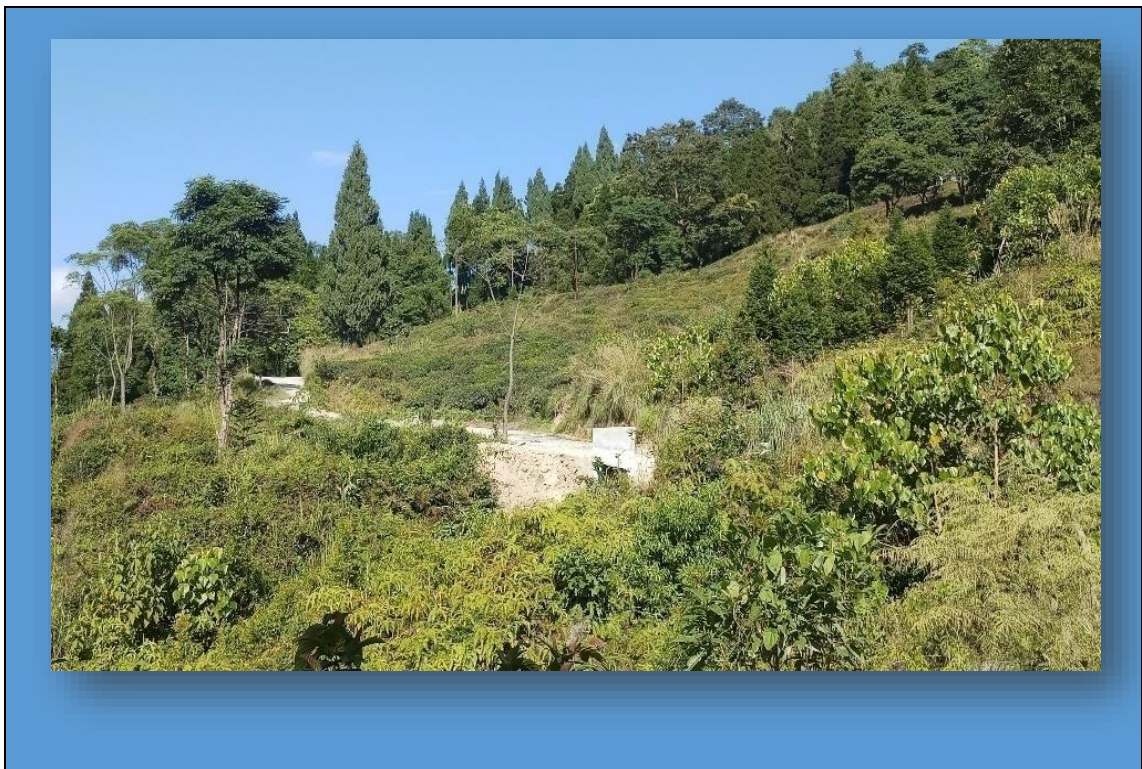
Source: Field Survey, Oct-Nov 2020

3.6.5 Forest Resources and Land Holdings

Types of forest resources available for the labourers are mainly firewood, fodder grasses, fruits, medicines etc. The labourers of the gardens are largely dependent on forest for the firewood collection for cooking purpose. The local trees found in the gardens are *Dhupi (Pine)*, *Katus (Chesnut)*, *Malingo (small bamboos)*, *Oaks*, *Maples* etc.

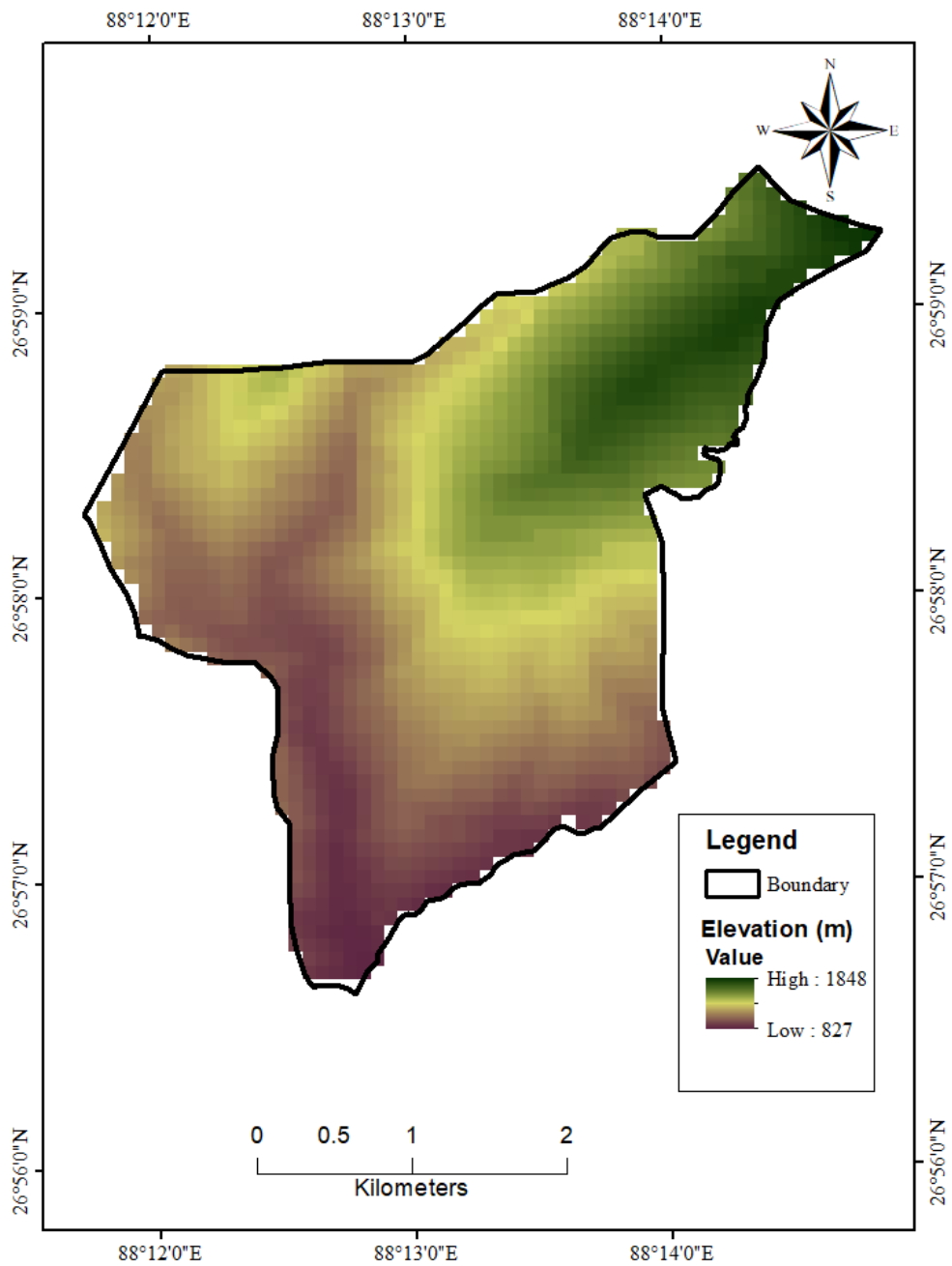
As per the survey the land occupied by the labourers are cultivable and they cultivate seasonal crops and vegetables which are mainly for self-consumption like maize, lentils, radish, peas, beans, cardamom, coriander etc. About 88 percent of the respondents have additional lands along with their homestead land. The average farm size of the labourers is 0.21 hectares in Dooteriah Tea Garden. Out of the total respondents, 12 percent of labourers do not possess any additional land due to which they are unable to opt for any alternative like farming, rearing animals etc making their condition more vulnerable.

Plate D: Dooteriah Tea Garden



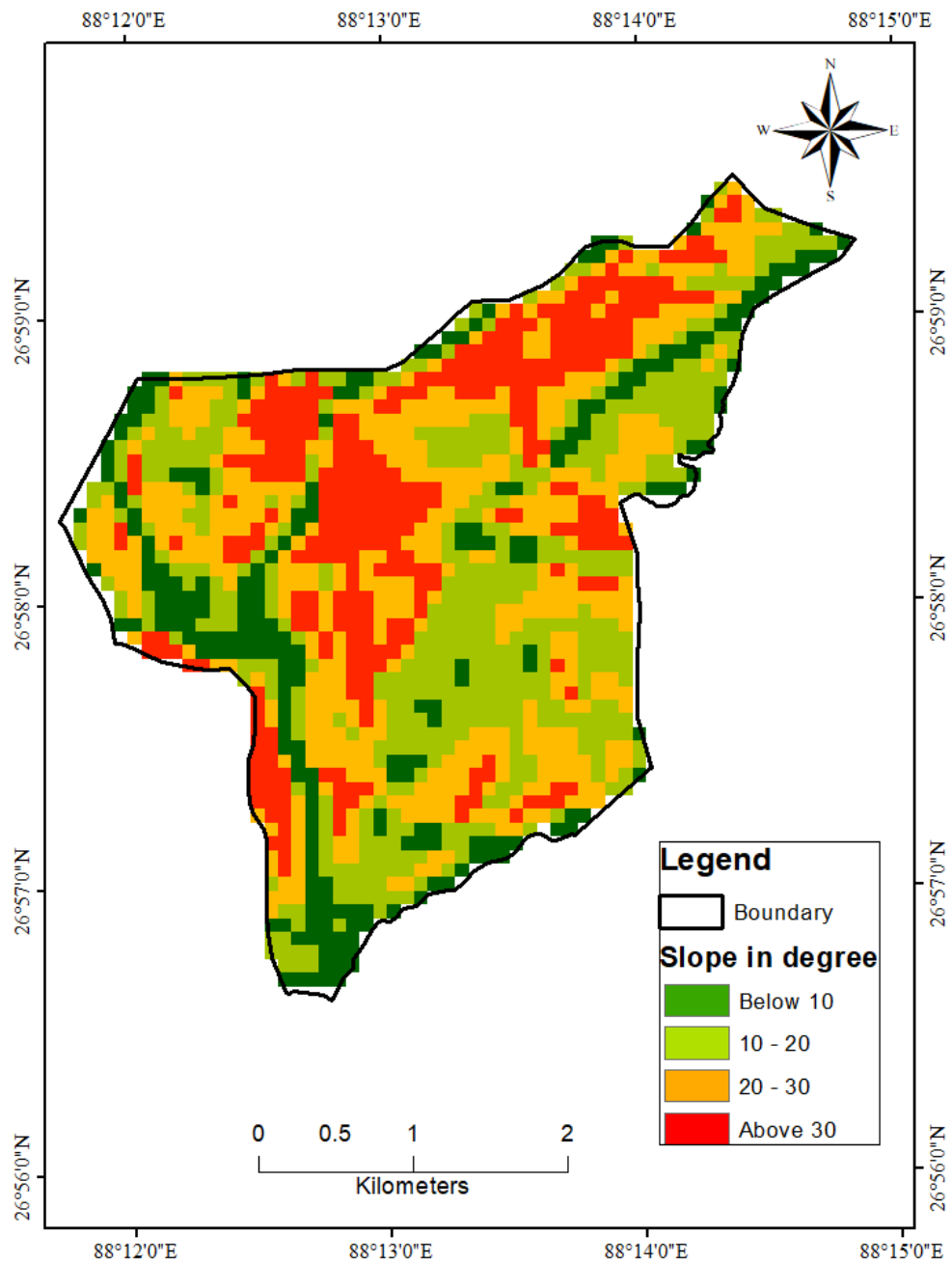
Source: Field Survey, Oct-Nov 2020

Figure- 3.2: Elevation of Dooteriah Tea Garden



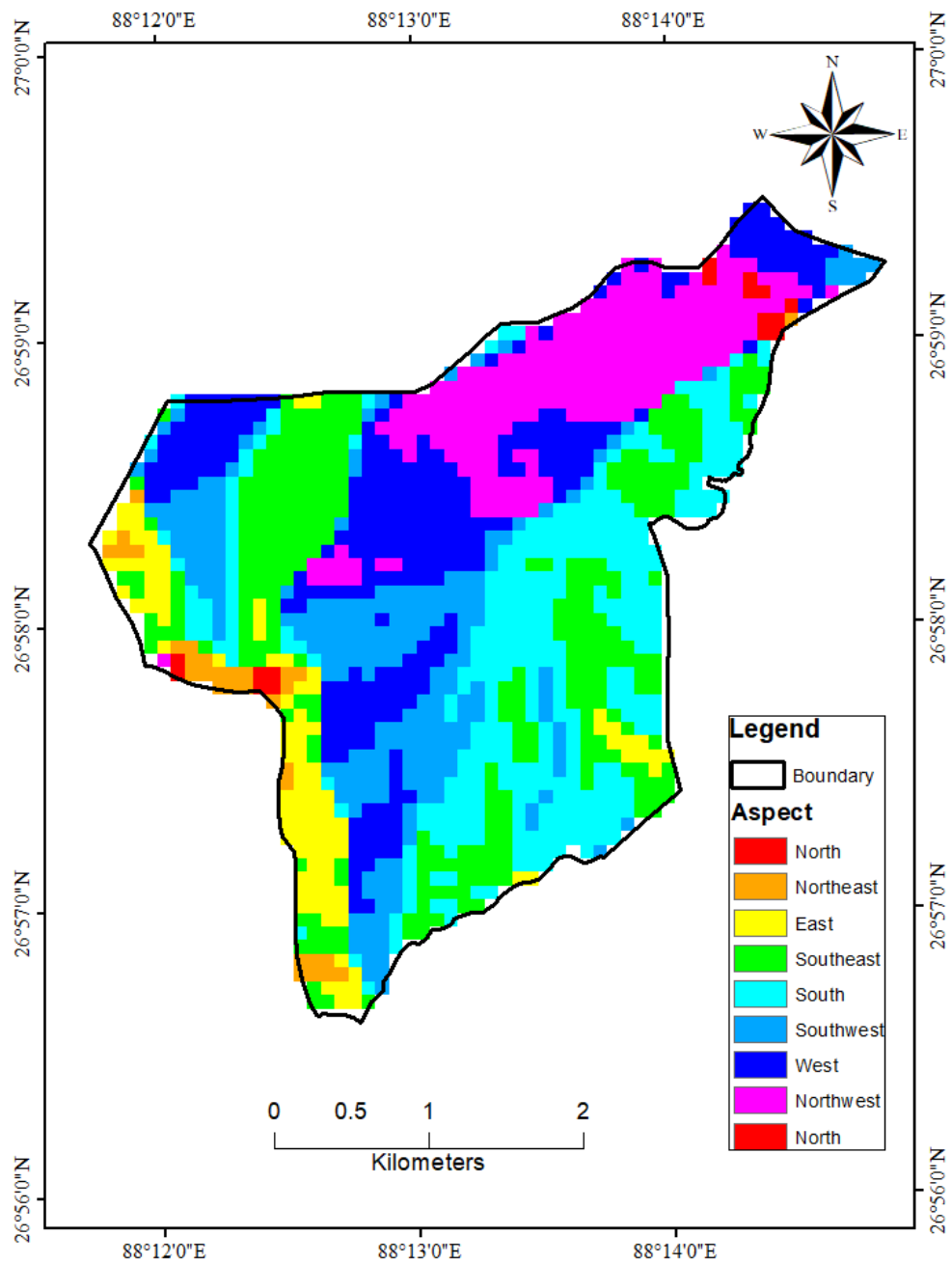
Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.3: Slope of Dooteriah Tea Garden



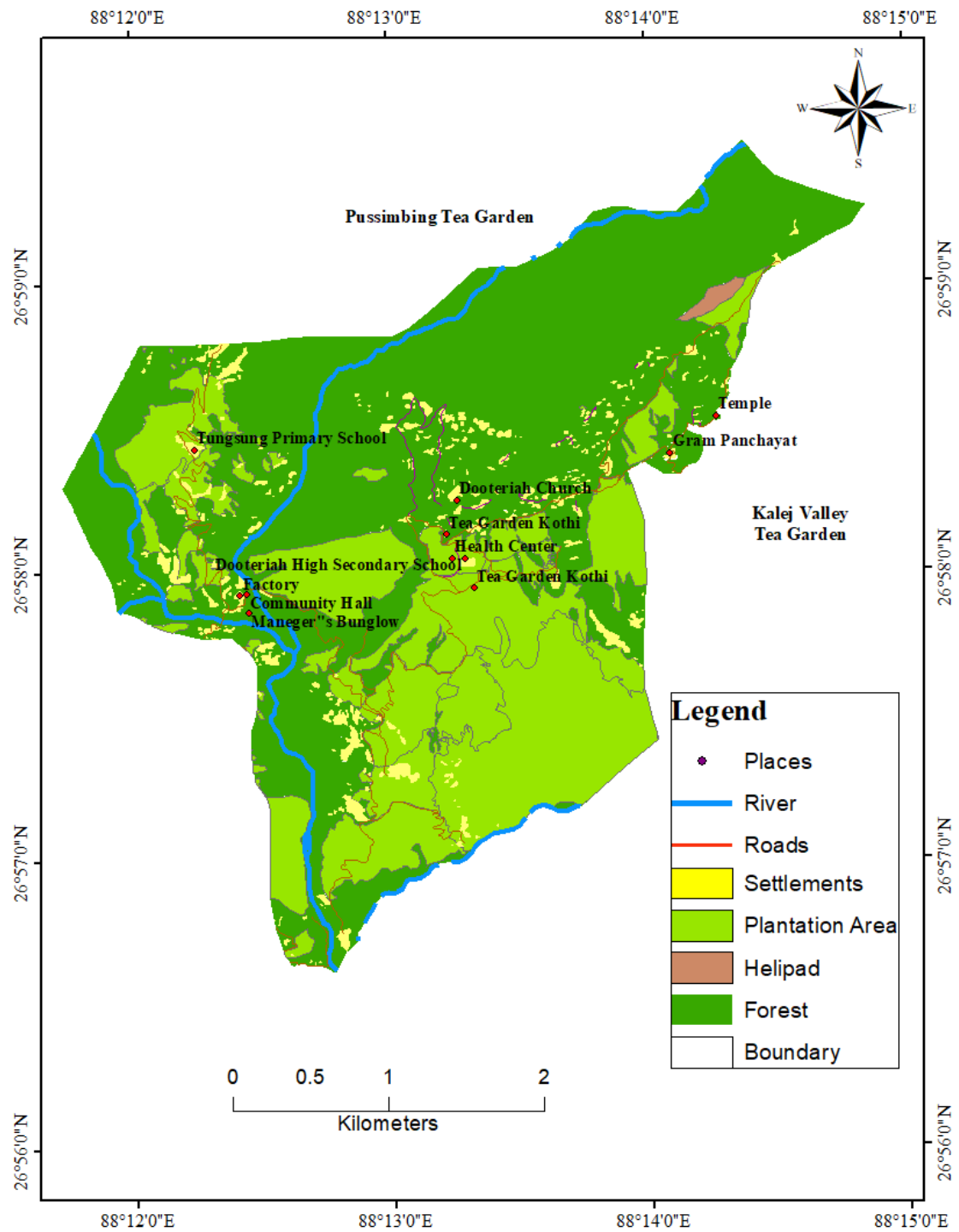
Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.4: Aspect of Dooteriah Tea garden



Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.5: LULC of Dooteriah Tea Garden



Source: ESRI, Digital Globe, GeoEye, Earth Star Geographies, CNES/Aibus DS, USDA, AeroGRID, IGN and GIS User Community (14 Nov, 2019) and Google Earth Imageries (14 Nov, 2019), Accessed on Dec 2020.

3.7 Kalej Valley Tea Garden

3.7.1 Elevation, Slope and Aspect

The elevation of the garden varies from 961 low - 2126 meter high. The elevation of the Kalej Valley is higher compared to the Dooteriah and Peshok tea garden. The higher elevation is mainly covered by forest area and barren lands. The lower elevation areas are mainly covered with tea plantations (see figure- 3.6). The plantation areas are mainly found in between 10° - 30° slope (see figure-3.7). The maximum area of Kalej Valley tea garden has slope ranging between 20° - 30° slope. The river and roads are mainly found in lower elevation. The slope of the area is facing towards east, south, southeast, southwest and west (refer figure 3.8). The hilly elevations in the region may hinder the growth of any other large industry in the region.

3.7.2 Land Use Land Cover

The main land use land cover detected in Kalej Valley is forest, plantation area, settlement areas, barren lands, quarrying, rivers and roads (see figure-9). The plantation areas cover only 20 percent of the total land as per the image data. The forest and others which includes the jhoras, agricultural lands, thatch etc. covers 55 percent, settlement cover 17 percent, barren lands cover 8 percent of the area. Due to the closure of the garden the under growths and the forest cover has increased which has led to the increase in wild attacks in the farm lands of the labourers in Kalej valley as well. The neighbouring garden of Kalej Valley is Dooteriah and Roogmook or Ceders tea gardens.

3.7.3 Drainage and Sources of drinking Water

The drainage system in Kalej Valley is open and kutchha. Moreover, as per the discussion during FGD and the interactions, the hamlets like Dara Goan, are barely connected with other hamlets due to absence of roads and pathways. They have to cross the drain on the bare foot which is very risky due to slippery stones. As articulated, though there is little improvement in the working condition after independence it is not up to the need of the labourers. The drainage system is poor and mainly during rainy season they face difficulties (Bharali, 2007).

In Kalej Valley, 84 percent of the labourers are dependent on spring/stream, 3 percent are dependent on PHE department, 3 percent are dependent on the water supply by the garden and 6 percent labourers are dependent on the other sources like water supply by NGOs, Panchayat etc as the source of drinking water. As per the interaction maximum number of households of Lamba Goan are dependent on the water supply provide by the NGO, under the scheme “Chai Project”. Out of the total remaining 3 percent of labourers have no proper source of Drinking water. They have arranged untreated source of water for their domestic purpose by themselves and they carry drinking water from other nearby hamlets. Whereas in Bich Goan four to five households have come together and they have arranged one source of drinking water. The sources of the drinking water are Khanchi Dhara, Lamo Dhara, Lamba Gaon etc.

Plate E: Drinking and Sanitation



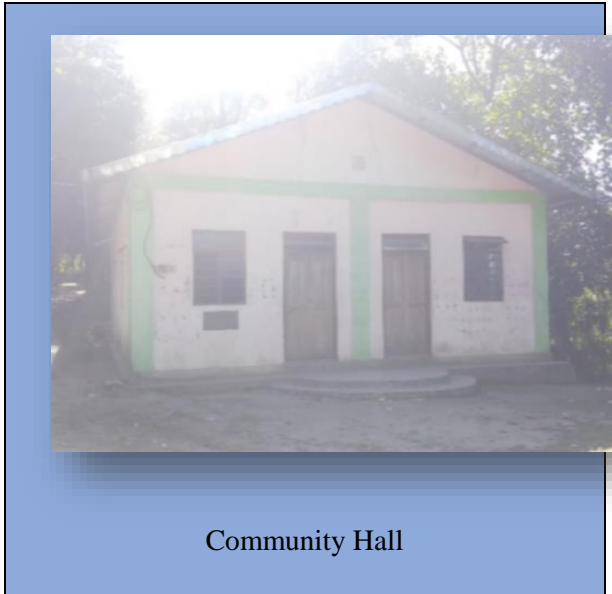
Source: Field Survey, Oct-Nov 2020

3.7.4 Village Commons

The Kalej Valley also have many common structures like library, community hall, playground, factory, primary school, temple etc. In this tea garden various sports, cultural programmes, competitions, puja celebrations are conducted by the youths. They have formed groups and clubs like Nawa Yuwa Sang, Junkeri Youth Club etc. Besides, public meetings, weddings, programmes etc. are also organised in the village or community halls.

Plate F: Village Commons





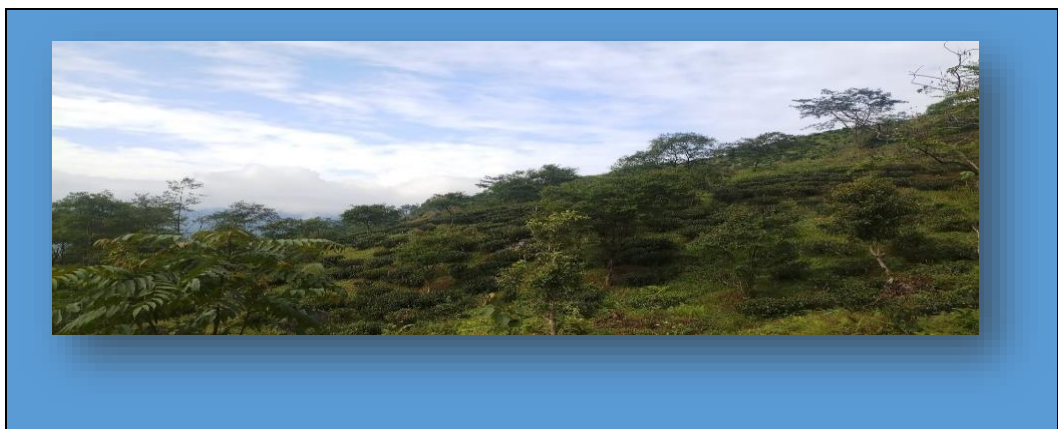
Source: Field Survey, Oct-Nov 2020

3.7.5 Forest Resources and Land Holdings

Types of forest resources available are mainly firewood, fodder grasses, fruits, medicines etc. The labourers of the Closed Tea Gardens are largely dependent on forest for the firewood collection for cooking purpose. The local trees found in the gardens are *Dhupi (Pine)*, *Malingo (small bamboos)*, *Oaks*, *Maples* etc.

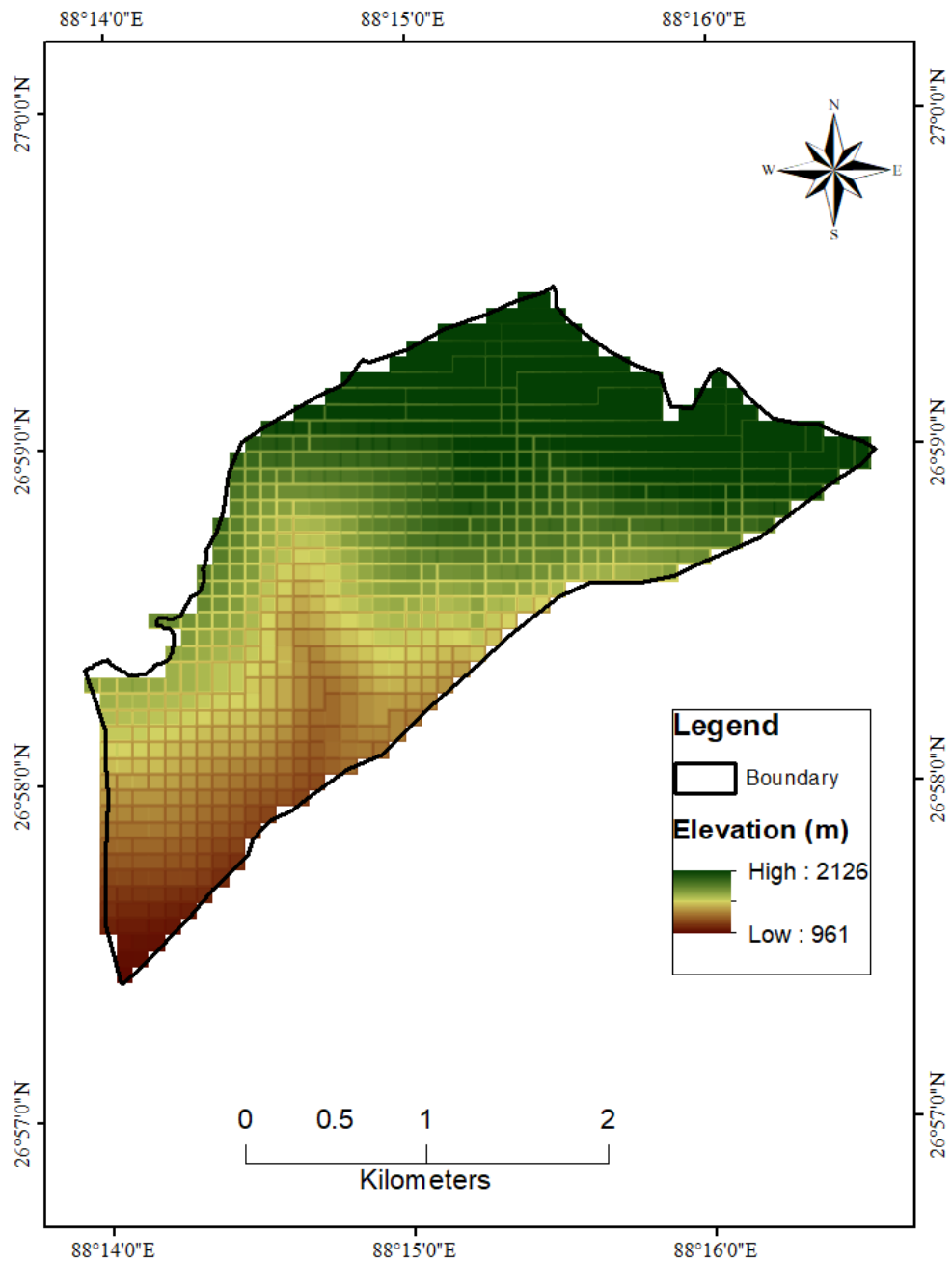
The labourers have small land holding beside homestead land. The average farm size of the labourers is 0.39 hectares. The labourers cultivate seasonal crops like lentils, cabbage, maize, beans, peas etc for self-consumption.

Plate G: Kalej Valley Tea Garden



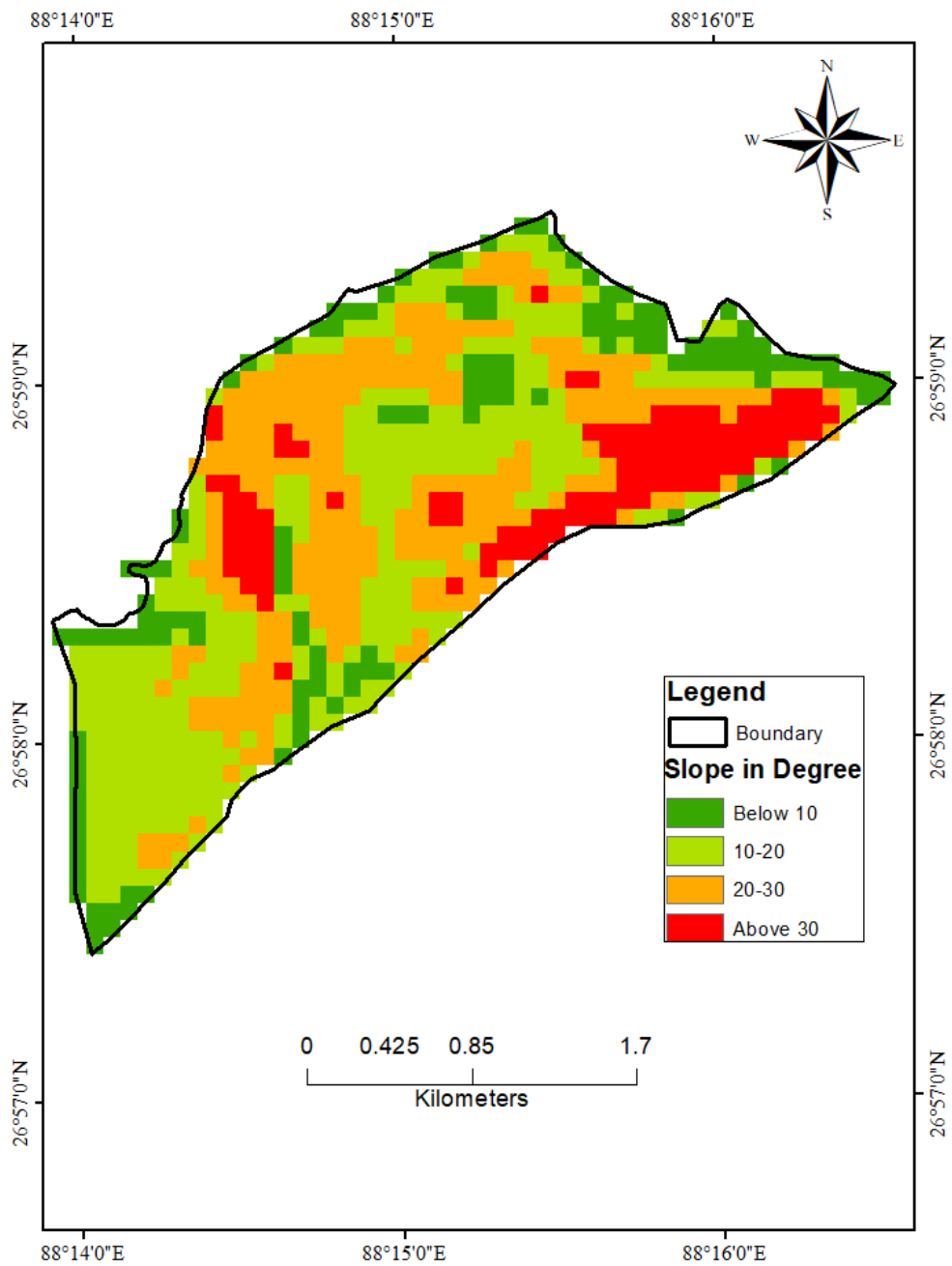
Source: Field Survey, Oct-Nov 2020

Figure- 3.6: Elevation of Kallej Valley Tea Garden



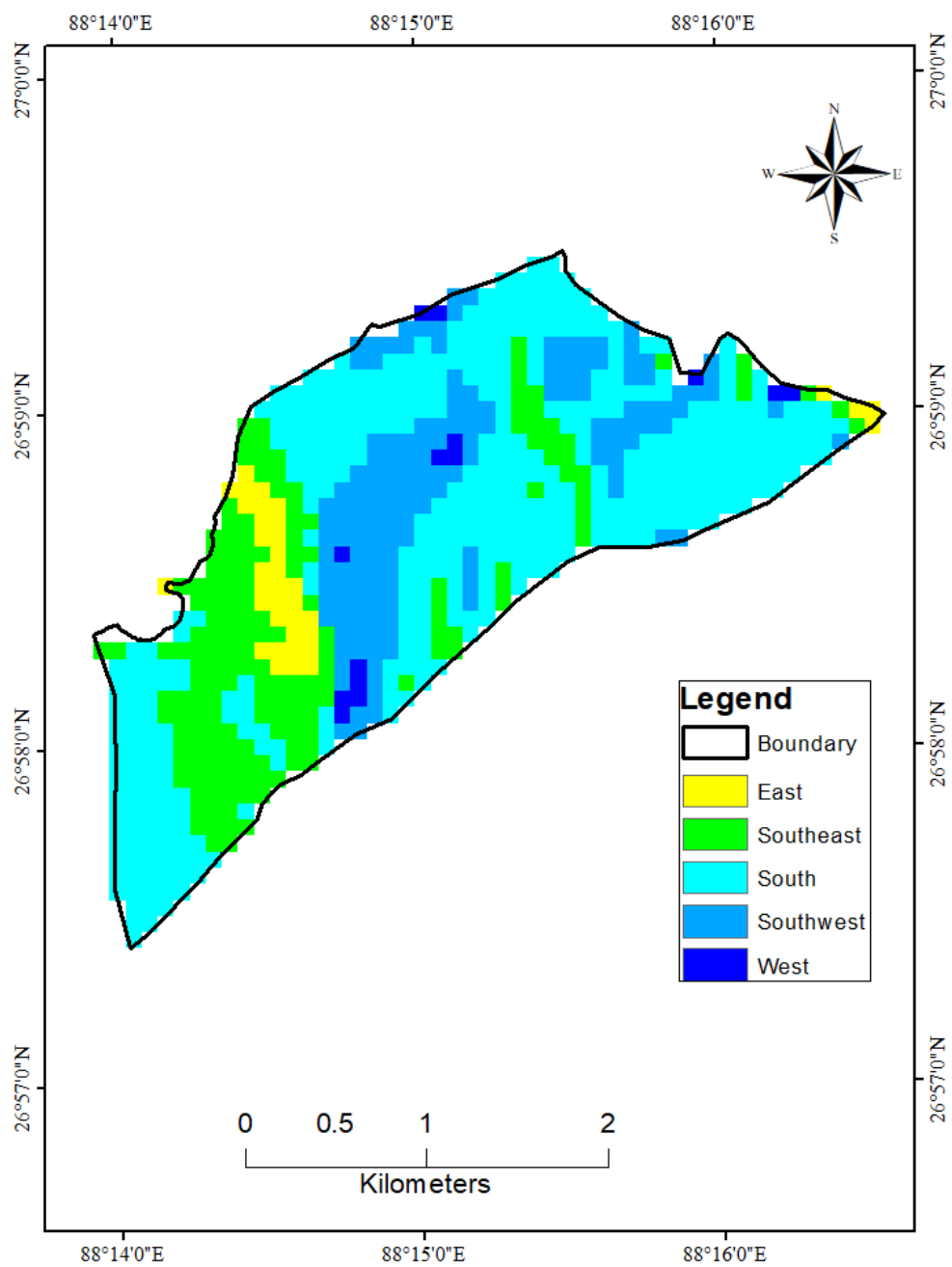
Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure 3.7 Slope of Kalej Valley Tea Garden



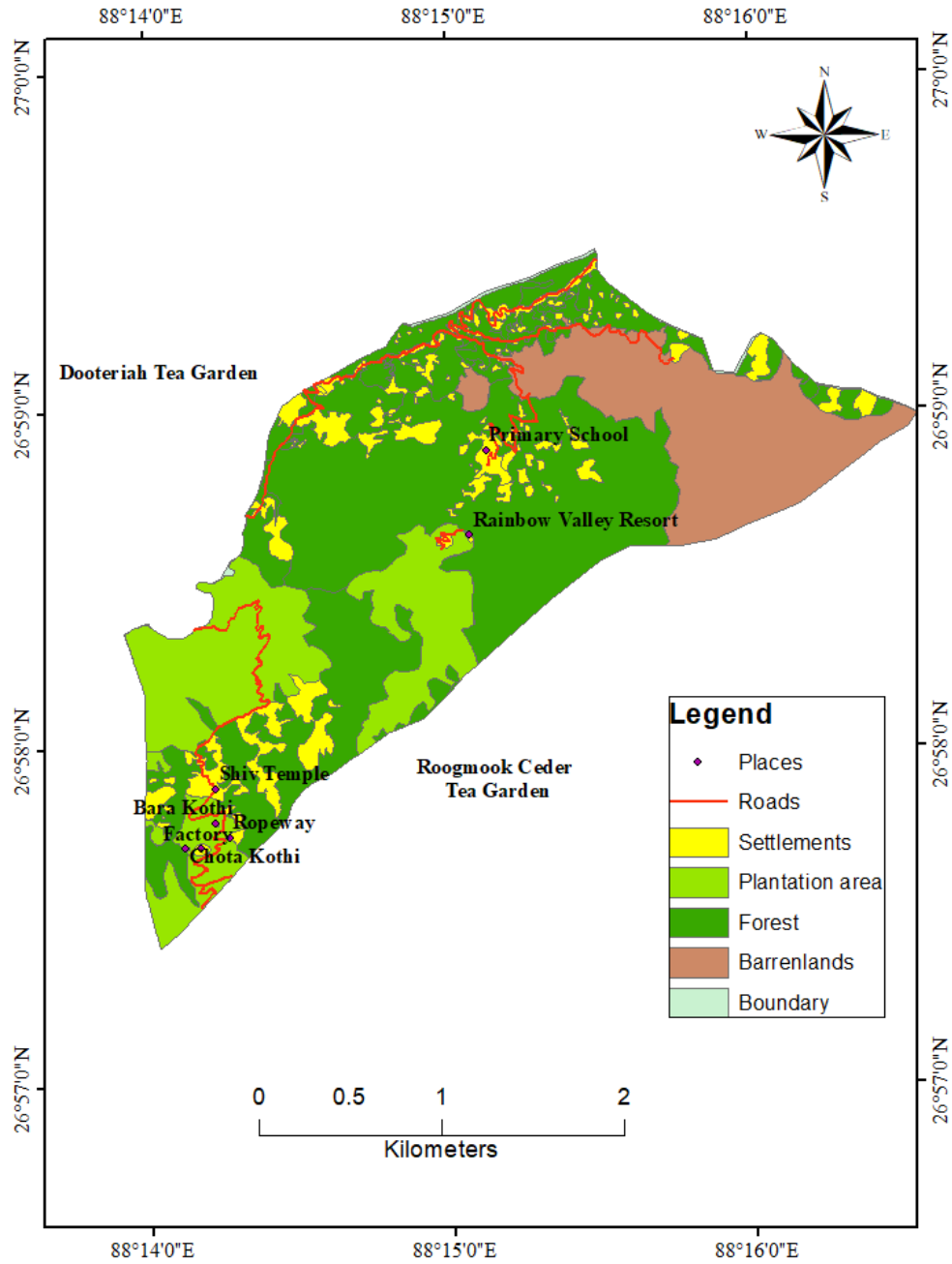
Source: Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure 3.8 Aspect of Kalej Valley Tea Garden



Source: Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure 3.9 Land Use and Land Cover of Kalej Valley Tea Garden



Source: ESRI, Digital Globe, Geo Eye, Earth Star Geographies, CNES/Aibus DS, USDA, AeroGRID, IGN and GIS User Community (14 Nov, 2019) and Google Earth Imageries (14 Nov, 2019), Accessed on Dec 2020.

3.8 Peshok Tea Garden

3.8.1 Elevation, Slope and Aspect

The elevation of the garden varies from 366-meter low to 1679 meter high (see figure-3.10). The elevation of the Peshok is lower compared to the Dooteriah and Kalej Valley tea garden. The higher elevation is mainly covered by forest. The lower elevation areas are mainly covered with tea plantations and settlements (Figure 3.13). The maximum slope of the garden ranges between 20° - 30° (Figure 3.11). The river and roads are found at lower elevation. The slope of the area is facing towards northeast, north, southeast, east, southwest, south, northwest, west and flat (see figure-12). Due to lower slope in this tea garden more agricultural practices are carried out compared to other two closed tea gardens i.e., Dooteriah and Kalej valley as per field observation.

3.8.2 Land Use Land Cover

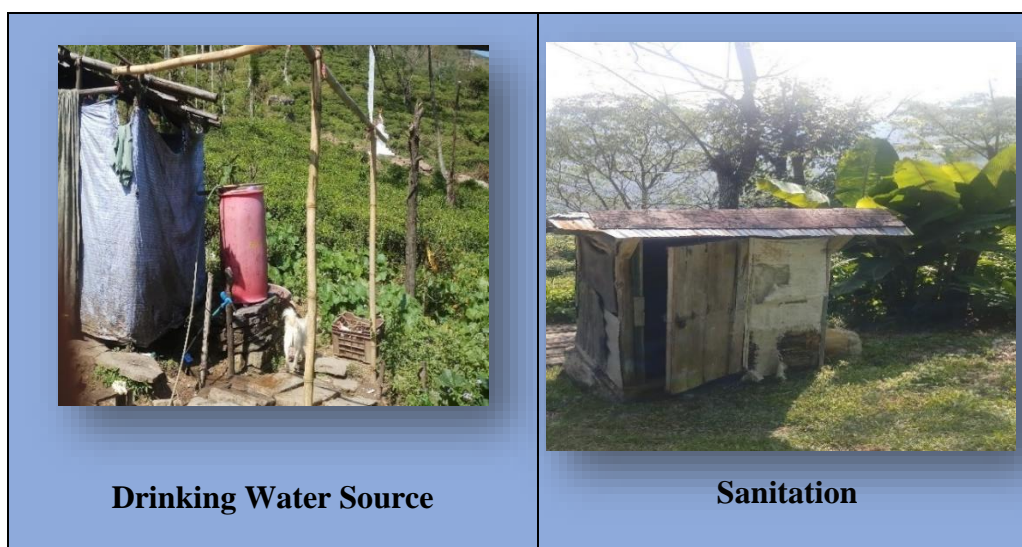
The main land use land cover spotted in the region is forest, plantation area, settlement areas, rivers and roads (refer figure-13). The plantation areas cover less than 50 percent of the total area i.e., 23 percent. The forest and other areas which include agricultural lands, jungle, jhoras etc cover 75 percent area, settlement cover two percent area of the garden. The forest cover has increased in the areas having plantation after the closure of the garden which has led to increase in the wild attacks in the agricultural fields. National Highway 12 runs through Peshok Tea garden area. Lopchu tea garden is neighbourhood garden. At the foothills of the Peshok tea garden there is a confluence of Teesta and Rangeet river as per the field observation.

3.8.3 Drainage and Water Resources

An attempt has been made to analyse the availability of sanitation and drinking water facilities in the closed tea gardens. Sanitation facilities was provided in the maximum number of households of the three closed tea gardens under “Swachh Bharat Mission”. The drains or the jhoras in some of the hamlets are constructed under MGNREGA.

In Peshok Tea Garden 59 percent of the labourers are dependent on spring/stream, 10 percent are dependent on PHE department, 17 percent labourers are dependent on the other sources like water supply given by forest, NGOs, PWDs Bungalow etc as the source of drinking water. Remaining 14 percent of the people have no proper source of drinking water as per the survey. In Garlang Goan six to seven households are dependent on one source of drinking water i.e., one hamlet. The source of streams is Dube Pani, Bardhara, Saheb Dhara, Simal Dhara, Jugay Dhara, Saat Dhara, Gairi Dhara, Orale Dhara, D.K Dhara, Utis Dhara etc.

Plate H: Drinking water and Sanitation

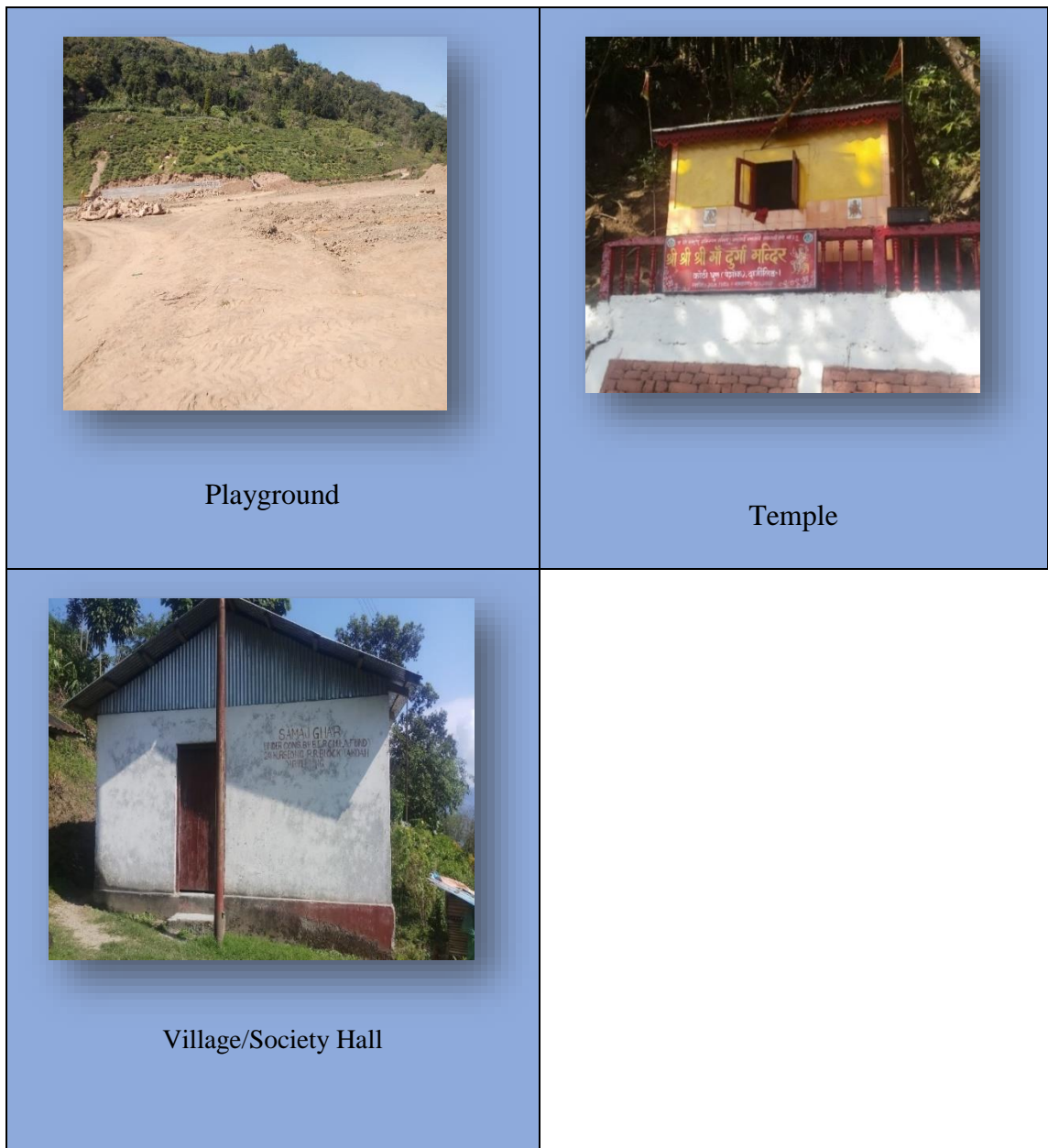


Source: Field Survey, Oct-Nov 2020

3.8.4 Village Commons

The Peshok Tea garden also have many common structures like community hall, playground, monastery, primary school, temple etc. In the Garlang playgrounds various sports like footballs are organised by the local youths.

Plate I: Village Commons



Playground

Temple

Village/Society Hall

Source: Field Survey, Oct-Nov 2020

3.8.5 Forest Resources and Land Holdings

Types of forest resources available are mainly firewood, fodder grasses, fruits, medicines etc. Mostly trees like *Dhupi (Pine)*, *Malingo (small bamboos)*, *Maples etc* are found. In all the three gardens the land is owned by the company and some labourers have occupied land in which they cultivate crops and fodders. In Peshok Tea Gardens the labourers sell the excess crops and vegetables are sold in the local markets. The average farm size of the labourers is 0.31 hectares and all the respondents have little additional land with homestead land.

Plate J: Peshok Tea Garden

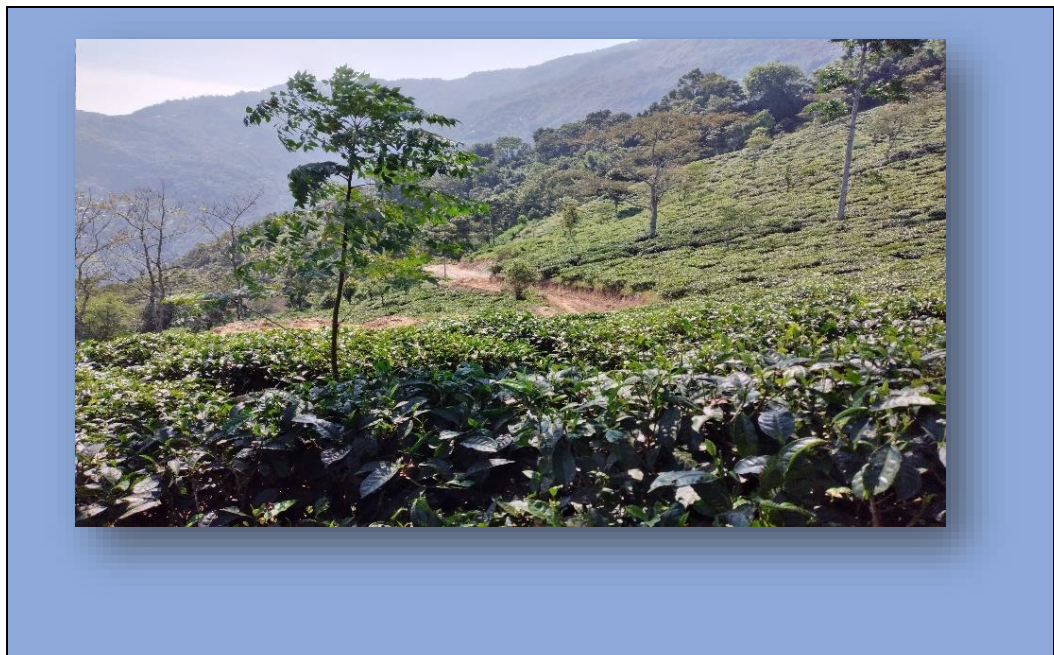
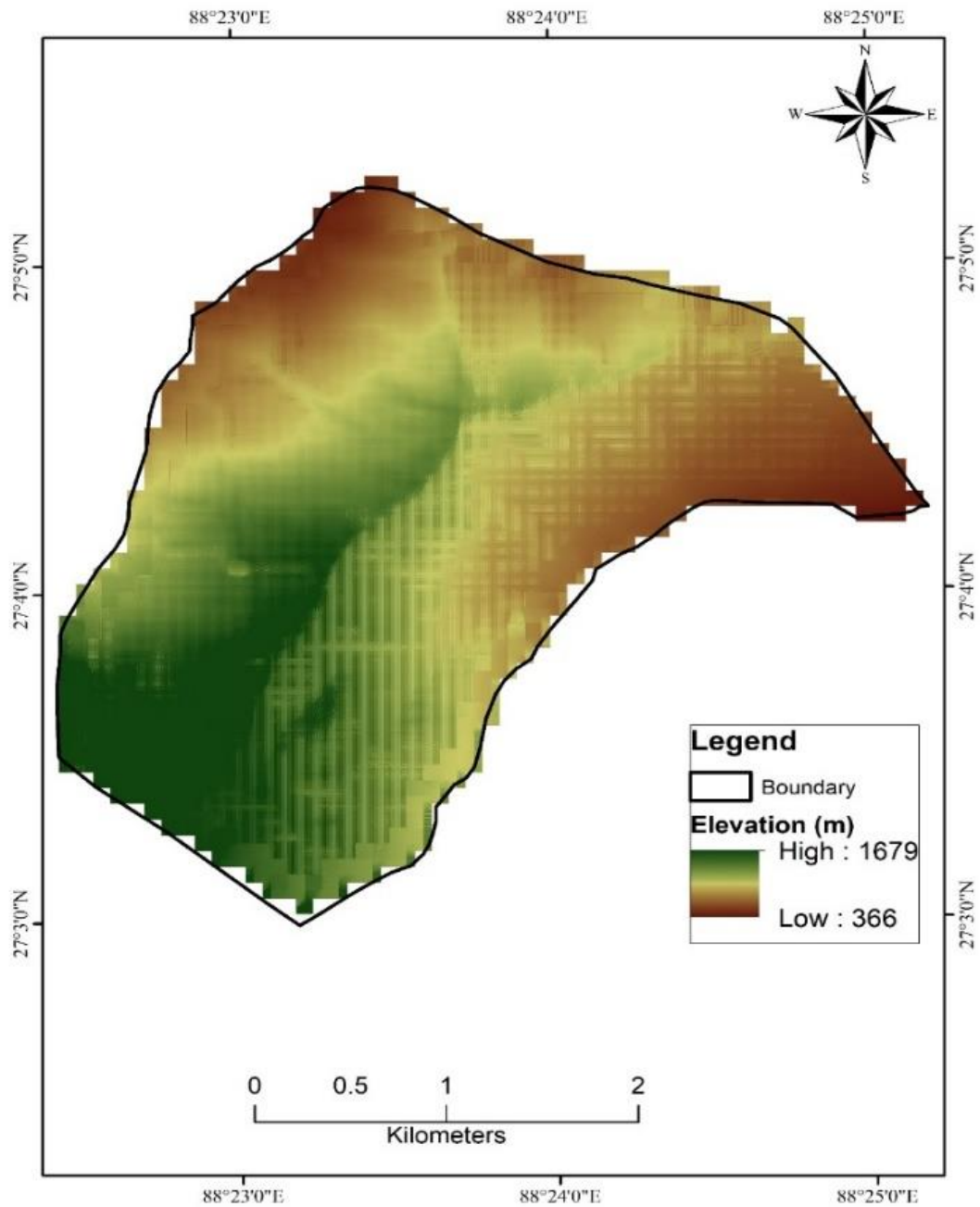
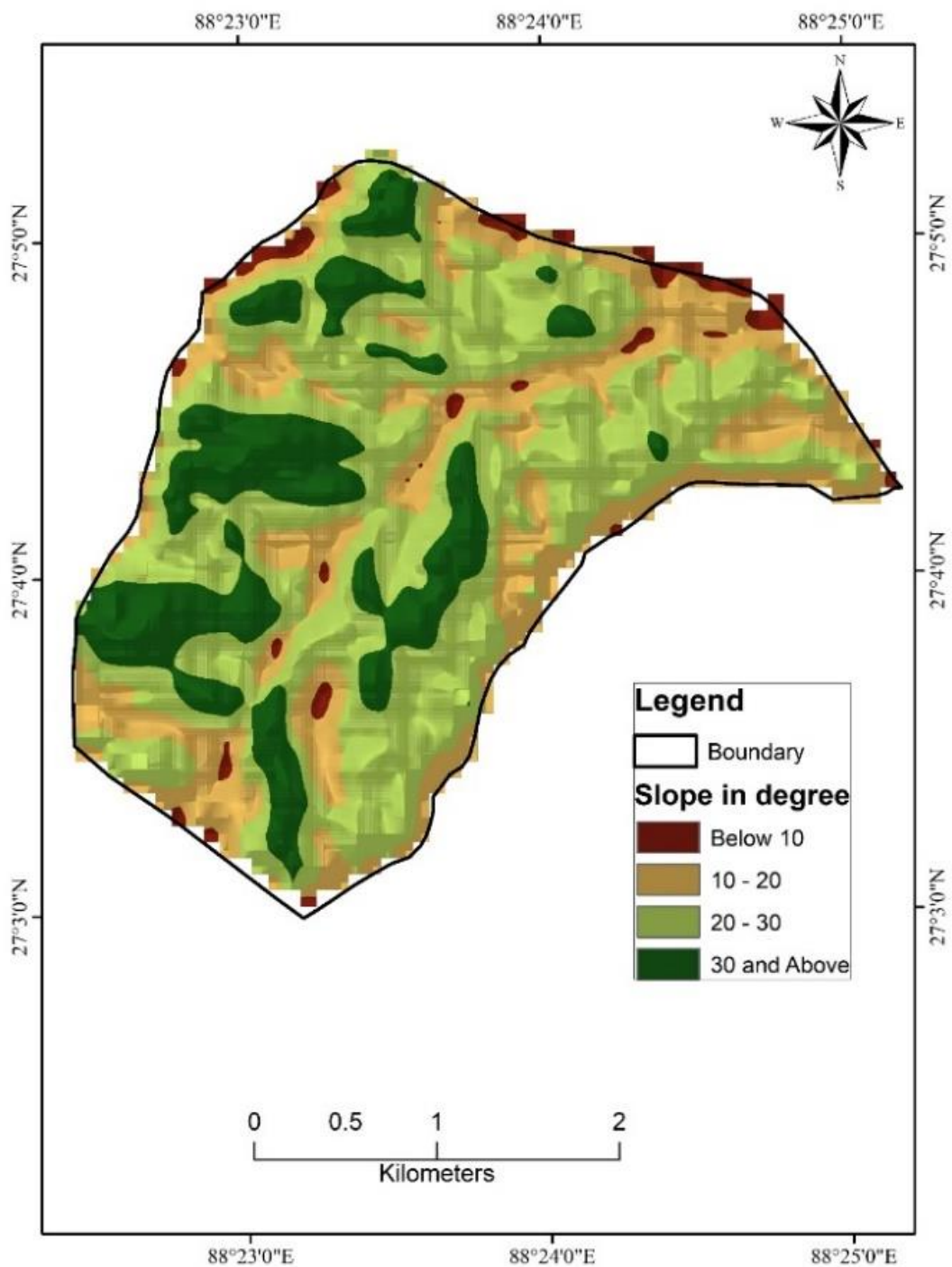


Figure- 3.10: Elevation of Peshok Tea Garden



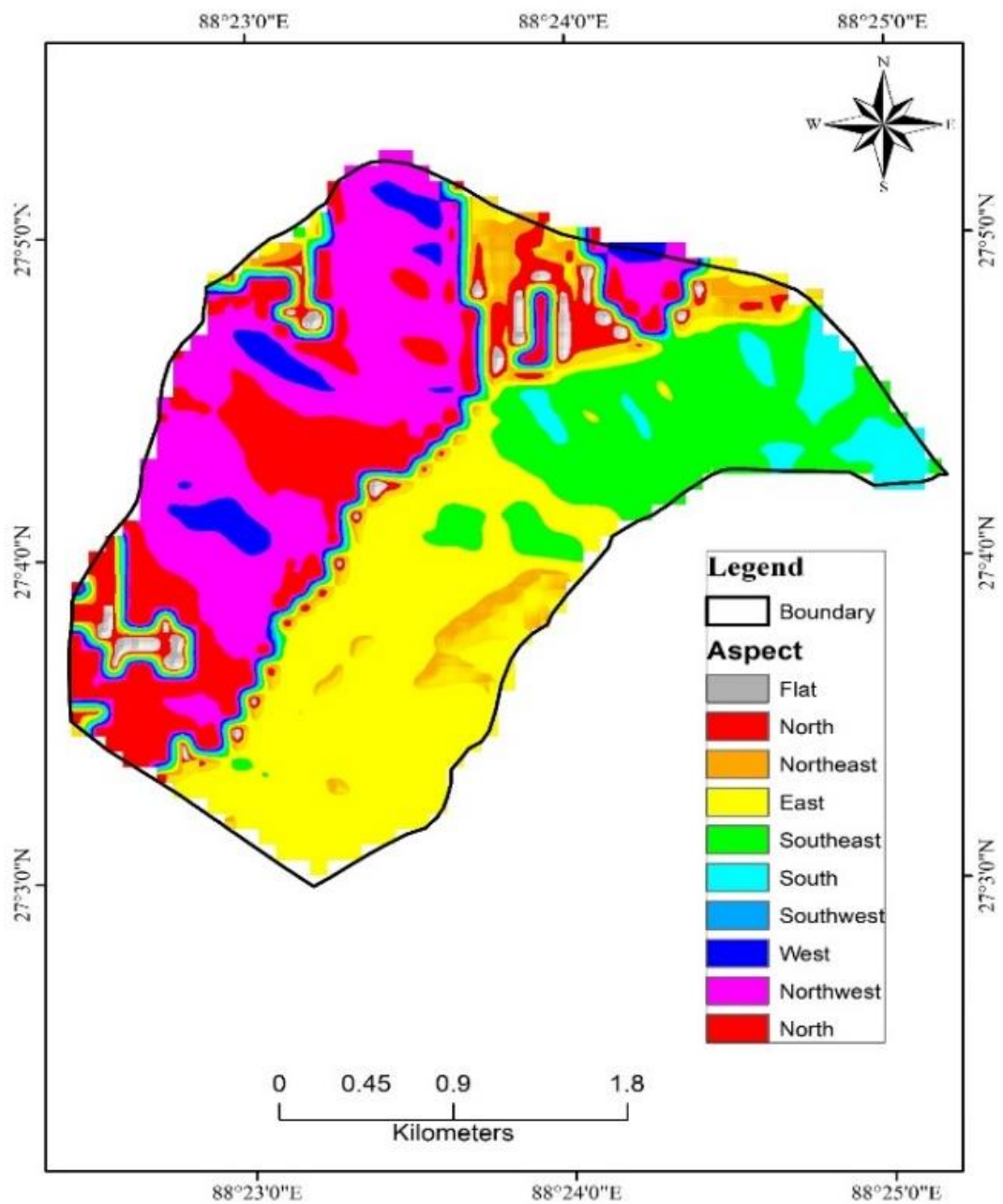
Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.11: Slope of Peshok Tea Garden



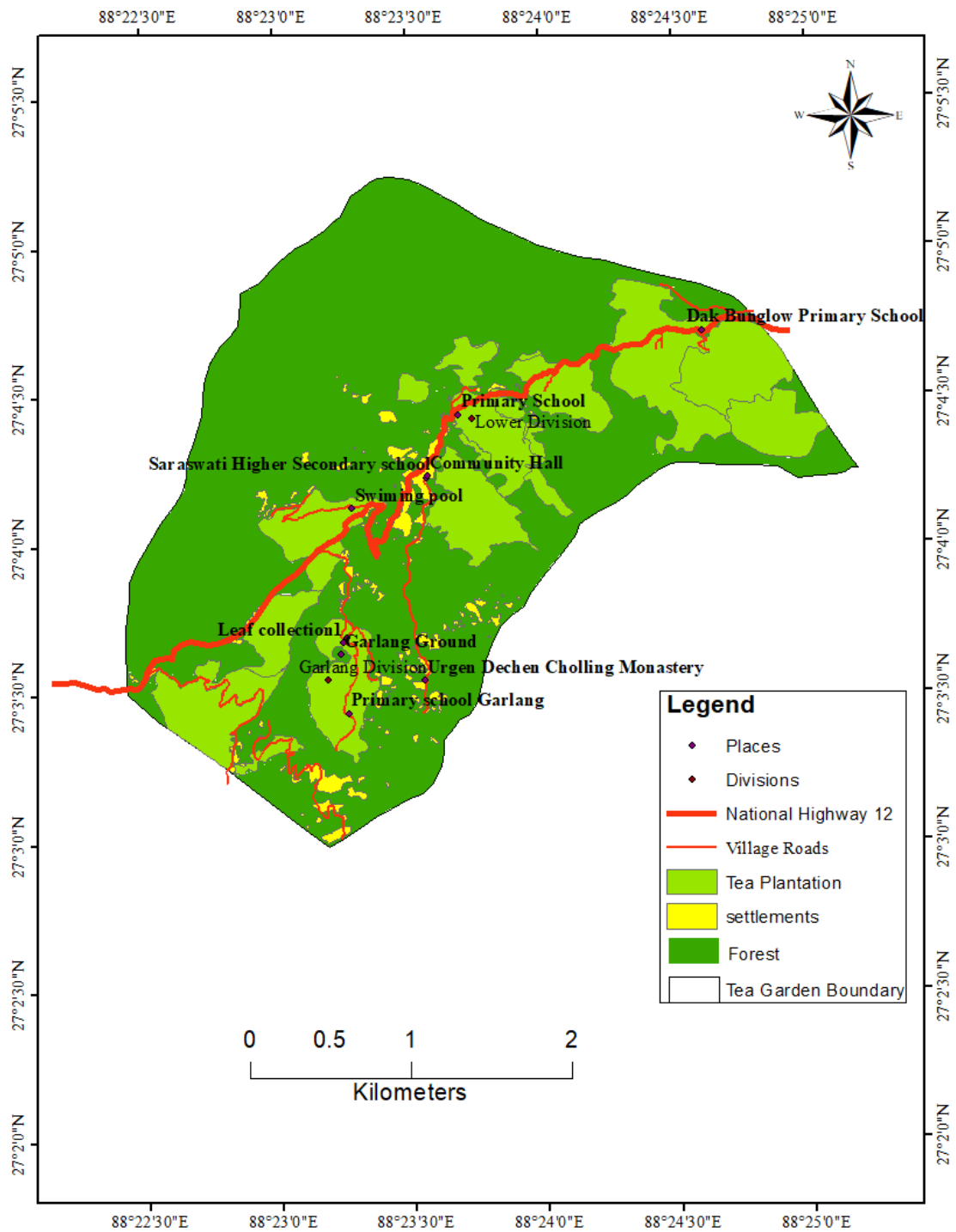
Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.12: Aspect of Peshok Tea Garden



Source: SRTM DEM (CIAT-CSI SRTM <http://srtm.csi.cigar.org>) Accessed on Dec, 2020

Figure- 3.13: Land Use Land Cover of Peshok Tea Garden



Source: ESRI, DigitalGlobe, GeoEye, EarthStar Geographies, CNES/Aibus DS, USDA, AeroGRID, IGN and GIS User Community (14 Nov, 2019) and Google Earth Imageries (14 Nov, 2019), Accessed on Dec 2020.

Table- 3.5: Land Use Land Cover of Closed Tea Garden

Land Use Land Cover Type	Dooteriah		Kalej Valley		Peshok	
	Area (in hec)	Share (%)	Area (in hec)	Share (%)	Area (in hec)	Share (%)
Forest and others	1027.00	68.79	362.00	55.02	801.00	75.00
Plantations	442.00	29.60	129.00	19.60	251.00	23.50
Settlements	20.00	1.34	52.00	17.48	16.00	1.50
Helipad	4.00	0.27	-	-	-	-
Barren Lands	-	-	115.00	7.90	-	-
Total	1493	100.00	658.00	100.00	1068.00	100.00
Roads (in Kms)	20		11		18	
River (in Kms)	12		-		-	

Data source: Based on ESRI Arc Imageries (14 Nov, 2019), Mauja Map collected from Land Reform/Touzi Department (Based on survey date-1926, 1890 and 1946-48), Garden Sketch Map, Google Earth Imageries (14 Nov, 2019)

It is evident that there is a differential pattern of land use while analysing garden level data and image data. Generally, the land use in tea gardens can be classified into two major groups: i) Activities Associated with Tea Plantations; and ii) Activities other than Tea Plantations (see table 3.6). It is found that these Closed Tea Gardens have surplus land under activities other than the plantations. In Dooteriah, its is 35 percent as per garden data and 69 percent as per image data, in Kalej Valley it is percent and percent as per image data and in Peshok it is percent as per garden data and it is percent as per garden and image data. It is also observed that there is under reporting of Land use classes and the Government should take initiatives. Moreover, it is envisaged in the West Bengal Estates Acquisition (Amendment of section 6) Act, 2009 that “if the intermediary or the lessee, as may be, fails to use the whole or any part of the land for the purpose for which it has been retained i.e., for tea garden, mill, factory or workshop, as the case may be, by him, so as to resume such land as being surplus to his requirement, by the State Government in the manner laid down in the provision”, (The Kolkata Gazette, 2010). Similarly, the surplus or occupied land

which is involved in activities other than tea plantations in this Closed Tea Gardens can be resumed and redistributed among the labourer by the Government as per the provisions.

Table- 3.6: Differences in Land use Pattern in Garden Level and Image Data (in Hectares)

Items	Land Class	Dooteriah (%)		Kalej Valley (%)		Peshok (%)	
		Garden (ha)	Image (ha)	Garden (ha)	Image (ha)	Garden (ha)	Image (ha)
Plantation Associated Activity	Tea	444.94 (35.19)	442.00 (29.60)	235.56 (47.51)	129.00 (19.60)	314.70 (31.83)	251.00 (23.50)
	Cardamum	126.31 (9.99)	-	-	-	-	-
	Bamboo	46.52 (3.68)	-	-	-	-	-
	Labour Line/ <i>Busti</i> (Settlements)/Village Land	169.16 (13.38)	20.00 (1.34)	47.45 (9.57)	52.00 (17.48)	422.56 (42.75)	16.00 (1.50)
	Roads	22.38 (1.77)	-	-	-	-	-
	Sub-total	809.31 (64.00)	462.00 (30.94)	301.01 (60.71)	181.00 (33.33)	737.26 (74.58)	267.00 (25.00)
Other than Plantations	Jhoras	18.25 (1.44)	-	-	-	-	-
	Forest	139.79 (11.05)	-	-	-	-	-
	Jungle	78.20 (6.18)	-	100.84 (20.34)	-	-	-
	Fallow, Dang & Khet Land	152.84 (12.09)	-	-	-	-	-
	Grave Yard	0.05 (0.00)	-	-	-	-	-
	Thatch	38.30 (3.03)	-	-	-	-	-
	Land Slip	27.78 (2.20)	1027.00 (68.79)	-	362 (55.02)	-	801.00 (75.00)
	Others (Helipad, Jhoras, waste land)	-	4.00 (0.27)	111.90 (22.57)	-	-	-
	Vested Land	-	-	-	-	251.19 (25.41)	-
	Sub-total	455.21 (35.99)	1031.00 (69.05)	212.74 (42.91)	362 (66.66)	251.19 (25.41)	801.00 (75.00)
Total	1264.52 (100.00)	1493.00 (100.00)	495.75 (100.00)	543.00 (100.00)	988.54 (100.00)	1068.00 (100.00)	

Data source: Based on ESRI Arc Imageries (14 Nov, 2019), Mauja Map collected from Land Reform/Touzi Department (Based on survey date-1926, 1890 and 1946-48), Garden Sketch Map, Google Earth Imageries (14 Nov, 2019)

3.9 Conclusion

In the Closed Tea Gardens clustered and linear patterns of settlement are found. The tea gardens are highly covered with forest and plantation areas. The main land use land cover detected in the regions is forest, plantation area and settlement areas. The forest cover has increased in the plantation areas also after the closure of the garden as per field observation and information. The highest elevation is found in Kalej Valley and lowest in Peshok Tea Garden. The stiff slope in the region challenges the opening of any large industry and to practice intensive agricultural practices. The percentage of cultivators, agricultural labourers and household industrial workers is very low within the category of main workers and the percentage of other workers is relatively high. The local economy and resources also play a significant role in generating employment opportunities in the Closed Tea Gardens. Moreover, as stated due to stiff hilly terrains, the higher altitude land is difficult to bring under cultivation (Das et. al., 2012).

Under the provisions of the Plantation Labour act, 1951 (Section 8) the duty of the employer to provide the adequate provisions for drinking water for all the labourers but no such facilities have been provided in these tea gardens before the closure and the condition after the closure is acute. The lack of sanitation and other basic facilities have direct effect on the health of the labourers mainly children (Kundu,2013). The Labourers are compelled to depend on untreated water of streams and springs.

Ideally, in a running garden the labouring households do not face much crisis for their survival and sustaining livelihoods. But when a tea garden is closed and the labourers are out of job to gain their day-to-day earnings and food security, the additional land or extra land play an important role for deriving livelihoods. Moreover, it is found that

these Closed Tea Gardens have surplus land under activities other than the plantations. In this context the land which are not directly in use by the closed tea estate brings a debate of redistribution and social justice. In light of that if all the three gardens are viewed having a comparative picture of land use under direct use by the tea garden and not used by the tea garden need reimagination of land granting policies of the government of West Bengal and the regulatory bodies like Tea Board under the Tea Act, 1953 and the Plantation Labour Act, 1951.

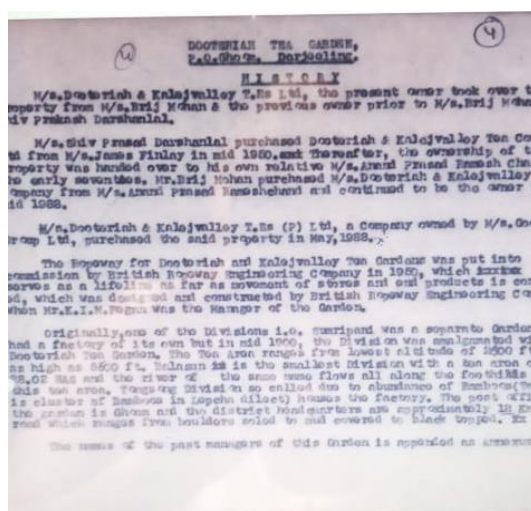
Chapter-4

Employment and Livelihoods: Closed Tea Gardens

4.1 Brief History of Closed Tea Gardens

In West Bengal tea are mainly grown in the Darjeeling hills, the Terai region and the Dooars region. In Darjeeling hills around 1800s' during British rule the plantation was also started in Dooteriah, Kalej Valley and Peshok Tea Garden along with other tea gardens in the Darjeeling Hills. Dooteriah and Kalej Valley Tea Gardens are located in Jorebunglow-Sukhia Pokhari Development Block and Peshok Tea Garden is located in the Rangli- Rangliot Development Block of Darjeeling District of West Bengal as per the data provided by Regional Labour Office, Darjeeling. These gardens have been shut down since 2015 (Himalayan Plantation Workers Union, 2015) and the official announcement of closure has been from 2018 (DMDC, 2019).

Figure- 4.1: History of Dooteriah Tea Garden



Source: Field Survey, Mar, 2020

Case study I: *As per local resident of Dooteria, who was Factory babu (Head Clerk) in the tea garden before closure, thus he stated that, M/S. Dooteria & Kalej Valley Tea Estate Ltd, the present owner took over the property from M/S. Brij Mohan and the previous owner to Brij Mohan was Mr. Shiv. Prakash Darshan Lal. M/S. Shiv Prakash Darshan Lal purchased Dooteriah and Kallej Valley tea garden ltd from M/S. James Finlay in mid-1950. The rent for the ownership of the property was handed over to his own relative M/S. Anand Prasad Ramesh Chand in the early seventies. M/S Brij Mohan purchased M/S. Dooteriah and Kalej Valley Tea Company from M/S. Anand Prasad Ramesh Chand and continued to be the owner till mid-1988. M/S. Dooteriah and Kalej Valley Tea ltd. Company owned by M/S. Goodricke Group ltd, purchased the said property in May, 1988. Toubro Industries Ltd. Purchased M/S. Dooteria and Kallej Valley Tea Company from M/S Goodricke Group Ltd, on 26th Feb, 2004.*

(Source: Factory Babu (Head Clerk) Dooteriah Tea Estate, Mar 2020)

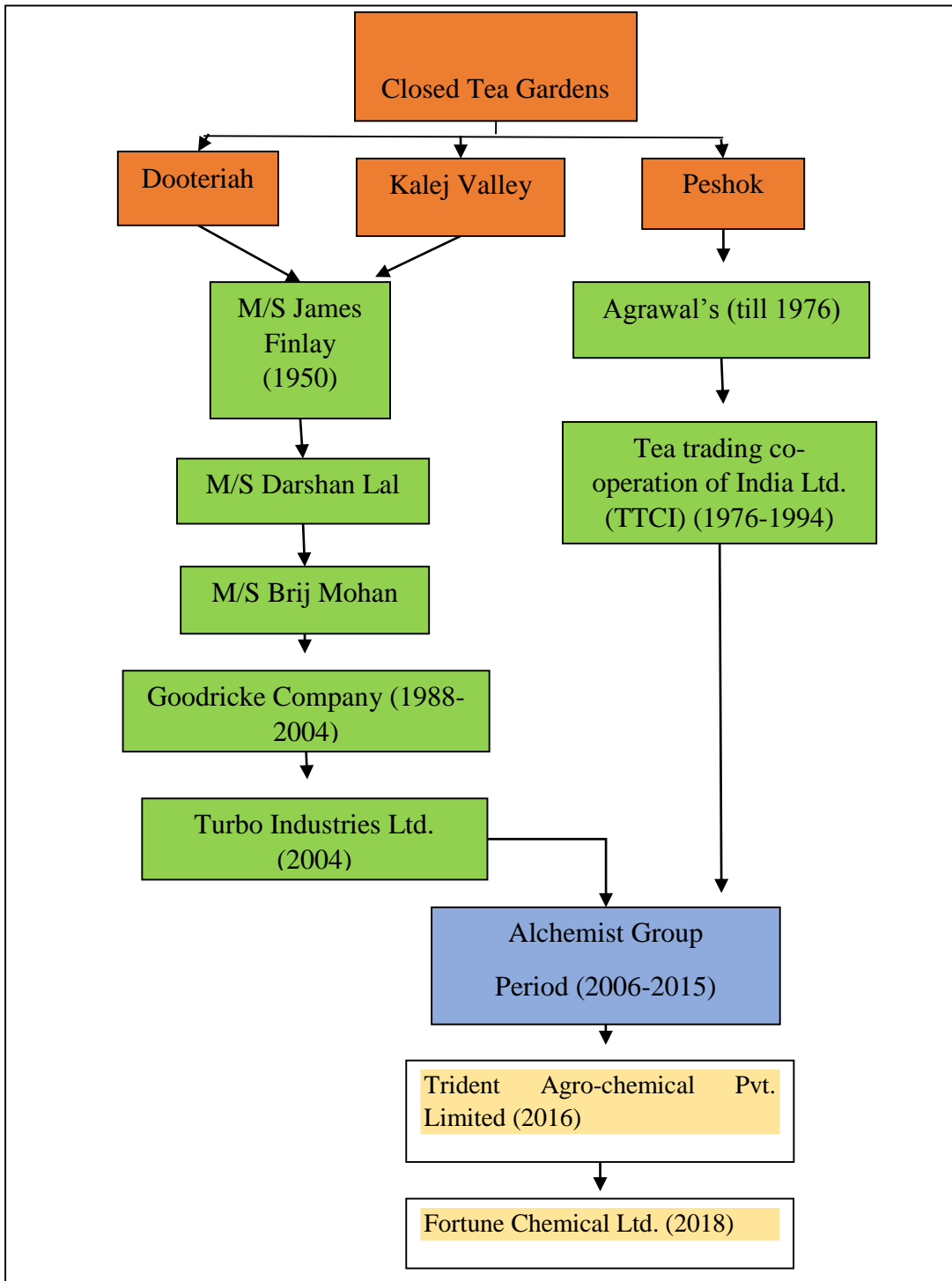
Case study II: *According to the office staff of Peshok Tea Garden before closure, he narrated that, “After British Company the Peshok garden was taken over by Agrawal’s during 1976. After that the tea garden was operated by T.T.C.I (Tea Trading co-operation of India Limited) with co-operation with Central Government for approximately 17-18 years. Then later in 2006, Alchemist Group took over the Peshok Tea Garden who abandoned the tea garden without any formal notification about the closure”.*

Source: Office staff, Peshok Tea Garden, 12 March 2020

Later, Trident company in 2016 and Fortune Private Limited in 2018 claimed to open and manage these closed gardens but they could not run the gardens due to huge

amount of pending liabilities to the labourers and various other institutional bodies as per the interaction.

Figure- 4.2: Ownership Pattern in the Closed Tea Gardens



The figure 4.3 shows the change in ownership patterns during both Pre- Independence and Post- Independence of the Dooteriah Tea Garden. The British personnel were managing Dooteriah from 1897 till 1955. From 1955 onwards the Indians have been managing the garden.

Figure- 4.3: Name list of the managers of Dooteriah Tea Garden

DOOTERIAH TEA GARDEN (PLANTED BY DR. BOROUGHAM IN 1859)		
MANAGERS	FROM	TO
Dock Brown Esq.	1897	1906
Killock Esq.	1906	1920
R.D. Mackie Esq.	1920	1930
Mackenzie Esq.	1930	1937
H.J.M. Pagan Esq.	1937	1941
Damson Esq.	1941	1943
Hudson Esq.	1943	1945
J.R. Hanley Esq.	1945	1953
George Buxie Esq.	1953	1955
Bimal Prasad	1955	1963
V.K. Mishra	1963	1972
M.K. Parohal	1972	1975
A.K. Sone	1975	1978
D.L. Mudra	1978	1985
K.K. Sarang	1985	1988
V.S. Parmar	8-5-88	19-8-88
N. Wangdi	20-6-88	22-10-90
Rajashwar Singh	23-10-90	7-11-94
K. Mahajan	8-11-94	8-5-96
K.K. Sarang	8-5-96	20-2-97
V.S. Mandal	21-2-97	14-7-98
A.M. Puri	15-7-98	26-2-02
U.P. Roy	27-2-02	02-2009

DOOTERIAH TEA GARDEN		
MANAGERS	FROM	TO
G. S. Sarang (Dy. General)	28-02-04	28-05-10
Bimal Mollan	28-05-10	

Source: Field survey, March 2020

4.2 Employment Pattern in Closed Tea Gardens

The participation of female workforce is greater in all the three gardens compared to the male i.e., 58.11 percent in Dooteriah, 60.90 percent in Kalej Valley and 82.46 percent in Peshok tea Garden out of total labourers (refer table 4.1). It may be because of their skills in fine plucking tea leaves and owing to their total population size as mentioned earlier (Chapter-III). As articulated by Roy (2017) the major workforce of the tea industry is women but inequality exists between male and female labourer though they are wage workers women are usually paid less compared to that of the male labourers. Moreover, employment in the tea gardens provided them with economic freedom and which in turn reduces the incidence of domestic violence. Due

to the closure of Tea Gardens, they are bond to do other daily wage work. They are facing problems to go outside to work and at the same time to manage the household chores. There is also increase in the domestic violence due to the closure of the garden as people are facing difficulties to cope up with the current situation and women and children are the foremost victims. Also, the severe cases are seen where there is only one working member in the household, somebody sick in the family, large family size, widowed, alcoholic parents etc. Cases of trafficking are also taking place in the closed tea gardens as labourers are helpless and are in need of money. So, it's easy for the agents to lure them with assured jobs and false promises for better life (ibid.).

Besides other distribution of labourers such as field labour, factory labour, staff and sub staff are given in table- 4.1. In Peshok Tea Garden there is no factory, all the tea leaves were transferred to Dooteriah tea garden for the required processing (DTA, 2019).

Table 4.1 Workforce Distribution in Closed Tea Gardens

Indication		Dooteriah		Kalej Valley		Peshok	
		No	%	No	%	No	%
Gender	Male	568	41.89	251	39.10	100	17.54
	Female	788	58.11	391	60.90	470	82.46
	Total	1356	100.00	642	100.00	570	100
Types of Workforce	Staff	24	1.77	13	2.02	18	3.16
	Sub-staff	100	7.37	58	9.03	35	6.14
	Factory Labour	41	3.02	12	1.87	0	0.00
	Field Labour	1191	87.83	559	87.07	517	90.70
	Total workforce	1356	100.00	642	100.00	570	100

Data Source: Unpublished data collected from the respective garden offices, March 2020

The number of labourers is 2568 and the number of their dependents are 7740 in the closed tea gardens collectively. The given table-4.2 shows, in Dooteriah there is 4068 dependents in Kalej Valley 1956 dependents and in Peshok 1710 dependent (DMDC,

2019). As per the calculated ratio there are three dependents on each labourer. Thus, a large number of the people are affected due to the closure of gardens in this Closed Tea Gardens.

Table- 4.2 Employment and Dependents in Closed Tea Gardens

Name of Tea garden	No. of Labourers	No. of Dependents	Ratio
Dooteria	1356	4068	1:3
Kallej Valley	642	1926	1:3
Peshok	570	1710	1:3
Total	2568	7704	1:3

[Note: The ratio of labourers and dependents are calculated by dividing the total number of dependents by the total number of the labourers.]

Data Source: Computed from unpublished data, Labour Commissioner office, Darjeeling, Jan, 2020

4. 3 Social Background of the Labourers

Out of the total 129 respondents in the study area, there is 43 percent male and 57 percent female (refer Table- 4.3). Mostly the women labourers were dependent on the gardens for their livelihood and their condition are more vulnerable compared to male labourers.

Table- 4.3: Gender Distribution of the Labourers

Gender	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
Male	25 (36.76)	20 (62.50)	11 (37.93)	56 (43.41)
Female	43 (63.23)	12 (37.50)	18 (62.06)	73 (56.58)
Total	68 (100.00)	32 (100.00)	29 (100.00)	129 (100.00)

Data Source: Fields Survey, Sept-Oct, 2020

The table- 4.4 shows that 87 percent of the labourers are married out of the total respondents, 2 percent were widowed, 8 percent are unmarried and 4 percent of them were divorced or separated in the closed tea gardens. The closure of the garden has also affected the marital life of the labourers. Many of the labourer's husband or the

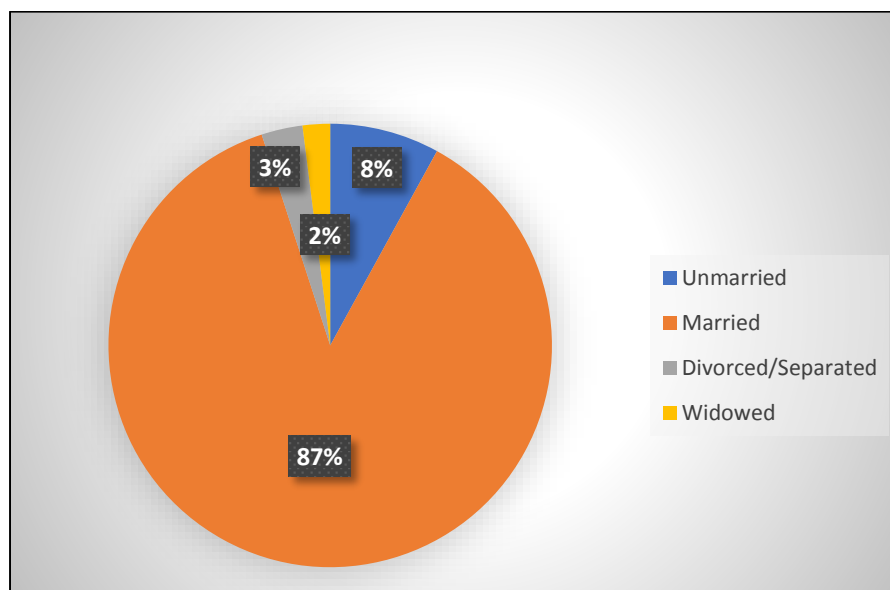
wife who have gone outside to work after the closure of the garden have not returned or they might have settled outside as per the interaction.

Table- 4.4: Marital Status of Labourers

Indicators	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
Unmarried	6 (8.82)	3 (9.38)	1 (3.45)	10 (7.75)
Married	56 (82.35)	28 (87.50)	28 (96.55)	112 (86.82)
Divorced/ Separated	3 (4.41)	1 (3.13)	-	4 (3.10)
Widowed	3 (4.41)	-	-	3 (2.32)
Total	68 (100.00)	32 (100.00)	29 (100.00)	129 (100.00)

Data Source: Fields Survey, Sept-Oct, 2020

Figure- 4.4: Marital Status of the Labourers



Data Source: Fields Survey, Sept-Oct, 2020

The table- 4.5 shows the age-group of the respondents in all the three Closed Tea gardens. The 46 percent of labourers broadly fall under 40-50 age group and secondly 39 percentage of labourers fall under the age group of 50 and above. Thus, percentage of middle age and old age are more in these tea gardens and their conditions are

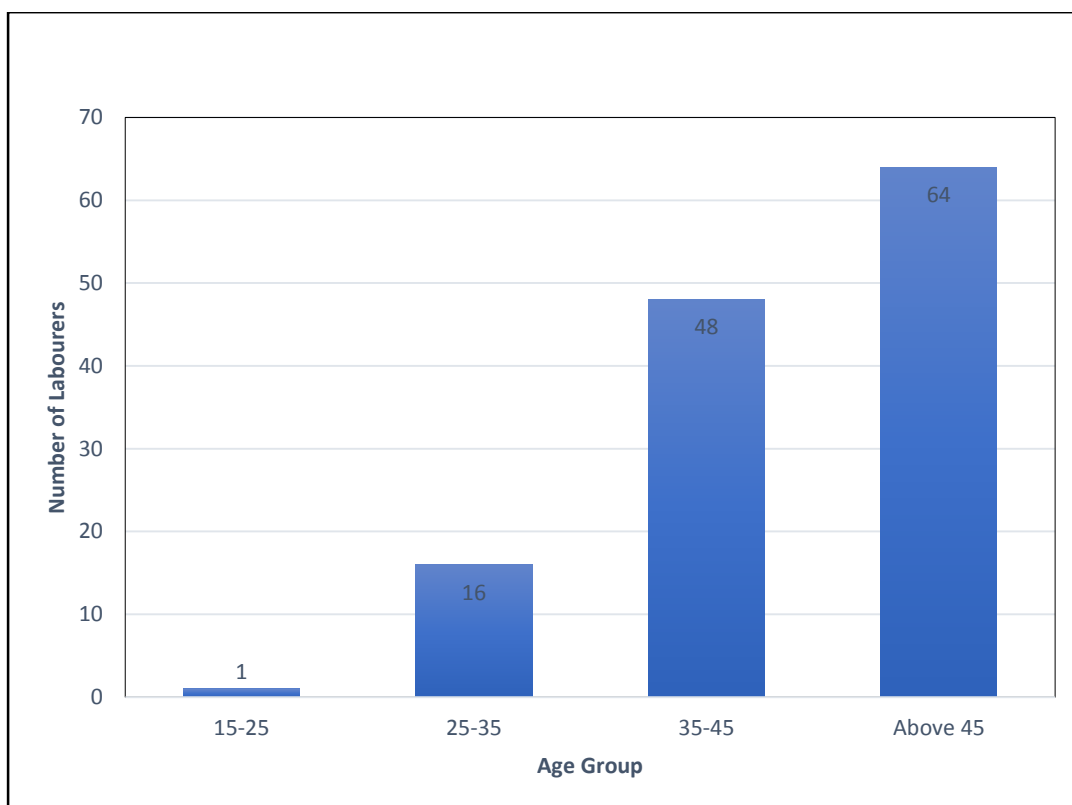
deplorable after the closure. The number of labourers in the age group between 18-30 and 30-40 is 8 percent and 36 percent respectively. The number of younger age groups are low owing to the out-migration due to the closure of the garden

Table 4.5: Age Profile of the labourers

Age Group	Dooteriah Tea Garden		Kalej Valley Tea Garden		Peshok Tea Garden		Total (%)
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)	
18-30	3 (37.50)	1 (12.50)	2 (25.00)	2 (25.00)	-	-	8 (6.20)
30-40	9 (25.00)	9 (25.00)	5 (13.88)	4 (11.11)	-	9 (25.00)	36 (27.90)
40-50	7 (15.21)	19 (41.30)	7 (15.21)	6 (13.04)	2 (4.34)	5 (10.56)	46 (35.65)
50 and above	6 (15.38)	14 (35.89)	6 (15.38)	-	9 (23.07)	4 (10.25)	39 (30.23)
Total	25 (19.37)	43 (33.33)	20 (15.50)	24 (18.60)	11 (8.52)	18 (13.95)	129 (100.00)

Data Source: Fields Survey, Sept-Oct, 2020

Figure- 4.5: Age-Group Distribution of Labourers



Data Source: Fields Survey, Sept-Oct, 2020

4.3.1 Distribution of Social Groups

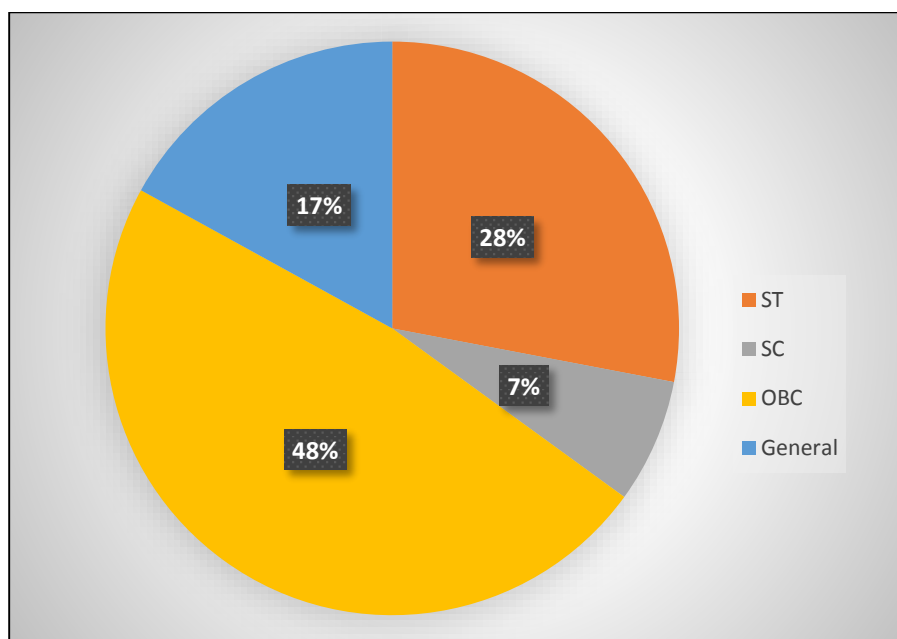
The labourers in these closed tea gardens are mainly belonging to Nepali community. The dominant social group in all the three gardens is OBC i.e., 43 percent in Dooteriah, 47 percent in Kalej Valley and 62 percent in Peshok Tea Garden. The lowest percentage of social groups found in these gardens are SC categories and others are ST and general.

Table-4.6: Distribution of social groups in the Closed Tea Gardens

Social Groups	Dooteriah Tea Garden		Kalej Valley Tea Garden		Peshok Tea Garden		Total	
	No	(%)	No	(%)	No	(%)	No	(%)
ST	16	23.53	11	34.38	9	31.03	36	28
SC	5	7.35	3	9.38	1	3.45	9	7
OBC	29	42.65	15	46.88	18	62.07	62	48
General	18	26.47	3	9.38	1	3.45	22	17
Total	68	100.0	32	100.0	29	100.0	129	100.0

Data Source: Fields Survey, Sept-Oct, 2020

Figure- 4.6: Social Group-wise Percentage Share of Labour



Data Source: Fields Survey, Sept-Oct, 2020

4.3.2 Religious Composition of Labourers

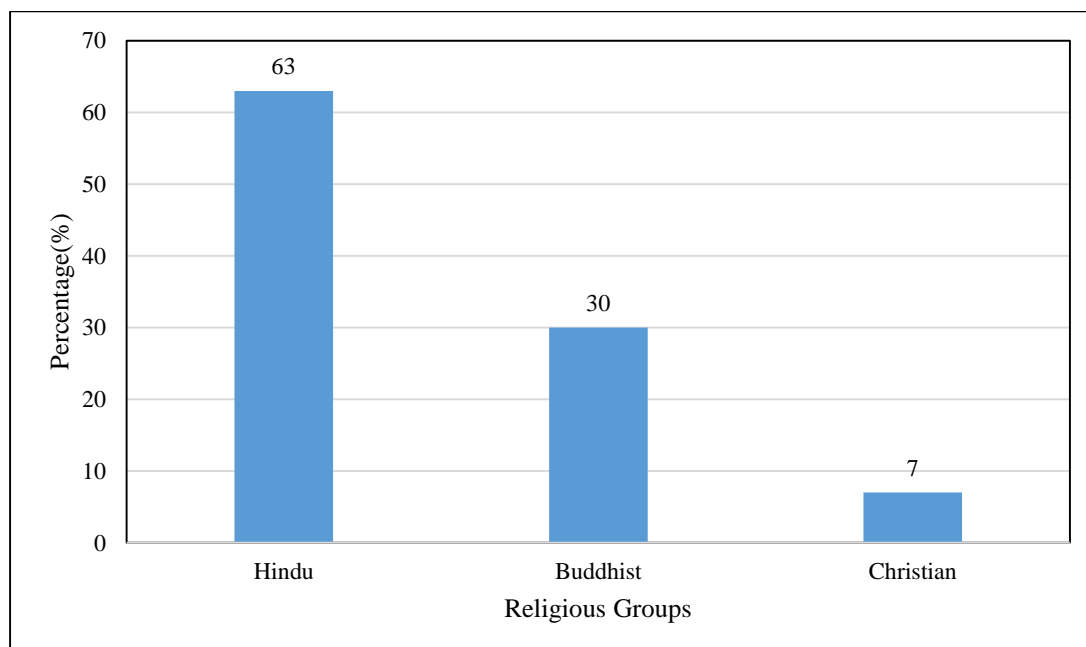
In these closed tea gardens Hinduism is the most dominant religion followed by the labourers i.e., 63 percent in Dooteriah, 66 percent in Kalej Valley and 59 percent in Peshok tea garden. Apart from Hindu, Buddhism and Christianity are also followed by the labourers.

Table-4.7: Religious Distribution of Labourers

Religious Groups	Dooteriah		Kallej Valley		Peshok	
	No	(%)	No	(%)	No	(%)
Hindu	43	63.24	21	65.63	17	58.62
Buddhist	18	26.47	10	31.25	11	37.93
Christian	7	10.29	1	3.13	1	3.45
Total	68	100.00	32	100.00	29	100.00

Data Source: Fields Survey, Sept-Oct, 2020

Figure- 4.7 Religious distribution of Labourers



Data Source: Fields Survey, Sept-Oct, 2020

4.4 The Education Level of Labourers

The table-4.8 shows the education and skill level of the labourers of closed tea gardens. Therefore, 38 percent of the labourers are illiterate, 10 percent have attended primary level of education, 32 percent have attended high school, 12 percent have studied till class X and 7 percent have passed class XII out of the total number of labourers. Hence, lack of proper education qualification, skills etc. has become one of the major strains for the labourers of the closed tea gardens. As stated, the skills and the mean level of education among the labourers are low to access for alternative employments after the closure of the garden (Mishra, 2014). They have limited options either they do physical labour, work in nearby tea gardens and out-migration.

Table-4.8: Levels of Education of Labourer

Education Level	Dooteriah Tea Garden		Kallej Valley Tea Garden		Peshok Tea Garden	
	No	%	No	%	No	%
	Illiterate	26	38.24	9	28.13	8
Primary Level (I-IV)	7	10.29	3	9.38	0	0.00
High School (V-VIII)	22	32.35	9	28.13	3	10.34
Class (X) Pass	8	11.76	6	18.75	9	31.03
Class (XII) Pass	5	7.35	5	15.64	9	31.03
Diploma	-	-	-	-	-	-
Graduate	-	-	-	-	-	-
Post Graduate & Above	-	-	-	-	-	-
Total	68	100.00	32	100.00	29	100.00

Data Source: Fields Survey, Sept-Oct, 2020

4.5 Household Economy of Labourers

To understand the household economy of the labourers the household assets, average income and expenditure before and after closure of the garden, indepthness and receivable company dues, number of dependents etc has been analysed.

4.5.1 Household Assets

The household assets of the labourers noticed are cooking gas, mobile and television. Majority of the labourers have simple mobile phones with no internet functions. As per the interaction with the labourers some of them have bought mobile phones recently, just for their children's online class during the pandemic. Out of the total respondents every household are dependent on firewood as the source of energy for cooking and as an alternative they have LPG connection provided by government under the scheme "Pradhan Mantri Ujjwala Yojana". The electricity connection is found available in almost all the households in these Closed Tea Gardens, but they have to take NOC from the management for any new connection as per the discussion during FGD. The main assets of the labourers in these Closed Tea Gardens are domestic animals. Out of the total labourers, 41 percent in Dooteriah, 34 percent in Kalej Valley and 55 percent in Peshok rear animals mainly cow, goat, pig and chickens. In the time of need they sell cow in ₹ 27000-30,000, goat in ₹ 7000, pig in ₹ 14000 and chickens ₹ 200 per kg approximately. Besides, labourers also have occupied little additional land attached to their home stead land where they cultivate some seasonal crops like lentils, radish, peas, beans etc for self-consumption.

Table-4.9: Distribution of Household Assets

Assets	Dooteriah Tea Garden		Kallej Valley Tea Garden		Peshok Tea Garden	
	No	%	No	%	No	%
Mobile	68	100.00	32	100.00	29	100.00
Television	41	60.00	23	-	22	75.86
Tape Recorder	-	-	-	-	1	3.45
Computer	1	1.47	-	-	1	3.44
Cooking Gas	68	100.00	32	100.00	29	100.00
Refrigerator	-	-	1	1.14	-	-
Cow/Goat/Pigs/ Chicken	28	41.17	11	34.37	16	55.17
Extra Land for Cultivation	64	94.11	27	84.37	28	96.55
Total		68.00		32.00		29.00

Data Source: Fields Survey, Sept-Oct, 2020

4.5.2 Income and Expenditure Pattern of Labourers

Ansari et. al, (2016) articulated, income is an important factor which influence most of the social factors. Though the labourers were permanently employed in tea gardens they are daily rated i.e., no work no pay (Talwar et. al., 2005). Before closure of these gardens their average income was low and so is their variation as measured by standard deviation (S.D) and Coefficient of Variation (C.V). The variation between Dooteriah and Peshok is somewhat similar whereas Kalej Valley shows higher variations.

The Co-efficient of Correlation (r) between income and expenditure has also been calculated to see their magnitude of relationship. In Dooteriah before the closure of the garden the corelation between income and expenditure is 0.02, this indicates positive but weak magnitude of relationship. In Kalej valley Correlation (r) is 0.11 before the closure of the garden. This also indicates that though positive relationship existed between the income and expenditure but it is not very strong. In Peshok Correlation (r) is-0.06 before the closure of the garden. This indicates that negative relationship existed between the income and expenditure. The calculated F-values

(1.03) is more than the tabulated (0.005) value which indicates that the test is significant in Dooteriah. The calculated F-values (0.36) is more than the tabulated value (0.01) which indicates that the test is significant in Kalej Valley. The calculated F-values (0.10) is more than the tabulated value (0.003) which indicates that the test is significant in Peshok

Table-4.10: Income and Expenditure of Labourers (before Closure)

Name	Monthly Income (in ₹)			Monthly expenditure (in ₹)			r	F-Value
	Mean	S. D	C.V	Mean	S. D	C.V		
Dooteriah Tea Garden	2321.76	745.9	32.13	3929.41	1848.61	47.05	0.02	1.03
Kalej Valley Tea Garden	2216.88	1312.91	59.22	3890.63	1579.83	40.61	0.11	0.36
Peshok Tea Garden	2495.86	885.57	35.48	4655.17	2495.18	53.6	0.06	0.1

Data Source: Fields Survey, Sept-Oct, 2020

It is noted that the income of the labourers after the closure of the garden is higher and so is the variation as measured by standard deviation S.D and C.V. This implies that the labourers despite the closure are able to ensure good income outside the garden but they have lack of security and no regular availability of jobs. The expenses have also increased depending on the growth of prices of all the basic materials, vegetables, medicines, fees, transport cost etc. In Dooteriah the Co-efficient of Correlation (r) is -0.07 after the closure, which indicates there exist negative magnitude of relationship between income and expenditure. In Kalej valley the Correlation (r) is 0.03 after the closure of the garden. This indicates that though positive relationship exists between the income and expenditure but it is not very strong. In Peshok Correlation (r) is -0.49 after the closure of the garden. This indicates that negative relationship exists between

the income and expenditure. The calculated F-values (0.37) is more than the tabulated (0.01) value which indicates that the test is significant in Dooteriah. The calculated F-values (0.03) are more than the tabulated (0.01) value which indicates that the test is significant in Kalej Valley. The calculated F-values (8.77) is more than the tabulated value (0.24) which indicates that the test is significant in Peshok.

Table-4.11: Income and Expenditure of Labourers (after Closure)

Name	Monthly Income (in ₹)			Monthly expenditure (in ₹)			R	F-Value
	Mean	S.D	C.V	Mean	S.D	C.V		
Dooteriah Tea Garden	4145.59	3631.34	87.6	5620.59	1915.81	34.73	0.07	0.37
Kalej Valley Tea Garden	4040.63	2862.02	70.83	5796.88	1775.97	30.64	-0.03	0.03
Peshok Tea Garden	4126.21	2940.62	71.27	7137.93	4328.93	60.65	-0.49	8.77

Data Source: Fields Survey, Sept-Oct, 2020

4.5.3 Debts⁶ and Receivable Company dues⁷

The labourers have incurred debts to ration and other shops after the closure of the garden for essential materials and during health issues. They are facing great difficulties to repay the amount as no regular employment is available. Moreover, their debts are increasing day by day. Likewise, the labourers have large number of receivable dues like weekly wages, ration, bonus, firewood etc from the company which they have not received till date as per field information and same case has been highlighted by DTDPLU (2016). The labourers of the gardens even filed a complaint against the management for their due wages and other grievances (Himalayan Plantation Workers Union, 2015). As per table- 4.12 in Dooteriah, out of the total

⁶Labourers have borrowed money from informal sources to meet their household expenses, health etc. after the closure of garden.

⁷ Wage of the Labourers to be paid by company during the transition period of closure.

respondents' 66 percent of labourers have an average of ₹ 11,244 per labourer, in Kalej Valley 50 percent of labourers have an average of ₹ 10,250 dues and in Peshok 47 percent of labourers are in debt of an average ₹ 7,800. All of the respondents have a receivable due from the company i.e., an average of ₹ 65,242 in all the three gardens collectively.

Table- 4.12: Debts and Dues of the Labourers (in ₹)

Categories	Debts		Dues	
	No.	Avg. amount (₹)/ labourer	No.	Avg. amount (₹)/ labourer
Dooteriah Tea Garden	45	11244	68	65743
Kalej Valley Tea Garden	16	10250	32	70172
Peshok Tea Garden	15	7800	29	59810

Source: Fields Survey, Sept-Oct, 2020

As per the garden report (refer table- 4.13), the total dues of the Dooteriah are ₹ 88076058, Kalej Valley has total dues of ₹ 32695507 and Peshok has ₹ 23467175 due to the company. Here, the other include dues of coals, electricity bill, medical bill, food grains, pucca house, kutcha house repairing, plucking basket, sickle, labour arear wages, blankets etc.

Table- 4.13: Liabilities towards Labourers (Up to March 2016)

Name of the Garden	Gratuity Dues (₹)	Workers Dues (₹)	Statutory Dues (₹)	Other Dues (₹)	Total (₹)
Dooteriah Tea Garden	45340437	10981761	24398145	7355715	88076058
Kalej Valley Tea Garden	18881182	6623179	5365146	1826000	32695507
Peshok Tea Garden	8393307	5934471	8498129	641268	23467175
Total	72614926	23539411	38261420	9822983	144238740

Source: Computed from unpublished data, collected from respective tea garden, Dec 2020

All the three gardens officially closed their operation since May, 2018. Before the closure of the garden there was a period during 2014-2018 of sluggish growth and sick management. In these years there was a gradual decline of man-days employed in the closed tea gardens ranging from 80 percent to 50 percent and 25 percent workforce and finally closed operations. Labourers of 20-40 age groups started working outside the garden for earning their livelihood as the wage was low in the garden during that time. In this period the labourers were receiving irregular salaries and they were not getting any allowance and benefits like ration, health facilities, cash benefit for firewood etc. Bonus were not released for two consecutive years and employer's contribution of provident fund was not paid to EPFO, Government of India. Labourers were unable to pay the school fees of their children and access health care, thus many young labourers went outside for work in cities like Delhi, Gangtok, Bangalore, Siliguri and even outside countries like Singapore specially women workers where they are working as housekeeping etc due to the terrible situation and many are in the threshold of starvation. The gardens were left abandoned without any formal notification about the closure by the company. During this period Trade Unions existed in all the three gardens and they were affiliated to GJM, TMC, JAP, CPM, GNLF, BJP etc. The trade unions employed in Darjeeling are DTDPLU, HPWU, NUPW, DTDCKMU, CBTCMU, DZCCJSS, DCKMSTU etc. It is evident from the field interaction with the labourers and found that no constructive role played by Trade Unions in negotiations with the government and urged to reopen the gardens even if they have tried, no result of it has been seen till now. The labourers do not know whether the company or the government are not listening to the trade unions or there is lack of efforts in the work made by them. In fact, the unions of various parties disappeared and workers were left helpless situation to find any alternative channel to

negotiate with the government (JAC, 2016). After it was seen that somehow the young labourers could engage in other works locally and survive and sustain their families. At the same time the older generation work force finds difficulties to survive and engage in any other activity. When garden was normally operational the older lot of labourers used to be allotted lighter works and provided the full wages even in cases of sick persons. In case of labourers who were partially injured during their work time they were provided petty works as per their capabilities and capacities. This has serious impact to older group of labourers after the closure and some cases labourers died due to improper food and nutritional intake. They find it easier to work in the vicinity of the garden and cannot out migrate for alternative means of living at distant places.

Consequently, the labourers especially including old age, physically weak and staff members altogether formed the Workers committee in 2015, locally known as *Joint Action Committee*⁸, to support themselves and the needy workers. The committee consists of 180 labourers in Kalej Valley, 500 labourers in Dooteriah and 250 in Peshok Tea Garden approximately. The Joint Action Committee placed their charter of demands to the government of West Bengal through political affiliation with the ruling party on 2017, the major three demands are as follows:

- a) To sell or handover the garden to the New Company,
- b) Government should take over the closed tea gardens if no party is interested; and

⁸Joint Action Committee is formed by the labourers, staffs and union members after the closure of the gardens i.e., Dooteriah, Kalej Valley and Peshok tea gardens to support themselves and the needy workers. Under the committee they pluck leaves sell them to nearby gardens like Lopchu, Ring tong etc.

c) If the Government takes no interest the workers Co-operative may be formed and allowed to run the garden (JAC, 2016).

There was no response from the government to those demands and Trade Union office members of Kolkata cleared the JAC members that it was impossible to form co-operatives saying it has failed and not worked in any of the gardens till date. As per interaction with the labourers they argued that the labourers can't even use basic assets around them like they were not even allowed to use the rolling machine of the factory to dry their collected leaves. As stated, even to connect electricity they have to take NOC from the management so they can't even think of doing any projects as alternatives in the gardens.

The Joint Action Committee partly manages the gardens and engages labourers for plucking and plant management practices. It has different set of members managing the work in the respective gardens. The committee also anticipate to provide bonus, benefits like; plucking basket, Umbrella etc. beside wages earned from leaf trade. The JAC in belief that the Trade Unions are not representing their actual voices and manipulate the issues which suit them at times. The committee also think the workers co-operative should be formed and encouraged even if the company takes over the garden and acknowledge the real stake holders like JAC are to be recognized by the Government of West Bengal and regulatory bodies like TBI and another organisation. It is also expressed by the JAC members during interaction that "We want to be an example forming the workers committee in Hills for the first time, breaking the hegemony and rule of Company Representatives, Political Leaders, Trade Unions etc...we want to be free from all such barriers of political interference and work for the safeguard and growth of the garden". It has been further stated that the local authority like GTA have shown less interest for the overall development of workers

as a whole but in few selective cases they have provided one-time grant of Rs. 1000 to the few hand full workers who are affiliated to their political thought and philosophy. It is also revealed that some of the members of the joint action committee have started malpractices and there in absence of bye-laws of cooperatives relating to farm management, leaf trade etc. Due to informal allotment of land planted area, there are conflicts which in long run may lead to corruption, rivalry, enmity and social crime. The age differentials in workforce, the old labourers again find difficulty to be coped with the young labourers in terms of plucking and other benefits. The delay in formation of proper byelaws or cooperatives might ultimately damage the healthy bushes of the garden and there will be less opportunity left to reopen garden through some initiatives. Therefore, they are in opinion that the government of west Bengal should take pro-active role to open the closed tea garden either through new companies or governments, own initiative or properly arranged through workers co-operative having bye-laws and guideline. The current scenario of the garden seems to be *lutti layo bhuti khayo* (Rob it and eat it). As stated, it's going to affect the future generation. Due to the closure of gardens the tea leaves, plants and bushes are dying due to lack of proper medication. As stated by the labourer, it disheartens them to see the garden in the verge of extinction and they want to protect and treasure it, as tea garden has been a part of the culture since their four fathers. The JAC members approached the District administration for seeking permission to manage the garden and engage into leaf trade produced in the closed gardens. It has been stated by JAC members that the formal permission is not given. However, a kind of verbal assurance is allowed to JAC engaging leaf trade and garden management. In this informal process the other agencies like local police also robed in and collect bribes from the sale of leaf trade.

This has allowed to exist a chain of corruption and middlemen to exist in the name of management of the closed gardens.

Figure- 4.8: Profile of Joint Action Committee

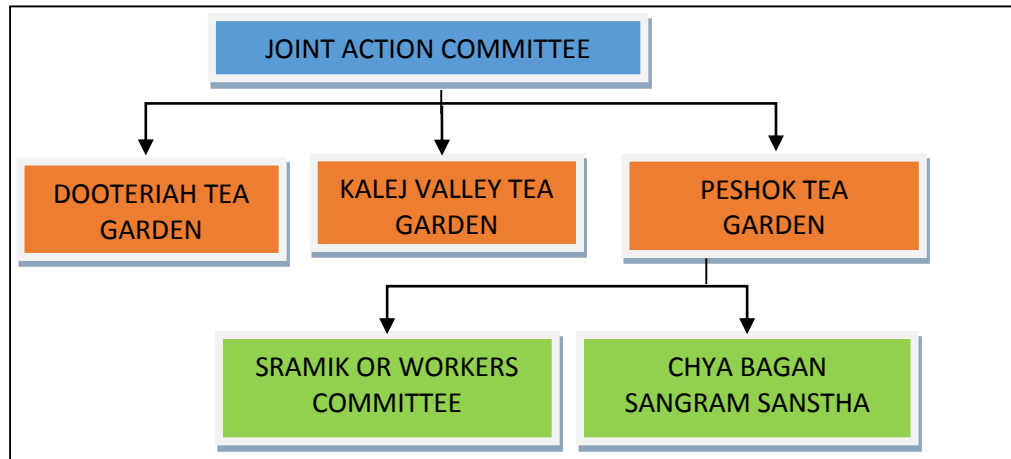


Plate K: Plucking of tea leaves under Joint Action Committee



Source: Field Survey, Oct-Nov 2020

4.6 Health Infrastructure and Access to Health Care Facilities

In the running tea garden, health care facilities extended to employees are of two types: Out-patient and in-patient facility. In case out-patient, an employee can visit the health centre during 2-4 pm every day except Sunday. When a patient suffers from serious illness or diseases, they are referred to Darjeeling District Sadar Hospital with a recommendation of the health centre and garden management. After treatment, an employee had to apply for reimbursement with proper bill and certificates, which was a long procedure. There used to be no doctors in the garden dispensary. The doctors visited rarely, sometimes through NGOs, or any other programme. The labourers used to get some medicines and injectable.

Thus, in these tea gardens the workers are also facing severe crisis in terms of health facilities after the closure. There is no existence of dispensary or health centre in the Peshok garden. The labourers of Dooteriah and Kalej Valley Tea Gardens are not satisfied with facilities available before the closure because there was no doctor or nurse available nor there was any testing facility or beds available in the dispensaries. The health facilities provided in the gardens are not sufficient (Talwar et. al., 2005). There were no doctors available in the dispensaries. The hospitals are located at the distant places from the gardens i.e., 20-25 Kms away and no ambulance facilities available in these gardens. In these closed tea gardens, no health facilities as per the provisions of Plantation Labour Act, 1951 is found to be existing.

In Dooteriah Tea garden there was four dispensaries in each four division, and in Kalej Valley there was two dispensaries in each two division. In the dispensary there used to be a compounder and aya. The dispensary is closed since the closure of the garden. Health facilities like medication, injections were provided. There was no proper

medical facility available in the garden dispensaries. As per the source no government or any kind of institution has come forward with any help and relief. There was no health camps or programmes organised in these gardens after closure during survey. Due to lack of income and employment they face huge problems tackling the health issues. Now the health workers of government are managing these dispensaries and they provide labourers with some medicines, injectable etc.

Case Study III- As stated by the health worker of the sub-centre of West Bengal Health Department, in Kalej Valley there is one supervisor and three health workers. There is no toilet, bed, water supply etc in their centre. There is no existence of any kind infrastructure in the sub centre and their working condition is vulnerable. On monthly basis they give injections to the children of 0-16 age groups, they provide some medicines and do blood pressure, diabetics check-up etc.

Place: Kalej Valley, Health Worker, 06.10.2020

While interacting to the labouring community during field work it has come to notice that the working labourers died after the closure of the tea gardens in all the three gardens under current study death cases has been reported under varied context and situations. To understand the gravity of the deaths selected case studies are captured during the field work.

Case Study-IV: A tea garden labourer, Jyoti Prakash Khulal in Dooteriah tea garden died in November 2019, he was a diabetic person. After the closure of the garden, he owns receivable dues from the management which he has not received and he is exempted from FAWOLI as he had crossed 60 years of age during 2018. Further during sickness, he got no help or financial assistance nor his dues from the

management. If the garden was open it was possible that he would have claimed his money for treatment.

Place: Dooteriah, Labourer, 09.11.2020

Case Study-V: Sil Kumar Tamang was a tea garden labourer of Kalej Valley tea garden. After the closing of the garden, he was working in nearby town area i.e., in Darjeeling as a load carrier and he died in that working site due to accident. He was 56 years old and had dues to the garden management. He nor his family has received any financial assistance from management till date. If the garden was not closed, he wouldn't have to work as a load carrier and the accident wouldn't have taken place.

Place: Kalej Valley, Labourer, 06.10.2012

Case study-VI: Saran Tamang a tea garden labourer of Kalej Valley tea garden was found dead in the roadside after the closure of the garden. He was 54 years old and he used to travel to nearby town areas for work i.e., Rangbull, Ghoom etc on a daily basis. He used to work there as a labourer. It was the rainy season, he was returning home from his work, he slipped in the road and was lying there in the unconscious state till the next morning when the villagers found him dead. If the garden was not closed, he wouldn't have been forced to go outside and work.

Place: Kalej Valley, Labourer, 06.10.2012

Case study- VII: One of the tea garden labourers of Peshok died in 2018. He was 58 years old and was suffering from diabetics. Moreover, after the closure of the garden he was suffering from anxiety as the garden was their main source of income and

employment. Whatever money he and his family had was spent on his treatment. He has not got his financial dues from the management till date.

Place: Telephone, Labourer, 25.09.2020

4.7 Educational Infrastructure and Access to Educational Facilities

As per the interview conducted with the teachers of the school, the condition and infrastructure of school is not good. There is no proper supply of drinking water in the school, the roof of the school leaks at places, lack of proper sanitation facilities etc. As stated, if all these were maintained more students would be encouraged to go to schools. As per the field source no aids were provided by the garden management even before the closure of the garden. Thus, due to the closure of the garden it has largely impacted the health conditions of the student which is ultimately affecting the education. Children are suffering from various health issues so they find it difficult to focus on their studies. The girl students, face lots of problems in the need of hour as there is lack of sanitation facilities and awareness among the students. The State government is providing some 'stamins like Sikhsa Shree for ST and SC students who are poring over class five to eight, Akyashree for student falling under minorities, Kanyashree for girl students, Prematric for OBC etc. students in these closed tea gardens are not able to avail it. There is lack of the proper documents fulfilling the criteria for such stamins like caste certificates, Bank account, Adharcard etc. Thus, as per interaction many students are devoid and deprived of such facilities as their parents are outside busy earning their living and don't have time to look after all this matters. Mostly, the young children are left with their grandparents, so there is absence of parenting leading the younger groups to practice bad habits. Although some books are

provided to the school by the government but it's not sufficient and regular as for some class they give and for some they don't give.

Besides, many children travel more than 15 kms daily to go to high school in nearby towns which takes around 6 hours. As stated, some of the labourers have rented the houses near school for their children but all such expenses are very hard to afford after the closure of the garden due to lack of regular employment. As articulated, though the majority of labourers are illiterate they encourage their children to study (Ansari et. al., 2016). It is found that due to the closure of the garden many children got deprived from school, colleges due to financial crisis as their parents were mostly dependent on the tea garden for employment and income.

The number of schools drop outs are increasing among the children in these Closed Tea Gardens. Roy et. al., (2018) articulated that in the closed tea gardens there is increase in the number of youths dropping out from school shattering their education to sustain their family and avoid hunger. The parents are forced to send their young ones outside to the nearby towns to work. The similar case can be seen in the closed tea gardens of Darjeeling. The younger generations are outside working as maids, in hotels, shops etc. in the nearby town, other states and even in another country like Singapore, Dubai etc.

Considering the economic condition of the labourers in the closed tea gardens, the child trafficking is likely to take place as people are helpless and in the need of money. Due to the poor economic condition of the labourers their children face a number of difficulties in getting access to better schooling (Mishra, 2014). The parents are not able to bear the expenses for the studies. The children are victimised to child trafficking, child labour, abuses and mostly they get indulged in household works. As

per table- 4.14 there is only one high school in Dooteriah including all the sub-divisions, in Kalej Valley there is no high schools available and in Peshok there is one high school including both the divisions. The student teacher ratio in these gardens is found to be more in these Closed Tea Gardens i.e., 1:5 in Dooteriah which indicates that there is one teacher for five students. In Kalej Valley it is 1:4 which indicates that there is one teacher for four students. In Peshok the ratio is 1:13 which indicates that there is one teacher for 13 students. The rationalisation of teachers and student enrolment should be made.

Table- 4.14: Enrolment and Availability of Teachers in Schools

No. of the Garden	Name of the school	Location	No. of School	Enrolment	No. of teachers	Teacher and Student Ratio	
Dooteriah Garden	Tea	Dooteriah Higher Secondary School	Office Goan	1	133	15	1:9
		Dooteriah Tea Garden Primary School	Office Goan	1	14	4	1:4
		Dooteriah Munshi Goan Primary School	Munshi Goan	1	38	5	1:8
		Saraswathi Primary School	Sukrabare	1	12	3	1:4
		Tungsung Primary School (Unit I)	1 No. Goan	1	4	4	1:1
		Tungsung Junior Basic School (Unit II)	Cirkit Goan	1	17	6	1:3
		Dooteriah Balason Primary School	Dooteriah Balason Primary School	1	33	4	1:8
		Samrik Primary School	No. 17	1	2	2	1:1
	Aurobindo Primary School	No. 14	1	5	4	1:1	
Sub-total			9	258	47	1:5	
Kalej Valley Garden	Tea	Lower Kalej Valley Primary School	Bich Goan	1	6	4	1:2
		Prathamik Bal Vidhya Mandir	Gairi Goan	1	29	6	1:5
Sub-total			2	35	10	1:4	
Peshok Garden	Tea	Saraswathi Higher Secondary School	Bhatti Dara	1	350	19	1:8
		Peshok Unit I Primary School	Garlang	1	7	3	1:2
		Peshok Unit II Primary School	Kothi Dhura 8 No.	1	8	4	1:1
		Dak Bungalow Primary School	Dak Bungla	1	11	3	1:4
Sub-total			4	376	29	1:13	
Total			15	669	86	1:8	

[Note: Student teacher ratio is calculated by dividing total number of students by total number of teachers in the school.]

Data Source: Field Survey, Oct-Nov 2020

As mentioned in the provisions of Plantation Labour Act, 1951 states that the children between the ages of six and twelve of the labourers working in any plantation surpass twenty-five in number, the state Government may make rules necessitating every company to provide educational facilities for the children in such way and of such standard as may agree.

In analysing the status of educational facilities and developments across closed tea gardens the indicators of educational fulfilments with orientation to number of schools and infrastructure are taken into consideration. The closure of Tea Garden has hampered the education of many children. Many students have been withdrawn from private schools and has joined government school due to lack of income and employment. As per the sources many labourers even females went outside to places like Delhi, Bombay, Bangalore, Hyderabad, Singapore, etc. to earn a living and educated their children. The labourers are not satisfied with the quality of education in schools within the tea garden but they also not able to send their children to the better school due to lack of proper employment.

Case study VIII: As per Suraj Tamang, before the closure of garden his children were going to private school, but he transferred his children to government school as he had no security and regular employment - educating two children he has to bear expenses of ₹25,000-30000 annually which he couldn't afford after the closure of the garden.

Place: Kalej Valley, Labourer, 14.09.2020

Plate L: Schools in the Closed Tea Gardens



Dooteriah High School



Dooteriah Primary School



Kalej Valley Primary School



Peshok Higher Secondary School

Source: Field Survey, Oct-Nov 2020

4.8 Social Security and Ration System

The labourers of the tea gardens have Provident Fund (PF) account for the security of money that they earned working in tea gardens for many years. As stated, the PF dues comprise the money that owners have subtracted from the labourers as PF and which they have not put with the PF Commissioner (Talwar et. al, 2005). They used this money during marriage, festivals, health emergency etc. But after the closure of the garden people have no security and savings of income and employment that they used

to have in the tea garden. The table 4.16 shows that out of the total respondents only 43 percent of labourers of the Closed Tea Garden has withdrawn their PF during health issues, marriage, repairing houses etc. Out of the total 32 percent of labourers in the closed tea gardens collectively have not applied for the money in the hope that the garden will reopen and if not, it will be their saving for the future. Some of the labourers are facing problems to withdraw their PF after the closure of the garden as there is absent of authority to give the consent. About 26 percent of the labourers had their application pending during the survey. The middle-man also charges money from the poor labourers in the name of helping them to withdraw their PF. They are tired of visiting the PF office back and forth moreover the taxi fare is costly as the office is located at the distant place. Thus, they are not able to withdraw their PF in the times of need due to lack of managerial authority, documenting issues, ill health etc. Earlier during death, marriage, chronic disease or sickness people used to take out money from their provident fund but now it's hard for the people to manage money during the need of the hour. The current situation of the people is vulnerable who were totally dependent on tea garden for their income and livelihood. Moreover, the sick and bedridden labourers are facing it difficult to withdraw their PF. As stated, the Tea Garden authorities have not yet deposited huge amount of Provident for a quite long time (DTDPLU, 2016). The total PF dues are ₹ 6843087 of Dooteriah Tea garden, ₹ 3005336 of Kalej Valley Tea Garden and ₹ 6014766 of Peshok Tea Garden labourers as per the unpublished data collected from the field.

The table 4.15 shows that out of the total respondents of the Closed Tea Gardens, 55 percent of the laborers in Dooteriah, 50 percent in Kalej Valley and in Peshok 4 percent have withdrawn their PF. In Dooteriah only four percent of the applications of the labourers are pending, one percent in Kalej Valley and 97 percent in Peshok. 32 percent

of the labourers had not applied during the time of the survey. The total average amount withdrawn is ₹ 72838.32. As per the interaction they have not fully withdrawn their PF but only one fourth of the total amount.

Table- 4.15: Provident Fund Status

Items	Dooteriah Tea garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
	No (%)	No (%)	No (%)	No (%)
People withdrawn PF	38 (56)	16 (50)	1 (3)	55 (43)
Application pending	4 (6)	1 (3)	28 (97)	33 (26)
Not applied	26 (38)	15 (47)	-	41 (32)
Total	68 (100)	32 (100)	29 (100)	129 (100)
Average amount withdrawn (in ₹)/ Labourers	24526	33313	15000	72839
Total amount withdrawn (in ₹) by Labourers	9,32,000	5,33,000	15,000	10,00,000
Expected Amount (₹) to be withdrawn by labourers	7,35,780	5,33,008	4,20,000	53,90,086

[Note: Expected amount to be withdrawn by the labourers is calculated by adding the number of labourers having pending application and the number of labourers who have not applied and multiplying the total number with the average amount withdrawn by labourers.]

Data source: Field Survey, Sept-Oct 2020

After the closure of the garden the labourers are provided with the compensatory grant from the government of West Bengal i.e., FAWLOI scheme with effect from May 2018. Under this scheme it was passed that the unemployed labourers will get ₹ 1500 per month as financial assistance to them. The labourers attaining the age of 60 and above are excluded from the scheme as per the field interaction. Moreover, the labourers are provided with financial assistance nearly after 2 years from its date of commencement. The labourers of the Closed Tea Gardens started receiving the amount from April 2020. As stated, in the closed tea gardens the labourers received FAWLOI

in an irregular manner (Talwar et.al., 2005), and the irregularities are also seen in these closed tea garden during the survey. A number of labourers being uncovered under FAWLOI were known at the time of field survey. There was also accumulation of money from many months for the labourers who were to receive FAWLOI. The table 4.16 states that out of the total respondent's 64 percent of labourers are receiving FAWLOI beneficiaries and 36 percent of the labourers was not covered under the scheme at the time of survey.

Table- 4.16: FAWLOI in the Closed Tea Gardens

Items	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
	No. (%)	No. (%)	No. (%)	No. (%)
Beneficiaries of FAWLOI	36 (52.94)	30 (93.57)	16 (55.17)	82 (63.57)
Non- Beneficiaries of FAWLOI	32 (47.06)	2 (6.25)	13 (44.83)	47 (36.43)
Total	68 (100.00)	32 (100.00)	29 (100.00)	129 (100.00)

Data source: Field Survey, Sept-Oct 2020

There are two types of food security schemes are in operation in the closed gardens. One is provided by the Govt. of India, named, PMGKAY and the other one is government of West Bengal, in both cases the entitlement of individual households is free ration to all the family having ration card. The central scheme is announced during Covid 19 pandemic initially for three months (march- May) and has been extend for another six months. Earlier the labourers used to get one kg rice per labourer and two kg and 300 grams wheat weekly as per the number of their working days. The PMKAY schemes provide five kg rice per person and PDS of West Bengal provided six kg of rice per person. Before the closure of the gardens the ration is provided by the company till 2015 and the garden was officially locked out in 2018. After that under the National Food Security Act, 2013 all the gender or any other beneficiary is getting equal ration.

After the closure of Garden, the maximum number of ration cards of labourers was transferred to the local monthly ration shop of government of West Bengal. And some of the people are still getting ration from tea garden. “*We would have starved to death if these rations were not given to us*”, as stated by labourers. There are six ration shop in Dooteriah with 6435 card holders, in Kalej valley there are two shop with 1395 card holders and one in Peshok with 985 card holders (refer table 4.17). The monthly ration (MR) shop dealers are Dipen Gurung, Ugal Alay in, Pradeep Pradhan, Kushal Gurung, R.S Gurung etc. The names of the hamlets where the ration shops are situated are Sukrabare, Gorkha Busty, Himul Dara, Bich Goan etc.

Table- 4.17: Distribution of MR Shop and Ration Card Holders

Name	No. of ration shop	Name of MR shop dealer	Name of hamlet and location of MR shop	No. of card holder
Dooteriah Tea Garden	6	Dipen Gurung, Bandhan, Biru, Ugal Alay, Sukraj, Pradeep Pradhan	Sukrabare, Gorkha busty, Office Goan, Gairi Goan, Himul Dara, Bich Goan	6435
Kalej Valley Tea Garden	2	Kushal Gurung, Vikumar Gurung	Bich Goan	1395
Peshok Tea Garden	1	R.S Gurung and son	Bhatti Dara	985

Data Source: Field Survey, Oct-Nov 2020

Case Study-IX: Family of Mann Bahadur, a tea garden worker has not received ration since the closure of garden from any source. They tried to seek help but they are not able to get any of those. They are facing lots of problem to sustain their family and their situation worsened during the pandemic. They are of Samrik division of Dooteriah tea garden.

Place: Samrik Pani, Labourer, Via: Telephone, 05.12.2020

Case Study-X: *The family of Kharke Limbu was also not getting ration during the time of survey. They are not receiving any ration after the closure of the garden. The ration of all other workers was transferred to the local government ration shops but there was no transfer of ration of his families. They are not receiving any ration from any source neither from garden nor government even during the pandemic. While opting for this issue family of Man Bahadur received one-time ration from Block office.*

Place: Samrik Pani, Labourer, Via: Telephone, 05.12.2020

4.9 Housing Habitat and Land Rights

The houses in all the hamlets are mostly kutcha house with thatched roof as per the field observation. Under plantation Labour Act 1952, the tea garden management should provide housing facilities to the labourers and as per the provision they should convert 8 percent of the houses of labourers into pucca house every year, (Ansari, 2016). But the implementation of this act is not found in these tea gardens. In Dooteriah Tea Garden the hamlets are mostly kutcha house with thatched roof as per the field observation. As per table-4.18 out of the total respondents of Dooteriah 93 percent of the people are living in the kutcha house. Remaining six percent have semi-pucca house and one percent are having pucca house. The average number of rooms in these households is four. Sanitation facilities were provided in every hamlet under “Swachh Bharat Mission”. Out of the total respondents of Kalej Valley Tea Garden 91 percent of the people are living in the kutcha house. Remaining six percent have semi-pucca house and three percent are having pucca house. The average number of rooms in these households is two. And out of the total respondents of Peshok 93 percent of the labourer are living in the kutcha house and remaining as no housing facilities are provided to the labourers and seven percent are having pucca house. The average number of rooms in these households is five.

Table- 4.18: Types of House

Types	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
	No (%)	No (%)	No (%)	No (%)
Semi-Pucca	4 (5.88)	2 (6.25)	0	6 (4.65)
Pucca	1 (1.47)	1 (3.13)	2 (6.89)	4 (3.1)
Kutcha	63 (92.64)	29 (90.63)	27 (93.1)	119 (92.2)
Total	68 (100)	32 (100)	29 (100)	129 (100)

Source: Field Survey, Sept-Oct 2020

According to table-4.19, in these tea gardens 59 percent in Dooteriah, 34 percent in Kalej Valley and 72 percent in Peshok have liveable condition of their houses and maximum of the responded don't have a good housing condition. Out of the total respondent's 40 percent of labourers in Dooteriah, 66 percent in Kalej Valley and 28 percent in Peshok have dilapidated condition. The condition of the house of many workers is in dilapidated condition as the houses have not been repaired for many years even before the closure of the garden and they are not in position to repair it after closure. As per the provisions of the Plantation Labour Act, 1951, it is the duty of the employer to provide and maintain the housing accommodation for the labourers and their family but the implementation of these acts should be checked as many workers are devoid of any such facilities in this tea gardens.

Case Study XI: *As per Devi Chettri one of the respondents from the labouring community, she said that her house is in vulnerable condition and she had knocked every possible door for help but got no help from anywhere. The condition of the house is very bad and the roof leaks during rainy season. She said I fear to sleep at night, as I am afraid the house will collapse any time.*

Table- 4.19: Condition of Houses

Indicators	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden
Avg. No of rooms	3	2	3
Condition of house	No (%)	No (%)	No (%)
Good ⁹	1 (1.47)	-	-
Dilapidated ¹⁰	27 (39.71)	21 (65.63)	8 (27.59)
Liveable ¹¹	40 (58.82)	11 (34.38)	21 (72.41)
Total	68 (100.00)	32 (100.00)	29 (100.00)

Source: Field Survey, Sept-Oct 2020

The table- 4.20 presents the family size of the labourers of the Closed Tea Gardens. Out of the total respondent's 50 percent of the labourers have 1-4 number of family members, 42 percent of the labourers have 5-8 number of family members and 9 percent have 9-12 family members.

Table- 4.20: Household Size

No. of member	Dooteriah Tea Garden	Kalej Valley Tea Garden	Peshok Tea Garden	Total
1-3	16 (23.52)	8 (25.00)	10 (34.48)	34 (26.35)
3-6	42 (61.76)	16 (50.00)	14 (48.27)	72 (55.81)
6-9	10 (14.70)	8 (25.00)	5 (17.24)	23 (17.82)
Total	68 (100.00)	32 (100.00)	29 (100.00)	129 (100.00)

Source: Field Survey, Sept-Oct 2020

In the total number of tea gardens i.e., 87 which is under the GI status in Darjeeling Hills, no one has the land rights. As stated, 81.2% of the people in the hill are landless in the government figure and only 18% are having their own land (based on the Trade

⁹Good census houses do not require any repair and are in fairly good condition.

¹⁰Dilapidated such census houses shows signs of decay or those breaking down and required major repairs and are far from being in condition that can be restored or repaired are considered as dilapidated.

¹¹Liveable houses need minor repairs are recorded in this category (Das, et. al., 2013)

Union Study, DTDPLU). In the place where people have no lands people are demanding “Gorkhaland” or own land. It has great impact on the labourers of the tea garden especially in the closed tea gardens in all sphere. As they own nothing even to bury the dead bodies, they have to seek permission and pay some amount to the company. Thus, the condition of the labourers in these gardens are very poor even the minimum wages are not implemented in these tea gardens till date. The total leased land of the tea gardens is 102740.59 acres, the tea plantation land is 46799.93 acres, land under tea garden forest is 22228 acres, Khet land is 11,115 acres and the surplus land is 21283.76 acres (ibid.). Out of the total leased land, 54626.76 acres land is under labours possession and through the ruling political party the trade union leaders are fighting for the land rights of the labourers and trying to make agreements with the state government to resume land from company and distribute the remaining land occupied by the labourers or the to provide labourers at least the homestead land. The Forest Dwellers Act, states that the dwellers or the people living in the forest to be given the land they have occupied; therefore, people of the tea garden areas are also acquainted for the same. For example, tea gardens like Mineral Spring under Bijanbari Block, have been resumed by the State Government and the whole land was settled with actual inhabitants (Parja Patta Co-ordination Committee, 2018), Tirana Tea Garden had 1757.17 acres of land and the government resumed 643.71 acres of land and distributed land paper among the actual inhabitants (Government of West Bengal, 2008). Likewise, resumption of 18.94 acre from retained area of Puttabong Tea Garden in respect of the inhabitants of Ropeway Village, Darjeeling (Government of West Bengal, 2004, 2015 and 2016). So same can be done be with all the tea gardens of Darjeeling Hills. As proposed by the trade union leaders, the following securities of the labourers are attached with the land rights and which will be available only when the

land will be distributed among them they are- i) Legal security: if the labourers get land they will be the owner and they can't be evicted, ii) Food security- if their own land is provided they can cultivate their own food, iii) Livelihood Security: with land they can get alternative source of income, they can use it as asset for example they can mortgage the land and do business, iii) Cultural security: As the cultures of the hill people are connected with land people will get cultural security, iv) Identity security: With land way of life of the labourers will be changed, they will be able to make their permanent house, labourers will have something to prove that are resident of the area etc. vi) Social Security: if they have land, they have social security and status but the labourer has none of those (ibid.). Mishra et. al. (2014) articulated, social exclusion and discrimination along ethnic line limit the opportunities and choices of the labourers.

In the provision of Plantation labour Act, 1951, it is stated that the employer should provide housing facilities but the labourers are devoid of the facilities. After closure of the garden labourers are living in their house and continue to have living rights formally or informally, the situation is worse in the closed tea gardens. The workers in the running gardens get various housing and repairing benefits from the garden as per Plantation Labour Act 1951, thus in the closed the tea gardens most of the houses of the labourers are vulnerable as many are not in the position to repair it. Therefore, in closed tea gardens the labourers neither received government schemes like Indira Awaas Yojana¹² nor management provide any relief relating to housing rights,

¹²Pradhan Mantri Garmin Awaas Yojana (PMGAY), previously Indira Awaas Yojana (IAY), is a public welfare programme, formed by the Indian Government, which offer housing for the rural poor in India.

maintenance and land rights. If we look into the West Bengal Land tenancy Act, it has the provisions of tenants under which they have living rights whereas in plantations the labouring households who are living is almost 5th generation but there is no example of tenancy provisions within the embed of plantation labour act. In case of closed tea gardens land is abandoned and the state has the jurisdiction of cancelling the lease of the land of the tea garden and amendment is possible with the provision of state.

Even to extend the Panchayat raj institutions in the tea gardens and activities under development schemes like MGNREGA, Indra Awaas Yojana etc. are extended to the tea gardens and tea garden labourers are also beneficiaries of such schemes. In this type of unique cases tea garden provides NOC to the beneficiary for the holding accordingly house is allotted to the labouring household. This type of situation exists in running gardens whereas in the closed tea gardens the situation is different. Here the management is absent and labourers do not have option of availing government schemes during the period of closure. Therefore, in closed tea gardens the labourers neither enjoy government schemes nor management provide any relief relating to housing rights, maintenance and land rights. Further it is stated that the plantation rules are not whole applied in the Darjeeling tea Industry as it does not review the definite problems of region and workers. Sharma et. al., (2012) articulated, the socioeconomic reassurance is seemed to be irresolute as the workers and their conditions are of no same type when compared to that of the plains. Although in some cases the management provides housing it does not contribute to the repair of the houses.

The Government of West Bengal launched a scheme “*Nijo Griha Nijo Bhumi*” in the month of Oct- 2011, to address the problem of landless rural families. Under this scheme it was projected that three cottah i.e., five decimal of homestead land to landless and homestead less rural agricultural labourers, artisans, and fisherman families

(Government of West Bengal, 2012). Similarly, the State Government can make new policies or schemes for Land rights and living rights by bringing different kinds of policy changes which is available under Plantation labour Act (1951) and the Tea Act (1953). In the closed tea gardens a kind of a clause called extraordinary circumstances may be introduced based on detail research and study.

Case Study XII: As per SRO of Darjeeling Touzi Department, *there is no existing policy of Government regarding land rights in tea gardens. The Plantation Act of 1951 has not given land right instead lease land has been given. Though the tea garden workers have no legal right over the land they are not deprived in terms of physical ownership. There is no law to control them at the moment; they carry things on their own. Possession is important and they have it he said. Further FAWLOI, MGNREGA, and Self-Help co-operatives are put forward by the various organisations not to displace people and to provide employment, rations, and other essential commodities.*

Source: Tshering Sherpa, SRO, Land Reforms Department: 13.01.2020

“Land Right” has been a very disputed and dangerous issue in Tea Gardens, Vikumar Gurung, Labour, 04.09.2020.

4. 10 Alternative Livelihoods

During the closure people are relied heavily on PDS and FAWLOI however, these two schemes do not provide them optimal subsistence and survival of day-to-day household expenses. They look for alternatives within locality and outside locality. The alternatives which fall broadly within localities are road construction under PMGSY, sand and stone quarrying on river bed economy, built up of pucca houses within village or adjacent villages, hundred days work under MGNREGA, fire wood collection for

household energy and cooking, green leaf plucking in the abandoned garden under JAC or privately on individual basis, daily commuting to nearby urban centres for daily wage like Rangbull, Sonada, Ghoom, Jorebunglow, Darjeeling etc. with a distance of 15-20 Kms. The local market wage is approximately ₹ 300 for male and ₹ 250 for female. There is an irregularity of work in the urban centres sometimes; they get few days in month ranging from 5-20 days. It has been transcribed by the labourers that there is no social security available in urban informal economy in comparison to the tea garden work where in normal condition they are protected by PF, bonus, health facilities, ration etc. They can work up to the age of 58 and avail all such social security benefits. But now aged, sick and women labourers face discrimination considering their peak productivity in work. In case of leaf trade managed by JAC, only young are encouraged and work are available during peak season only. In contrary to that in the normal situation before the closure of garden the labourers used to get work throughout the year irrespective of peak and lean season. In some cases, labourers try to find work in running gardens adjacent to their place of residence with a distance of 10-20 kms approximately. The nearby gardens are namely, Manju Tea Garden, Pussimbeng Tea Garden etc. About 54 percent of the labourers are engaged as daily wage and agricultural labourers in this closed tea gardens (refer table- 4.21).

In addition, the majority of labourers have small patch of land near to their quarters, ranging from .02 to .05 hector of cultivable land. Altogether 33 percent of the labourers practice cultivation in these gardens. Normally vegetables, maize, cardamom etc. were cultivated in earlier days. Now they have stopped growing crops due to attack of wild animals like monkeys, leopard, wild boars, deer, rabbits etc. When the garden was open and functional these wild animal attacks on crop fields rarely happened. But after closure the tea bushes are raised to a big tree and there is undergrowth of jungles which

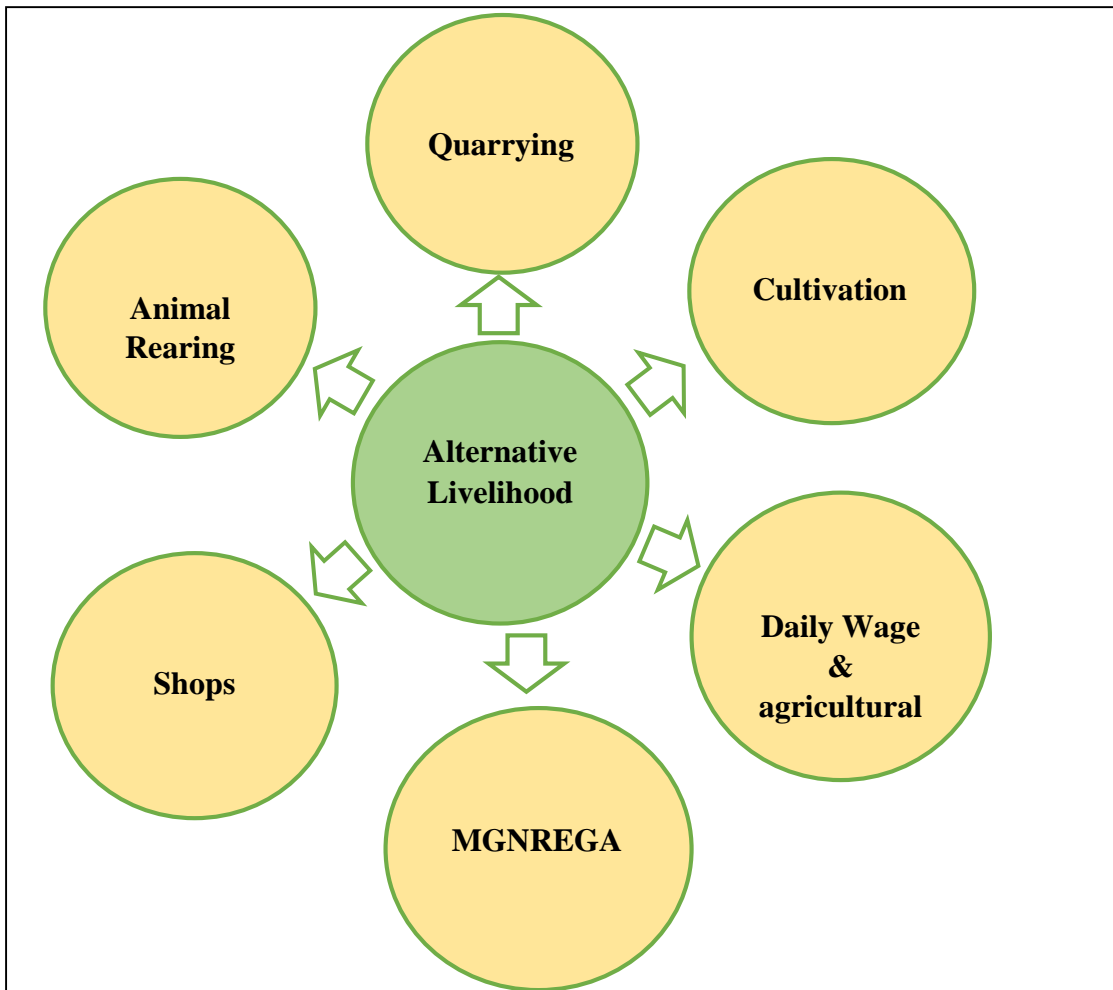
causes frequent animal attacks. The labourers find difficulty to grow crops now which was normal practice in labour households to compensate their food basket. During that time the households used to exchange the harvest of crops within community which now have disappeared and interdependent livelihood coping strategies are missing. Now every household is competing to survive by their own and have been part of monetised economy. As per the interview it has come to light that a number of tea garden labourers of tea garden are engaged in quarrying activities during particularly dry seasons in the river beds, streams, within the tea plantation areas etc but those labourers are not on the list of respondents.

Table- 4.21: Sources of Alternative Livelihoods of Labourers

Alternative Livelihoods	Dooteriah Tea Garden		Kalej Valley Tea Garden		Peshok Tea Garden		Total
	No (%)	Average Income/Day (in ₹)	No (%)	Average Income/Day (in ₹)	No (%)	Average Income/Day (in ₹)	No (%)
Quarrying	-	200	-	250	-	250	-
Cultivation	31 (46)	-	3 (9)	-	8 (28)	250	42 (33)
Daily wage & agricultural Labourers	30 (44)	250	22 (69)	250	18 (62)	200	70 (54)
Shops	-	-	1 (3)	200	-	-	-
Animal Rearing	7 (10)	200	6 (19)	150	3 (7)	150	16 (12)
Total	68 (100)	650	32 (100)	950	29 (100)	850	129 (100)

Source: Field Survey, Sept-Oct 2020

Figure 4.9 Alternative Livelihoods and Income Level



The labourers also absorbed for work under MGNREGA for a period ranging from 30-60 days. In Dooteriah 50 percent, 88 percent in Kalej Valley and 83 percent of labourers in Peshok have job cards under MGNREGA (refer table-4.22). The labourers who have job cards, they are mostly perform construction of Pony Roads, protection wall, drains, water tank, footpaths along the jhoras etc. It is also said at times no work is allotted but payment is made to the labourers or beneficiaries with a 50 percent sharing basis between beneficiaries and Panchayat representative or supervisor. At times the job cards are also given on rent of ₹ 50-100 for a day without engaging into work. So,

there are varieties of leakage of work and asset formation under MGNREGA. It has been often transcribed by that there is no work plan and asset mapping. For example, if panchayat plans to give financial support for animal husbandry, cowsheds, buying animals for dairy products and meat consumption along with other schemes which may allow the labour household to sustain in long run and derive their livelihoods. The other options could be labourers could engage in vegetable cultivation and crop production in their surrounding areas of the house. This may give them additional income and food security. Village roads can also be concretised by engaging labourers under MGNREGA so that the villager's mobility and commodity movement would be easy for sending the agricultural products in the local market and bringing inputs of agricultural operations and household goods for consumption. This may multiply the local trading opportunities and employment generation in addition to the works available within the village economy. The panchayats can also plan the village level community halls under MGNREGA for building an asset in the village which can be used for marriage, funerals, cultural programmes, festivals, blood donation camps, health camps, awareness programmes etc. Panchayats can also plan and organise people to form SHGs and co-operatives and construct their offices under MGNREGA. This collective can take up trades and services of local products and also procure essential goods at wholesale prices which enhance the economic scale of the rural population and may have some durable impact on local economies and their sustenance. The local springs may be developed as a source of water supply to the adjacent villages for drinking and household purposes and also to irrigate the crop fields. The spring-shed development through micro level piped water project under MGNREGA may be built up where people can be awarded work and conservation of water resources under asset generation for sustainable farming and household requirements. The villages may

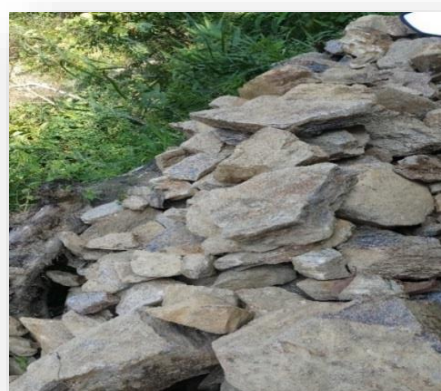
be fenced under MGNREGA through barbed wire to protect the crop fields and people from animal attack.

Table- 4.22: Distribution of Labourers under MGNREGA

Names of the tea gardens	No of Labourers having Job Cards		Total No. of labourers	Types of works under MGNREGA
	Yes (%)	No (%)		
Dooteriah	50 (74)	18 (26)	68 (100)	Pony road, water tank, protection wall, drains etc.
Kalej Valley	28 (88)	4 (13)	32 (100)	
Peshok	24 (83)	5 (17)	29 (100)	

Source: Field Survey, Sept-Oct 2020

Plate M: Quarrying in River / Stream side and Plantation areas



Source: Field Survey, Sept-Oct 2020

Plate N: Animal Rearing



Source: Field Survey, Sept-Oct 2020

Plate P: Agricultural Lands



Source: Field Survey, Sept-Oct 2020

In some cases, the labourers particularly youth out migrate to bigger cities like, Gangtok, Delhi, Mumbai, Hyderabad, Bangalore etc. Roy et.al., (2018) articulated, the tea plantation area is located in the remote corners, the availability of the alternative sources of livelihood is very limited for the labourers. The same situation also prevails in the closed tea garden of Darjeeling Hills.

The rate of out-migration has become rampant in North Bengal from last few years (ibid.). Due to closure lots of exploitation, forced migration, crime among children and women are taking place in the bait of jobs (Ghosh, 2014). Mostly the labourers of tea garden migrate in pursuit of better employment and income. There exist pull and push factor for migration. The push factor includes low wages, poverty, deprivation from various facilities and benefits, closure of garden, mismanagement etc. The pull factors include availability of jobs, better wages, better education for their children etc. Most of the unskilled labourers of these closed tea gardens are forced to out-migrate as jobs are not available locally. The labourers are displaced from their regular employment; hence they out-migrate in order to earn their livelihood and sustain their family. The main reason for the migration in the closed tea gardens is poverty and unemployment (Roy, 2017). The out-migration of labourers also depends on the factors like gender, age and educational qualification of the labourers.

It is found from the field survey that 36 percent of labourers out-migrate in these three closed tea gardens altogether (refer table 4.23&4.24). Out of a total 2568 labourers, it is estimated that 936 labourers are expected to out-migrate in the study area in search of alternatives livelihoods in cities and distant places. This has also affected their dependents with an estimated population of 4435 persons out of total population of 11953 persons in all three villages.

Table-4.23: Intensity of Out-Migration in Closed Tea Gardens

Name of Tea Gardens	Actual Out-migrants		Expected Out- Migrants	
	No. of out-migrants (%)	No. of Labourers interviewed	No. of Expected out-migrants (%)	Total no. of labourers in Closed Tea Gardens
Dooteriah Tea Garden	19 (28)	68	379 (28)	1356
Kalej Valley Tea Gardens	18 (56)	32	361 (56)	642
Peshok Tea Gardens	10 (34)	29	197 (34)	570
Total	47 (36)	129	936 (36)	2568

[Note: The percentage of Expected Out-migrants are calculated based on the percentage of actual number of labourers out-migrating from the gardens found during field survey]

Source: Based on Field Survey, Sept-Oct 2020

Table-4.24 Affected Population due to Out-Migration in the Closed Tea Gardens

Name of Tea Gardens	Actual Out-migrants and Affected Population		Expected Out- Migrants and Affected Population		
	No. of out-migrants (No)	Affected Population (No)	No. of Expected out-migrants (No)	Expected Affected Population (No)	Population (No) as per Census-2011
Dooteriah Tea Garden	19	89	379	1781	5113
Kalej Valley Tea Gardens	18	79	361	1588	2640
Peshok Tea Gardens	10	54	197	1066	4200
Total	47	225	936	4435	11953

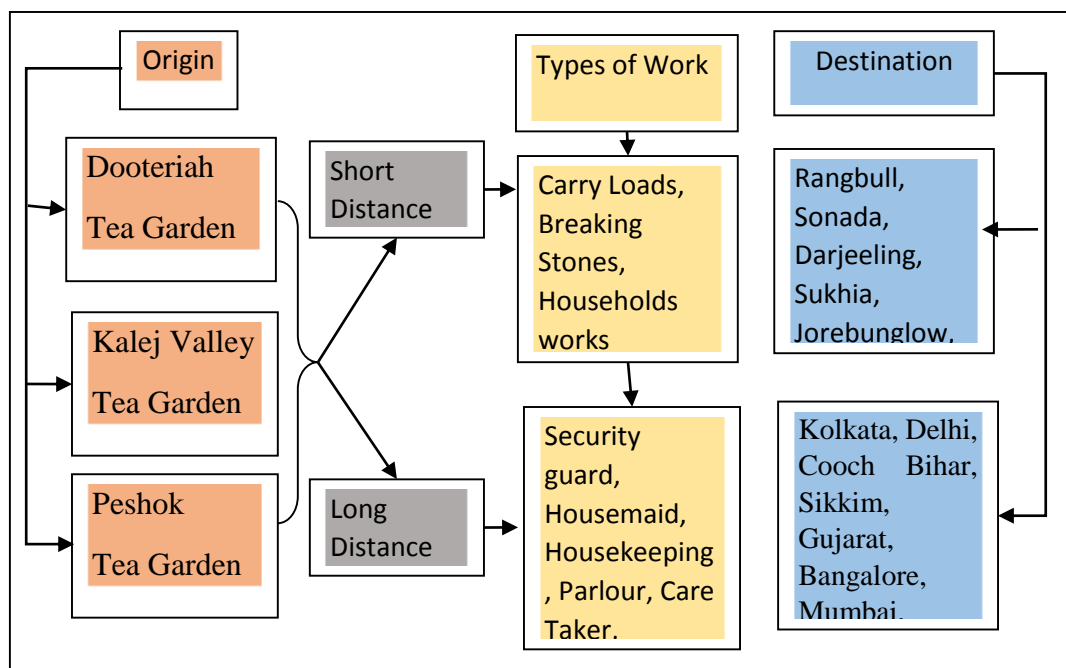
[Note: The number of Actual Affected Population is estimated based on Average Household Size of Sample respondent labourers multiplied by number of Actual Out-migrants. Similarly, the Expected Affected Population of out-migrants is worked out of Average Household Size derived from sample respondent labourers multiplied by the Expected Out-migrants]

Source: Based on Field Survey, Sept-Oct 2020

Earlier studies suggested that the labourers find difficulties to move out of the tea gardens to find alternative sources of livelihoods as they are usually unskilled labourers (Mishra et. al., 2014). Some labourers specially the younger generation out-migrate and cover long distance for work. Similar results are evident in the current research. There are two types of mobility of labourers are found in closed tea gardens. Firstly, the

labourers of middle-age and above absorb in the nearby urban places in search of opportunity on daily basis. The average wages in the short-distance works are rupees 250-300/-per day for male and rupees 200-250/-per day for female labourers. The common destinations are *Rangbull, Ghoom, Sonada, Sukhia, Darjeeling* etc. and work as daily wage worker in petty urban informal services (refer figure- 4.10). Secondly, the labourers also out-migrate for long distances and stay out of their residences for a period of six months to a year. The young people including women consist this group and common destinations are *Gangtok, Delhi, Mumbai, Hyderabad, Bangalore* etc. They live in slums in urban places in miserable living conditions. The common works in urban areas they perform mostly as housekeeping, caretaker of bungalows, security personnel, serving personnel in hotels and restaurants, construction labourers, etc. Most cases they out migrate with the help of known persons or labour contractors or friends and relatives. The monthly salary ranges from Rs.5000-10000/- per month.

Figure 4.10- Origin and Destination of Migrations, Out-migrants and Livelihoods



Source: Based on Field Survey, Sept-Oct 2020

4.11 Problem and Suggestions of labourers

To see the impact of closure of the tea garden the problem index has been calculated in broad divisions depending on the response of the labourers i.e., employment, health facilities, education, pensions etc. Out of the total respondent's majority of labourers are facing problems due to lack of income and regular employment in all the three closed tea gardens. They have to travel far from their houses to earn a living. Even when they are sick, they can't take rest as they have no assured job and have to look after the whole family. While garden was open, even though the other facilities was not provided they used to get money at every weekend or quarterly and with that they used to run their house. The situation of the labourers having more family members is vulnerable. They are also facing problems in order to educate their children. Due to the closure of the garden they have to go to work at distant places to earn livelihood as not much alternatives are available at their place. Moreover, only the young and physically strong are able to go outside and work. The old labourers and women are plucking tea leaves but that is just temporary solution they said and in the long run even those who are working outside they will also be able to do labour till they are young and strong. They no security and deposits that they used to have when the garden was open. Health issues is also a major problem as the garden dispensaries and facilities are also not available after the closure of the garden. During severe sickness they used to retrieve money from their PF account but presently they are helpless.

Likewise, the following table also includes the suggestive measures given by the labourers which is divided into four broad divisions i.e., formation of co-operative, new company should be invited, garden should run by SHGS and garden should remain close. As per the majority of respondents the new company should be invited in these Closed Tea Gardens. They believe if the new company comes, they will take good care

of the garden, they will also plant new bushes and the coming generation will have prosperous future. Even the old retiring labourers will get all their earnings and dues from the garden for which they have worked all their life. As stated by the respondents if the management runs the garden the labourers will get all the benefits, health facilities, ration, PF, bonus during festivals, gratuity etc. The reopening of garden is only the permanent solution to all our problems they said.

Table- 4.25: Problem and Suggestion Index

	Problem Index	Dooteriah Tea Garden		Kalej Valley Tea Garden		Peshok Tea Garden	
		No	%	No	%	No	%
A	Unemployment	50	73.52	31	96.88	23	79.31
	Health Facilities	13	19.12	1	3.13	2	6.90
	Education	4	5.88	-	-	2	6.90
	Pensions	1	1.47	-	-	2	6.90
	Total	68	100	32	100.00	29	100.00
	Suggestive measure						
B	Formation of workers cooperative	2	2.94	0	0.00	0	0.00
	New company to be invited	66	97.06	31	96.88	28	96.55
	SHGS	0	0.00	0	0.00	0	0.00
	Garden should remain closed	0	0.00	1	3.13	1	3.45
Total		68	100.00	32	100.00	29	100.00

Source: Field Survey, Oct-Nov 2020

4.12 Conclusion

All the three tea gardens under study remained closed since 2015 but officially it was declared in Jan, 2018 with a gap of three years by the Government of West Bengal. The labourers are in a state of transition and neither they have formal regular employment nor alternative plan is announced so far. Hence, they are dependent on alternative sources by their own efforts and do not enjoy the regular wage and benefits as existed before the closure of the garden. The impact of closure can be seen in all the spheres of

their life. The health, education, housing etc. in these closed tea gardens labourers are in vulnerable condition.

In the closed tea gardens, tea garden is found to be the major source of employment. Due to the closure of the garden the inequality that exists between the male and female labourers has deepened and women are usually paid less compared to that of the male labourers. Moreover, employment in the tea gardens provided them with economic freedom and which in turn reduces the incidence of domestic violence. After closure they are facing problems to go outside to work and at the same time to manage the household chores. There is also an increase in domestic violence due to the closure of the garden as people are facing difficulties to cope up with the current situation and women and children are the foremost victims. Cases of trafficking are also taking place in the closed tea gardens as labourers are helpless and are in need of money. So, it's easy for the agents to lure them with assured jobs and false promises for a better life.

The labourers were promised for interim sustenance allowance of rupees 1500 per month under FAWLOI scheme which labourers could avail only in April 2020. During field survey, it was found that only 64 percent of labourers are registered under FAWLOI. The labourers who have attained the age of 58 and above are excluded from such benefits. Normally, in a running garden the labourers enjoy housing, health, education facilities etc covered under the provisions of Plantation Labour Act, 1951. During the interim period in the closed tea gardens labourers are not able to access these facilities. Since the labourers don't enjoy land rights in tea gardens, it has impacted them during closure too and they are not in a position to avail other government facilities and schemes of housing (e.g., *Indira Awaas Yojana*) due to absence of land rights or repair their existing houses. The labourers cannot withdraw their Provident Fund and receivable dues from the company during closure as

management is absent. Besides after closure the tea bushes are raised to a big tree and there is undergrowth of jungles which causes frequent animal attacks on the agricultural fields of the labourers by wild boar, rabbit, monkey, deer etc. The labourers find difficulty to grow crops now which was normal practice in labour households to compensate their food basket. As a consequence, out-migration among the youth of the gardens were found. It was seen that somehow the young labourers could engage in other works locally to survive and sustain their families but they are uncertain about the availability of jobs. Most of the labourers find it difficult to work outside as they are skilled to work in tea industry and habituated to work within the vicinity of the tea garden. When gardens were in operation, the older lot of labourers used to be allotted lighter works and provided the full wages even in cases of sick persons. In case of labourers who were partially injured during their work time they were provided alternative works as per their health condition. Thus, the closure of the garden has serious impact on the older group and handicapped labourers due to which they find difficulties to survive and engage any other economic activity outside the garden. Even some cases labourers died due to non-availability of proper food and nutritional intake. Thus, the State Governments can make new policies in the closed tea gardens under the clause like extraordinary circumstances for the Land rights and living rights by bringing policy changes which is available in the Plantation Labour act, 1951 and Tea Act, 1953 based on a detail research and study.

Chapter- 5

Summary of the Findings and Suggestions

There has been a shift in tea economy during 1990s in North and North-East India. A sizable proportion of expansion of tea area and production is being contributed by the Small Tea Growers popularly known as Unorganised Sector. The per kg unit price of tea has declined during the period of 2000-2007 in the domestic and export prices. This has affected the tea industry and it coincides with the closure of tea gardens in major tea producing states of India. It is found that as many as 118 gardens were closed during the year 2000-2004 (ibid.). The situation has worsened and livelihood of labourers were affected. Consequently, a Writ Petition was also filed before the Hon'ble Supreme Court of India in 2006 under which a judgement and order is pronounced by the Court in April 2018. The implementing and monitoring agency like Tea Board of India and the States of Assam, West Bengal, Tamil Nadu and Kerala were instructed to comply such adverse order and asked for interim compensation to the labouring community. Yet it is found that there have been inadequate measures taken on the part of Tea Board of India as well as State Governments. This resulted in continuity of closure of tea gardens across states. It is also noticeable that the State of West Bengal is having highest numbers of closed gardens and the same is being continuing till date despite orders of the highest court of the country. In the current study of three closed tea gardens of Darjeeling Hills i.e., namely *Dooteriah*, *Kalej Valley* and *Peshok Tea Garden* which has displaced 2568 labourers from their regular employment since 2015. This has adversely affected the labouring community. As mentioned earlier, out of 118 closed gardens in India affecting a total of 68442 labourers collectively, 53 gardens were closed in West

Bengal alone impacting 43590 labourers. The condition of the workers was miserable and reports of deaths and suicide were captured in vernacular and national media. There is lack of proper implementation of the regulatory orders and laws due to which the process of closure of tea gardens is ongoing. Thus it can be equated with Harvey's argument that there is centralisation of wealth and power in the hands of a limited people by dispossessing the mass of their wealth or land. In this context, the labourers in the closed tea gardens are found to be dispossessed of their formal employment and loss of livelihoods, lost their living rights on habitat and housing, inability of access to health and educational facilities and CPRs etc.

The clustered and linear types of settlements are found the Closed Tea Gardens under the present study. Due to road network, gentle sloping and services of health centre, primary schools and panchayat office plays major role of such type of settlements. There are 37, 10 and 17 hamlets used to supply workforce in Dooteriah, Kalej Valley and Peshok garden respectively. The tea gardens are mainly covered with plantation areas, settlement, roads, forest and others including jhoras, agricultural lands, fallows, jungle etc. The highest elevation is found in Kalej Valley with 2126 metres and lowest in Peshok Tea Garden with 366 metres. The stiff slope in the region challenges the opening of any large industry and to practice intensive agricultural practices. The percentage of cultivators, agricultural labourers and household industrial workers is very low within the category of main workers and the percentage of other workers (plantation workers) is relatively high. The non-workers or dependents are also high in these three plantation villages as per the records of Census of India. It also indicates that there are no other viable alternatives except tea plantations. Ideally, in a running garden the labouring households do not face much crisis for their survival and sustaining livelihoods. But when a tea garden is closed and the labourers face

difficulty to get work in their vicinity for earnings and survival. The additional land or extra land adjacent to their residential quarters play an important role for deriving livelihoods. In this context the land which are not directly in use for tea plantations, factory etc by the closed tea gardens brings a debate of redistribution and social justice. In light of that if all the three closed gardens are viewed from the comparative perspective of the pattern of land use i.e.(i) under direct use by the tea garden and (ii) not directly used by the tea garden, need reimagination of land granting policies of the Government of West Bengal and the regulatory bodies like Tea Board of India under the provision Tea Act, 1953 and the Plantation Labour Act, 1951. The differential outcome of land use is found while analysing data received from the tea gardens and image data of the three Closed Tea Gardens of Darjeeling hills.

All the three closed gardens under present study remained closed since 2015 but officially it was declared in January 2018 with a gap of three years by the Government of West Bengal. During the transition period, the labourers neither have formal regular employment nor alternative plan is announced for them. Hence, they are dependent on alternative sources by their own efforts and do not enjoy the regular wage and benefits as existed before the closure of the garden. The impact of closure can be seen in all the spheres of their life. The health, education, housing etc. in these closed tea gardens labourers are in vulnerable condition. As argued by Chamber (1995), that income is important but the other characteristics of well-being and better quality of life like health, right to educate, self-esteem, security, impartiality, opportunities, admittance to goods and services, family, societal life, creativity, celebrations, etc are also necessary. Lack of opportunities to earn a living and deprivation has leads to the poverty in these gardens. However, Sen constructing the concept of Capability Deprivation, defines poverty not only in relations of little

income but poverty as an inability to get the indispensable commodities, and to alter the existing condition. Thus, the investment of human capital like on health, education, skill improves the capacity of individual and thereby enhances the people choices and capabilities. With regards to the Land Rights in the Tea industry there are few concerns and demands by various Stake holders including the labouring committee. Firstly, in tea plantations of West Bengal including Darjeeling Hills, the labourers are fourth or fifth generation and approximately more than 170 years. Despite, their long association with tea economy and contribution to make plantation economy sustainable their land rights have been neglected. As per the standard convention, land resources in tea cultivation given under lease for a period of 30 years (100 years earlier) to the companies by the respective State Governments. Whereas the Government failed to recognise the labouring community for their land rights and occupancy. Secondly, there has been a demand, by the Trade Unions and the labouring community to the Government of West Bengal for providing land rights to the labourers in tea industry which is yet to be materialised till date. Hence, the restructuring of tea economy /industry is essential and amendment of Plantation Labour Act, 1951 is necessary for the said purpose. Thirdly, in the Closed Tea Garden, the labouring community faces a deep crisis due to the absence of management during the period of closure of the garden. Here the labourers neither have ownership of land nor they have been asked to vacate the lease land occupied by the closed tea garden. Under the circumstances, the labourers are not in a position to repair their houses and also cannot avail any government schemes for a new house or any such other benefits given by Panchayati Raj Institutions. As according to Chamber(1995), the ownership and access to the resources like Land, forest, water bodies, village commons, and sharing for public good provides better sustainability to

the communities living in a locality or region. In the closed tea gardens, the management and company is absent for years in managing the continuity of production system and abandoned their labourers thus, depriving them from regular jobs, reduced their bargaining strength, loss of regular income and livelihood opportunities. Since the land including other resources like water bodies, the forest, village commons are owned and leased out to the management company by the government and the labouring communities hardly have any formal access to these resources. This situation further aggravated in closed tea gardens as the labouring community finds absence of management to look after them and are not allowed to access resources formally. The labourers cannot withdraw their Provident Fund and receivable dues from the company during closure as management is absent. As a consequence, labourers and young population out-migrate the gardens to far-off places. It was seen that somehow the young labourers could engage in other works locally to survive and sustain their families but they are uncertain about the availability of jobs on regular basis. Most of the labourers find it difficult to work outside as they are skilled to work in tea industry and habituated to work within the vicinity of the tea garden. When gardens were in operation, the older lot of labourers used to be allotted lighter works and provided the full wages even in cases of sick persons. In case of labourers who were partially injured during their work time they were provided alternative works as per their health condition. Thus, the closure of the garden has serious impact on the older age group of labourers due to which they find difficulties to survive or engage any other economic activity outside the garden. Even some cases labourers died due to non-availability of proper food and nutritional intake. Consequently, some labourers specially including old age, physically weak and staff members altogether formed the *Workers Committee* in 2015, locally known

as *Joint Action Committee* (JAC) to support themselves and the needy workers. As described by Robert Chamber that that poverty is caused by vulnerability, social exclusion, physical weakness, seasonality, powerlessness etc among the labourers. The alternatives which fall broadly within localities are road construction under PMGSY; sand and stone quarrying on river bed, streams and tea plantation areas; built up of pucca houses within village or adjacent villages, hundred days work under MGNREGA, fire wood collection from forests for household energy and cooking, green leaf plucking under *Joint Action Committee* etc. There are varieties of malpractices, leakage of work and asset formation under MGNREGA is undergoing in the Closed Tea Garden areas.

The labourers were promised for interim sustenance allowance of rupees 1500 per month under FAWLOI scheme which labourers could avail only in April 2020. During field survey, it was found that only 64 percent of labourers in three gardens altogether are registered under FAWLOI. The labourers who have attained the age of 58 and above are excluded from such benefits. Normally, in a running garden the labourers enjoy housing, health, education facilities etc covered under the provisions of Plantation Labour Act, 1951. During the interim period in the closed tea gardens labourers are not able to access these facilities. After the closure labourers are relied heavily on PDS and FAWLOI. However, these two schemes do not provide them optimal subsistence and survival of day-to-day household expenses throughout the year. Besides, after closure the tea bushes are raised to a big tree and there is undergrowth of jungles which causes frequent animal attacks on the agricultural fields of the labourers by wild boar, rabbit, monkey, deer etc. The labourers find difficulty to grow crops now which was normal practice in labour households to compensate their food basket. Interdependent livelihood coping strategies are missing. Now every

household is competing to survive by their own and have been part of monetised economy. As a consequence, out-migration among the youth of the gardens were found. It has been transcribed by the labourers that there is no social security available in neighbourhood urban informal economy in comparison to the tea garden work where in normal condition they are protected of PF, bonus, health facilities, ration etc.

The labourers and staff altogether have formed JAC, under this committee they are plucking green leaves and selling to the nearby gardens as the source of alternative livelihood for themselves. But this committee has resulted rising inequality and disparity among the labourers. It has led to the uneven distribution of land among the labourers. It is also revealed that some of the members of the JAC have started malpractices and there is an absence of bye-laws of co-operatives relating to farm management, leaf trade and overall functioning. There is informal allotment of planted area distributed to the labourers by the JAC but there is presence of conflicts which in long run may lead to corruption, rivalry, enmity and social crime. In some cases, labourers themselves have captured the tea areas as per their wishes and power relations.

Earlier *Charter of Demands* was kept together from labour and trade unions to the management but today there is a reverse situation in practice. The management and trade unions together used place demands of labourers regarding the curtailment of wages and other benefits. There are many trade unions existing in the region with various affiliations but no productive role is found to be played by them to reopen the garden as per the field interaction. They only make fake or false promises during the time of election and after election they get vanished.

In the plantation areas of Darjeeling hills, work in tea gardens is found to be the major source of employment. As per the Census of India, 2011 the percentage of female population is more in Peshok tea garden whereas in Kalej valley and Dooteriah the percentage of male and female is almost fifty percent. This has resulted to a greater number of female workforces in closed tea gardens and as a result women labourer condition is worse as compare to male counterpart. Due to the closure of the garden the inequality that exist between the male and female labourers and it has deepened further. Women are usually paid less compared to that of the male labourers. Moreover, employment in the tea gardens provided them with economic freedom and which in turn reduces the incidences of domestic violence. After closure they are facing problems to go outside to work and at the same time to manage the household chores. There is also increase in the domestic violence due to the closure of the garden as people are facing difficulties to cope up with the current situation and women and children are the foremost victims. Cases of trafficking are also reported and taking place in the closed tea gardens as labourers are helpless and are in need of money for their basic needs and survival. So, it's easy for the trafficking agents to lure them with assured jobs and false promises for better life. The closure of the garden has also affected the marital life of the labourers. Many of the labourer's husband or the wife who have gone outside to work after the closure of the garden have not returned or they might have settled outside.

In the backdrop of the situation, the closure of the tea gardens is an ongoing phenomenon in all major tea growing states in India. No constructive efforts are attempted by various State Governments and the regulatory authorities like Tea Board of India. Though there is a standing *Order* and *Judgement* by the Hon'ble Supreme Court (2018), yet the Tea Board of India and State Governments miserably failed to

introduce appropriate studies and framing policies for reopening the closed gardens. There are demands raised by all the stakeholders during field survey that the closed tea gardens should re-open without any further delay. The labourers out-migrate in search of alternative employment to cities and distant places and if gardens re-open they can be absorbed in their locality and lead better quality of life. In fact, during the COVID-19 Pandemic unemployment was accelerated in these tea gardens due to the return of the out-migrants to their native places. This has led to malnutrition, food insecurity and even deaths in some cases and overall economic instability in the region. Therefore it is understood that the existing model of tea economy have failed to protect either the interest of the company or the plantaion labour as argued by Xaxa (2019).The State Governments can make new policies in the closed tea gardens under the clause like extraordinary circumstances for the land rights and living rights by bringing policy changes which is available in the Plantation Labour act, 1951 and Tea Act, 1953 based on a detail research and study.

References

Books and Journals

- Addison, J. T., Fox, D. A., and Ruhm, C. J. (2000). Technology, trade sensitivity, and labor displacement. *Southern Economic Journal*, 682-699.
- Agrawal, A., and Redford, K. (2009). Conservation and displacement: an overview. *Conservation and Society*, 7(1).
- Ansari, S., & Sheereen, Z. (2016). Socio-economic Condition of Tea Garden Worker in Alipurduar District West Bengal. *International Journal of Research in Social Sciences*, 6(2).
- Asopa, V. N. (2007). Tea industry of India. *Indian Institute of Management, Ahmedabad*.
- Attewell, P. (1999). The impact of family on job displacement and recovery. *The Annals of the American Academy of Political and Social Science*, 62-82.
- Baruah, T., & Sharma, K. (1999). *Tea industry in India: an introduction*. NL Publishers.
- Behal, R.P. (1985). Forms of Labour Protest in Assam Valley Tea Plantations, 1900-1930. *Economic and Political Weekly*, PE19-PE26.
- Bhadra, M. (1985). Women Workers in Tea Plantations. *Indian Anthropologist*, 15(2), 93-114.
- Bharali, G. (2007) Paper presented at a Seminar ‘*Society, Social Change and Sustainable Development*’ organised by Dept. of Sociology, North Bengal

University. 11th-13th April. The Tea Crisis, Health Insecurity and Plantation Labourers' Unrest.

Bhowmik, S. (1981). *Class formation in the plantation system*. People's Pub. House.

Bhowmik, S. K. (1980). The plantation as a social system. *Economic and Political Weekly*, 1524-1527.

Bhowmik, S. K. (2002). Productivity and labour standards in tea plantation sector in India. *Labour Social and Issues in Plantations in South Asia: role of social dialogue*, 133-166.

Bhowmik, S. K. (1994). Tea Plantation Wage Agreement: Workers' Interests Sacrificed. *Economic and Political Weekly*, 2645-2647.

Chambers, R. (1995). Poverty and livelihoods: whose reality counts?. *Environment and urbanisation*, 173-204.

Das, B. (2018). A Geographical Analysis of Female Work Participation in Rural areas of North Bengal. *Indian Journal of Spatial Science*, 9(1), 32-36.

Dasgupta, K. (1983). Plantation Economy and Land Tenure System in Brahmaputra Valley, 1839-1914. *Economic and Political Weekly*, 1280-1290.

Das, T. C., and Sharma, K. R. (2012). *Agony of plantation workers in North-East India*. Delhi: Kalpaz Publications.

Das, B., & Mistri, A. (2013). Household quality of living in Indian states: analysis of 2011 census. *Environment and Urbanisation Asia*, 4(1), 151-171.

Dozey, E.C. (2001). *A Concise History of the Darjeeling District Since 1835: With a complete Itinerary of Tours in Sikkim and the District*. NL Publishers.

Datta, T. K. (2010). Darjeeling Tea in India. *Lecoent A, Vandecandelaere E, cadihon J (2010) Quality linked to geographical origin and geographical indications: Lessons learned from six case studies in Asia. Bangkok: Food and Agricultural Organisation of the United Nations, Regional Office for Asia and the Pacific*, 113-160.

Fernandes, W. (2007, November). Development-induced displacement: The class and gender perspective. In *International conference on The Emerging Woman in the Indian economy. Christ College, Bangalore*.

Fernandes, W. (2006). Mines, mining and displacement in India. *Managing the Social and Environmental Consequences of Coal Mining in India, The Indian School of Mines University, Dhanbad*, 333-344.

Fernandes, W. (2008). Paying the Price of Someone Else's Development. *Agenda-Infochange*, (12), 8-12.

Foucault, M. (1979), *Discipline and Punishment: The Birth of Prison*, New York: Vintage.

Ghosh, B. (2014). Vulnerability, Forced Migration and Trafficking in Children and Women. *Economic and Political Weekly*. 49(26/27), 58-65.

Hamid, G. M. (1996). *Population Displacement in the Sudan: patterns responses coping Strategies*. Center Migration Studies.

Hannan, A. (2017). Livelihoods, Labour Market and Skill Development in Small Tea Growers (STGs) gardens in India with special reference to India's North-East. *Transaction journal Institute of Indian Geographers, Vol.39, No.1*, 91-104.

- Harvey, D. (2003). Accumulation by dispossession. *The new imperialism*, (<https://socialistregister.com/index.php/srv/article/download/5811>), Date of access: 2-7-2020.
- Iyer, R. R. (2007). Towards a just displacement and rehabilitation policy. *Economic and Political Weekly*, 3103-3107.
- Kar, R. K. (1979). A migrant tribe in a tea plantation in India: Economic profile. *Anthropos*, (H. 5./6), 770-784.
- Kenny-Lazar, M. and Ishikawa, N. (2019). Mega-Plantations in Southeast Asia: Landscapes of Displacement. *Environment and Society*, 63-82.
- Lama, B. B. (2009). *The Story of Darjeeling: The Land of the Indian Gorkha*. Yonzone Lama Publications, 84-94.
- Mishra, D.K., Upadhyay, V., and Sarma, A. (2014). *Unfolding crisis in Assam's tea plantations: employment and occupation mobility*. Routledge India.
- Mitra, S. (2019). *Life of workers in tea gardens of North Bengal: A study on food security issues*.
- Malley, L. (1907). *Bengal District Gazetteers: Darjeeling*. New Delhi: Logos Press.
- Massey, D. (1995). *Spatial Divisions of labour: social structures and the geography of production*. Macmillan International Higher Education.
- Naderifar, M., Goli, H., and Ghaljale, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research, *Strides in Development of Medical Education*, 14(3), 1-6.

- Paudel Khatiwada, S., Deng, W., Paudel, B., Khatiwada, J, R., Zhang, J., and Su, Y. (2017). Household livelihood strategies and implication for poverty reduction in rural areas of central Nepal. *Sustainability*,9(4), 612.
- Paul, K.C. (2018). Case Analysis II: Closed Tea Estates-A Case Study of the Dooars Region of West Bengal, India. *Vision*,22(3), 337-338.
- Pramanik, M.K. (2016). Site suitability analysis for agricultural land use of Darjeeling district using AHP and GIS techniques. *Modeling Earth Systems and Environment*, 2(2), 5.
- Rai, S. (2016). Plantation and People of Darjeeling- Disparity and Development of the region. *International Journal of Multidisciplinary Research Review, Vol-1, Issue-4*, 161-163.
- Rai, P. C. (2019). An Empirical Study on The Socio-Economic Conditions of the Plantation Workers in the Tea Industry of Darjeeling. *International Journal of Applied Science and Engineering*, 7(1), 83-93.
- Rauhut, D., & Hatti, N. (2005). 11 Amartya Sen, Capability Deprivation and Poverty. *Economists and Poverty: From Adam Smith to Amartya Sen*, 275.
- Riddell, M. (2013). Assessing the impacts of conservation and commercial forestry on livelihoods in Northern Republic of Congo. *Conservation and Society*, 11(3), 199-217.
- Roy, N. C., & Biswas, D. (2018). Closed Tea Estates: A Case Study of the Dooars Region of West Bengal, India. *Vision*, 22(3), 329-334.

- Roy, S. (2017). Women labour in the tea gardens of West Bengal: Changing orientation and emerging challenges. *International Journal of Engineering Development and Research*, (5)4, 862-868.
- Sarkar, R. L., & Lama, M. P. (1986). *Tea plantation workers in the Eastern Himalayas*. Atma Ram.
- Shangpliang, R. M. (2012). Forest Legislations and Livelihood Strategies: Khasi Women in Rural Meghalaya. *Sociological Bulletin*, 479-493.
- Strategies, I. F. (2013). *Decontamination, Community Regeneration and Livelihood Rehabilitation*. Institute for Global Environmental Strategies, 53-60. (URL: <https://www.jstore.org/stable/resrep00781.6>)
- Talwar, A., Chakraborty, and Sarmishtha Biswas, S. (2005). Study on the Closed and Re-opened Tea Gardens in North Bengal. *Paschim Banga Khet Majoor Samity and International Union of Food, Agriculture, Hotel, Restaurant, Catering, Tobacco, Plantation and Allied Workers Association (IUF)*.
- Xaxa, V. (1985). Colonial Capitalism and underdevelopment in North Bengal. *Economic and Political Weekly*, 1659-1665.
- Xaxa, V. (2019). Need fro Reconstructing the Tea Plantation System in India. *Economic and Political Weekly, Vol-45*, 31-36.
- Yang, J., El-Kassaby, Y.A., & Guan, W. (2020). The effect of slope aspect on vegetation attributes in a mountaineous dry valey, Southwest China. *Scientific Reports*, 10(1), 1-11.

Published and Unpublished Government Reports/Action Plans

Census of India. (2001). *District Census Handbook, Darjeeling*. Directorate of Census Operations, West Bengal Ministry of Home Affairs (<http://www.censusindia.gov.in>)

Census of India. (2011). *District Census Handbook, Darjeeling*. Directorate of Census Operations, West Bengal Ministry of Home Affairs (<http://www.censusindia.gov.in>)

DMDC, Darjeeling. (2019). *Report on the status of Closed Tea Gardens in Darjeeling Sardar Sub-division, dated 28.06.2019*. Assistant Labour Commissioner, Darjeeling, Government of West Bengal.

DTA. (2019). *Area, Production and Labour Statistics dated 17.03.2020*. Principal Advisor, Darjeeling Tea Association, Darjeeling.

DTDPLU. (2016). *Memorandum for opening Closed Tea Gardens represented to the Chief Minister, Government of West Bengal, dated 30.03.2016*, submitted by the President, Himalayan Plantation Workers Union, Darjeeling Branch Committee Darjeeling.

Government of West Bengal. (2004). *Memo No. 705/ SDLLRO-Dj, Request for proper settlement of land in respect of the inhabitants of Ropeway Village, P.O North Point, Darjeeling dated 16.07.2004*. Sub-Divisional Land and Land Reforms Officer, Sardar, Darjeeling.

Government of West Bengal. (2008). *Order No. 2069LR/3T-29/03GE(M) dated 25.04.2008*. Land and Land Reform Department, Writers' Building Kolkatta.

Government of West Bengal. (2012). *Memo No. 30/5739-75/C/12, Settlement of vested Homestead land with beneficiaries of Nijo Griha Nijo Bhumi Prakalpa, dated 01.06.2012.* Director of Land Records & Survey and Ex-officio Special Secretary, L & LR Department, Government of West Bengal.

Government of West Bengal. (2012). *Order No. 6709-LP/1A-16/2012(Pt-1) dated 28.12.2012.* Land and Land Reform Department, Land Policy Branch, Writers' Building Kolkatta.

Government of West Bengal. (2015). *Memo No. 19/LMR, Resumption of land of two Tea gardens located in the jurisdiction of GTA dated 20.02.2015, submitted by Commissioner, Jalpaiguri Division.*

Government of West Bengal. (2015). *Memo No. 239/ CF – Resum- STP/ Tg./15, Resumption of land from the retained area of Puttabong Tea Estate in the district of Darjeeling, submitted to GTA dated 14.09.2015.* Office of the District Magistrate, Touzi Department, Darjeeling.

Government of West Bengal. (2017). *Memo No. 1273/4(2576)/DLLRO-DJ/2017 to GTA dated 06.06.2017.* Office of the District Magistrate, Darjeeling.

Government of West Bengal. (2019). *Proceedings of the 53rd meeting of the Screening Committee on FOWLI.* Kolkatta: Labour Development, West Bengal.

GTA. (2016). *Resumption proposal for 18.9 AC of land of Puttabong T.E. dated 17.02.2016,* submitted by Secretary GTA, Darjeeling.

GTA. (2018). *Settlement of vested Homestead land with beneficiaries of Nijo Griha Nijo Bhumi Prakalpa, dated 16.05.2018,* submitted by Principal Secretary GTA, Darjeeling.

Himalayan Plantation Workers Union. (2015). *Police Complaint at Jorebunglow Police Station District- Darjeeling, dated 20.10.2015*, lodged by the Secretary, Himalayan Plantation Workers Union, Darjeeling Branch Committee, Darjeeling.

Joint Action Committee. (2016). *Problems of Dooteriah, Kalej Valley and Peshok Tea Estate, represented to the Chief Minister, Government of West Bengal, dated 06.06.2016*, submitted by the President Joint Action Committee, D.T.K.V. & Peshok Tea Garden, Darjeeling.

Joint Action Committee. (2016). *Problems of Dooteriah, Kalej Valley and Peshok Tea Estate, represented to the President/ Secretary, H.P.W.U. Central Committee Darjeeling, dated 08.06.2016*, submitted by the President Joint Action Committee, D.T.K.V. & Peshok Tea, Darjeeling

Parja Patta Co-ordination Committee. (2018). *Settlement of unused/surplus/retained tea garden land to the tea garden residents under GTA, dated 12.10.2018*, submitted by Chief Co-ordinator, Parja Patta Co-Ordination Committee.

Statistical Profile of Scheduled Tribes of India. (2013). *Ministry of Tribal Affairs Statistics division Government of India*, 1-3. (www.tribal.nic.in)

Supreme court of India. (2018). *Writ Petition © No. 365 of 2006 and Contempt Petition © No. 16 of 2012*, dated April 04, 2018, New Delhi, 1-21.

Tea Board of India (2019). *65th Annual Report 2018-2019*, Tea Board of India, Kolkata, 14.

Tea Board of India. (2006). *51st Annual Report 2004-2005*, Tea Board of India, Kolkata, 23.

Tea Board of India. (2018). *64th Annual Report 2017-2018*, Tea Board of India, Kolkata, 100-102.

Tea Board of India. (2001). *Tea Statistics 2000-2001*, Tea Board of Kolkata.

Tea Board of India. (2002). *Tea Statistics 2001-2002*, Tea Board of Kolkata.

Tea Board of India. (2003). *Tea Statistics 2002-2003*, Tea Board of Kolkata.

Tea Board of India. (2004). *Tea Statistics 2003-2004*, Tea Board of Kolkata.

Tea Board of India. (2019). *Tea Statistics 2018-2019*, Tea Board of Kolkata.

The Kolkata Gazette. (2010). *West Bengal Estates Acquisition (Amendment) Act, 2009, dated 09.11.2010*, submitted by Pr. Sec-in charge to the Government of West Bengal, Law Department.

Newspaper Reports

www.sikkimexpress.com / Sikkim Express 06, 09, 2019). *Govt declares lock out of three gardens, financial assistance for workers: DTDPLU*. Gangtok

Web Sources

Government of India (1951) *Plantation Labour Act, 1951*

<https://labour.gov.in/sites/default/files/The-Plantation-Labour-Act-1951>. Accessed on: 13/07/2020

Government of West Bengal. (1997). *West Bengal Reforms and Tenancy Tribunal*.

Website: (<http://www.wblrtt.gov.in/AboutUs.html>) Date of access:24/7/2020

https://en.wikipedia.org/wiki/National_Food_Security_Act,_2013 (Accessed on: 24/7/2020)

https://en.wikipedia.org/wiki/Pradhan_Mantri_Gramin_Awaas_Yojana Date of access: 24/07/2020

<https://www.newsclick.in/COVID-19-Closed-Tea-Gardens-Issues-Livelihoods-India>

Majumder, S. (2019). *The Existential Crisis of Darjeeling Tea*. Sanhati Word Press.

Retrieved from <http://sanhati.com/articles/19048/>) Date of Access: 12/10/2019

PDS West Bengal Link: <https://www.wbpd.gov.in/>

Plate Q: Factory and Kothi



Dooteriah Tea Garden (Factory)



Kalej Valley Tea Garden (Factory)



Dooteriah Tea Garden (Kothi)



Kalej Valley Tea Garden (Kothi)

Source: Field Survey, Oct-Nov 2020

Plate R: Field Interactions



Source: Field Survey, Oct-Nov 2020

Annexure-I

ID No. 001

Questionnaire for Telephonic Survey on Closed Tea Gardens in Darjeeling Hills

A) PERSONAL DETAILS OF RESPONDENTS

1. Name: _____
 2. Age: _____
 3. Sex: *Male-1, Female-2, Others-3 (Specify) _____*
 4. Marital status: *Married-1, Unmarried-2, Widowed-3, Separated or Divorced-4*
 5. Educational level:
Literate- 1, Illiterate- 2, Primary(I-V) -3, High School(v-VIII) -4, Class X Passed- 5, Class XII Passed- 6, Graduate- 7, above graduate- 8, others- 9
 6. Religion:
Hinduism-1, Islam-2, Christianity-3, Buddhism-6, others-9.
 7. Social group: *Schedule Castes-1, Schedule Tribe-2, Other Backward Classes-3, Others-9_____*
 8. Hamlet and Village Name: _____
 9. Current nature of employment: _____
 10. Type of jobs/works engaged: _____
 11. Number of working members in family with sex: _____
 12. Total number of members in family with sex: _____
 13. Place of origin (native place if migrant): _____
 14. Date of closure of garden-_____
- Why garden is closed_____

B) INCOME AND EXPENDITURE (After and Before closure of Gardens)

15. Average weekly income before the closure of garden: _____
16. Average weekly income after the closure: _____
17. Monthly income before the closure of the garden _____
18. Monthly income after the closure of the garden _____
19. Average weekly expenditure before the closure: _____
20. Average weekly expenditure after the closure: _____
21. Monthly expenditure before the closure of the garden: _____
22. Monthly expenditure after the closure of the garden: _____
23. Has the indebtedness increased due to closure of the tea garden? (*Yes-1/No-2*) if
yes.....
24. Dues from company before closure, (Yes/No) what kind? _____ Bonus/Salary _____
25. Have you taken any loan in the last two years? Yes/No
If yes, from whom _____ Amount of loan _____ Tenure of loan _____ Rate of
Interest.....

C) HOUSING, HOUSEHOLD ASSETS AND WATER RESOURCES

26. Are you staying in the garden quarter after closure/ have you vacated the house?
Garden quarter-1, own house-2, other-9 (specify)
26. Type of Structure of houses: *Pucca house-1, Semi-Pucca house-2,*
Kutch house3,, Others-9
28. Number of Room in the house: _____
29. Condition of house- _____ *Good-1, Satisfactory-2, Bad-3*
30. If migrant, how long have you been here?

31. Whether electrified? (*Yes-1/No-2*) a) *if yes who pays bill b) If no, mention source of light_____*
32. Do you have Sanitation facilities? (*Yes-1/No-2*), if yes, types- Piped sewer system-1, Septic tank-2, Public Latrine-3, others system-9
33. Do you have drainage system: if yes: underground-1, covered pucca-2, open pucca-3, open katcha-4, others- 9
34. Household Assets: *Telephone/Mobile-1, Television-2, Radio-3, Tape Recorder-4, Computer-5, Cooking Gas-12, Refrigerator-14, others-9*
35. Sources of energy for cooking: *Firewood-1, Coal-2, Kerosene-3, Cow dung-4, LPG-5, Electricity- 6, others-9*
36. Mention the sources of drinking water:

Types of Sources	Yes/No	Details
Streams/Spring-1		
Tank/Lake-2		
Supply water Tea garden-5		
PHE State Government-4		
Any other, please specify-9		

Land holdings

37. Whether owns any land- *Yes-1, No-2*, if Owned by *Company-3, Other (Specify)-9*
If yes, Types of land owned, (*homestead only-1, homestead and other land-2, Other land only-3*)
38. If No, have you been provided additional land for cultivation (*Yes-1, No-2*), if yes, total area (in hectare/acre)
39. Which type of land do you have? *Cultivable-1, uncultivable-2, both-3*

40. Production of crop

Name of the crop	Season	Area	Production	Household consumption

D) ACCESS TO VILLAGE CPR, LAND RESOURCES AND FOREST RESOURCE

41. Availability of Common Property resource in the village (YES/NO) What are they?

Forest Resources-1, River-bed-2, Community Hall-3, Playground-4, Others

(Specify)5

E) SOCIAL SECURITY, FOOD SECURITY AND GOVERNMENT COMPENSATION (PDS/PF/FAWLOI)

42. Have you withdrawn your provident funds after the closure of the garden (*Yes-1, No-2*), if no why? _____ What is the amount (Rs)?.....Have you applied, if no why....

43. Are you receiving your compensatory grant of FAWLOI (*Yes-1, No-2*), If Yes, since when _____ Monthly/yearly), If No, why? _____

Ration

44. Do you have Ration Card/ Coupon? _____if yes- what type *APL-1, BPL-2, Others-9*

45. Are you getting ration after closure of tea garden? *Provided by tea gardens- 1, Government of West Bengal (PDS)-2, Provided by Central Government-3, Others-9*

46. Items Receiving (Weekly-1/monthly-2): Materials and amount _____

F) EDUCATIONAL FACILITIES AND INFRASTRUCTURE

47. No of Schools in your garden: __, *Nursery-1, Primary-2, Secondary-3, whether Government-4, Private-5 (Garden or Govt of West Bengal)*

48. Are you getting access to schools after the closure of the Tea Garden: *(Yes-1/No-2)*

_____ If No, explain problems _____

49. Children's Schooling (Before/After Lockdown)Private or Govt.... Payment of Fees by..... Expenses _____

G) HEALTH FACILITIES AND HEALTH INFRASTRUCTURE

50. No of health centers in the garden-1, Dispensary-2: _____ *Garden Managed-1, Govt of West Bengal-2*

51. Are the health centers functioning after closure? _____

52. Availability of: *Doctor-1, Nurses-2 No of Beds-3, Testing Facility-4, Others-9 (Specify)*

53. What kind of health facilities you used to get? E.g., *Medicines-1, Injectables-2, Others-9 (Specify)*

54. Do you prefer to go health centers of garden for basic treatment or prefer to go outside for treatment? _____

H) ALTERNATIVE LIVELIHOODS

55. Types of work currently engaged:

Work type	Yes/No	Income (Weekly)	Income (Monthly)
a) Cultivator and animal rearing-1,			
b) Daily wage and other agriculture work -2,			
c) Construction site -3,			
d) Shop -4			
e) Others- 5			

56. Are you a member of SHGS, income generated through SHGs, amount _____

SHGs initiated works, *if any*, *Cleaning-1, Mushroom Farming-2, Sewing-3, Manufacturing disinfectants- 4, Others Specify-9*

57. MGNREGA: a) Do you have job card: _____

b) What kind of works are done under MGNREGA: *Watershed-1, Irrigation management works-2, Roads-3, Footpaths/ Ponyroads-4, Agriculture and Livestock related works-5, Fisheries-6, Rural Drinking water-7, Sanitation works-8, Aganwadi Centers-10, others-9*

c) How many days you get work in a year under MGNREGA? _____

58. Do you or does any member of your household migrate to the other place for work?

_____ (*Yes-1/No-2*)

If yes, Name of Place: _____ Name Economic Activity: _____

Season/Months: Wages/Remuneration (per day/ per month) _____.

59. How do you out-migrate? *Through Middlemen-1, Commission Agent-2, Labour Contractor-3, Others-9 (Specify)*

I) EXISTING SITUATION AND FUTURE PERSPECTIVES

60. What are the major problems faced by the workers due to the closure of the tea gardens? _____
61. Any kind of measures taken by trade unions for the workers after the closure of the gardens? (*Yes-1/No-2*), If yes what are they?
62. Do you think measures taken are sufficient to overcome this problem due to closure of the gardens? Yes/No, if no what else should the government do? any suggestion
63. Any opinion to run the garden: *1. Formation of Workers Cooperatives-1, Formation SHGs-2, New Company to be invited-3, Others-9*
64. Role of the government institutions: Please Explain: _____*Panchayat-1, Tea Board-2, Labour Department-3, GTA-4, Any other Specify-5.*
65. What else should the government do? any suggestion: _____
66. Any other important comment: _____

Annexure-II

Garden-wise Status of Darjeeling Tea Industry, 2019

Sl. No	Name of the Gardens	a)	b)	c)	d)	e)	1	2	3	4	5	6
		Grant Area	Plantation Area	Production	No. of Workers	No. of Staff and sub-staff	Per unit labour absorption	Labour productivity	Production per unit of Land	labour and staff	land and labour	Land and staff
Darjeeling												
1	Alubari T. E.	146	50	-	36	-	-	-	-	-	4.06	-
2	Avon group	317	184	70070	435	35	0.00	161.08	221.22	12.43	0.73	9.05
3	Arya T.E	226	123	37587	465	56	2.05	80.83	165.98	8.30	0.49	4.04
4	Badamtam T.E	880	321	-	705	139	0.80	-	-	5.07	1.25	6.33
5	Bannock Burn	284	137	45605	690	98	2.43	66.09	160.63	7.04	0.41	2.90
6	BernesbegT.E	289	132	-	449	37	1.56	-	-	12.14	0.64	7.80
7	ChamongT.E	332	140	69072	378	57	1.14	182.73	208.05	6.63	0.88	5.82
8	Chongtong T.E	779	123	1E+05	980	79	1.26	136.29	171.50	12.41	0.79	9.86
9	DhajayiaT.E	317	179	94905	439	53	1.38	216.18	299.31	8.28	0.72	5.98
10	GlenbornT.E	759	285	-	653	74	0.86	-	-	8.82	1.16	10.25
11	GielleT.E	487	251	-	711	57	1.46	-	-	12.47	0.68	8.54

12	Ging	632	254	87600	690	85	1.09	126.96	138.58	8.12	0.92	7.44
13	Happy Valley	177	123	49455	335	42	1.89	147.63	278.84	7.98	0.53	4.22
14	LingiaT.E	220	142	79552	338	62	1.53	235.36	360.96	5.45	0.65	3.55
15	Lopchu T.E	321	99	55783	362	59	1.13	154.10	173.67	6.14	0.89	5.44
16	MarrybongT.E	395	285	1E+05	631	109	1.60	179.26	286.30	5.79	0.63	3.62
17	MimT.E	390	190	-	503	47	1.29	-	-	10.70	0.77	8.29
18	NagriT.E	544	317	1E+05	780	58	1.44	184.39	264.62	13.45	0.70	9.37
19	Nagri Farm T.E	570	286	97220	717	78	1.26	135.59	170.47	9.19	0.80	7.31
20	NamringT.E	771	448	2E+05	736	52	0.95	329.84	314.90	14.15	1.05	14.83
21	North Tukvar	517	195	78659	652	38	1.26	120.64	152.15	17.16	0.79	13.60
22	Orang Valley	347	189	82644	534	48	1.54	154.76	237.89	11.13	0.65	7.24
23	Pandam	382	131	79107	175	59	0.46	452.04	207.33	2.97	2.18	6.47
24	PhoobsheringT.E	510	232	68015	617	104	1.21	110.24	133.32	5.93	0.83	4.91
25	Poobong T.E.	521	167	-	530	47	1.02	-	-	11.28	0.98	11.08
26	Pussimbing T.E.	390	201	76800	430	78	1.10	178.60	197.13	5.51	0.91	4.99
27	Rangaroong T.E.	147	90	-	195	5	1.33	-	-	39.00	0.75	29.31
28	Risheehat T. E.	388	256	2E+05	475	59	1.22	372.72	456.07	8.05	0.82	6.58
29	KanchanView (Rangneet)	166	90	3254	140	7	0.84	23.24	19.60	20.00	1.19	23.71
30	Rangli Rangliot T.E	418	184	-	553	63	1.32	-	-	8.78	0.76	6.63

31	SelingbongT.E	308	155	42516	495	60	1.61	85.89	138.17	8.25	0.62	5.13
32	Singtom T.E.	837	437	-	755	61	0.90	-	-	12.38	1.11	13.72
33	SoomT.E	507	237	114230	566	110	1.12	201.82	225.31	5.15	0.90	4.61
34	SangmaT.E	481	282	153250	817	105	1.70	187.58	318.59	7.78	0.59	4.58
35	Teesta Valley	717	293	-	916	95	1.28	-	-	9.64	0.78	7.55
36	Takdah T. E	556	262	137715	669	108	1.20	205.85	247.89	6.19	0.83	5.14
37	Tukvar T.E	892	437	261650	800	166	0.90	327.06	293.32	4.82	1.12	5.37
38	Vah Tukvar T.E	1121.2	483	-	281	19	0.25	-	-	14.79	3.99	59.01
39	Tumsong	180	114	-	376	50	2.09	-	-	7.52	0.48	3.60
40	DothriaT.E	1264.52	445	-	850	120	0.67	-	-	7.08	1.49	10.54
41	Kalej Valley T.E	496	237	-	700	120	1.41	-	-	5.83	0.71	4.13
42	Peshok T.E	988	315	-	850	110	0.86	-	-	7.73	1.16	8.98
43	Panighatta T.E.	2403.15	1272.86	-	793	73	0.33	-	-	10.86	3.03	32.92
Sub-total		23371.3 4	10773.16	2594994	24202	2982	50.74	4756.79	-5841.80	8.12	0.97	7.84
Kurseong Division												
44	Goomtee T.E.	380	231	79015	327	39	0.86	241.64	208.15	8.38	1.16	9.73
45	Jungpana T.E.	101	74	-	260	39	2.57	-	-	6.67	0.39	2.59
46	Maldiram T.E.	110	68	-	170	12	1.55	-	-	14.17	0.65	9.16
47	Castle Ton T.E.	254	319	-	483	65	1.90	-	-	7.43	0.53	3.91
48	Rohine T.E.	1005	142	-	288	24	0.29	-	-	12.00	3.49	41.89

49	Tindhara T.E.	344	155	68863	255	33	0.74	270.05	200.36	7.73	1.35	10.41
50	Selim Hill T.E.	350	177	68863	239	34	0.68	288.13	196.75	7.03	1.46	10.29
51	Jogmaya T.E.	208	107	-	97	26	0.47	-	-	3.73	2.14	7.99
52	Sivitar T.E.	230	149	57526	328	31	1.43	175.38	250.29	10.58	0.70	7.41
53	Munda Kothi T.E.	563	291	96836	782	87	1.39	123.83	171.92	8.99	0.72	6.47
54	Ringtong T.E.	767	336	-	851	93	1.11	-	-	9.15	0.90	8.24
55	Malutaar T.E.	498	173	-	325	19	0.65	-	-	17.11	1.53	26.20
56	Norbung T. E.	4497	268	1E+05	215	23	0.05	553.31	26.46	9.35	20.91	195.5 1
57	Simring T.E.	319	189	-	161	15	0.50	-	-	10.73	1.98	21.30
58	Getanger T.E.				86	9		-	-	9.56	0.00	0.00
59	Long View T. E.	1021	506	-	1064	189	1.04	-	-	5.63	0.96	5.40
60	Rungmook/Cede rs T.E.	716	461	2E+05	761	27	1.06	215.74	229.26	28.19	0.94	26.52
61	Mountaveit T.E.	77	60	-	125	16	1.63	-	-	7.81	0.61	4.79
62	Sepay Dhura T. E.	273	139	59336	250	27	0.92	237.34	217.53	9.26	1.09	10.10
63	Maharani T. E.	340	275	-	217	15	0.64	-	-	14.47	1.57	22.65
64	Dilaram T.E.	358	196	-	280	37	0.78	-	-	7.57	1.28	9.68
65	Singel T.E.	551	242	1E+05	599	80	1.09	173.72	189.01	7.49	0.92	6.88

66	Abotia T.E.	966	353	1E+05	822	105	0.85	122.89	104.57	7.83	1.18	9.20
67	Margarets Hope T.E.	778	389	-	942	64	1.21	-	-	14.72	0.83	12.16
68	Gidhapahar T.E.	120	94	33378	189	10	1.58	176.60	279.15	18.90	0.63	11.96
69	Oaks T.E.	175	139	75489	334	42	1.90	226.01	430.55	7.95	0.52	4.17
70	Balasan T.E.	376	181	-	493	46	1.31	-	-	10.72	0.76	8.17
71	Makaibari T.E.	570	273	-	680	78	1.19	-	-	8.72	0.84	7.31
Sub-Total		15945	5988	1027519	11623	1285	29.40	2805	2504	9.05	1.37	12.41
Kalimpong												
72	Mission Hill T.E	380	244	2E+05	500	42	1.32	401.44	528.05	11.90	0.76	9.05
73	Kumai T.E.	588	314	2E+05	834	71	1.42	247.85	351.77	11.75	0.70	8.28
74	Samabiong T.E.	732	132	-	260	34	0.36	-	-	7.65	2.81	21.52
75	Lower FaguT.E	565	458	-	535	24		-	-	22.29	1.06	23.53
76	Amboik T.E.	277	150	-	321	43	1.16	-	-	7.47	0.86	6.44
77	Upper Fagu	455	78	-	342	27	0.75	-	-	12.67	1.33	16.86
Sub-Total		2996.48	1376.36	407429	2792	241	5.00	649.29	879.82	11.59	1.07	12.43
Mirik												
78	Singboley T. E.	624	301	407429	850	135	1.36	479.33	652.72	6.30	0.73	4.62
79	Seyok T. E.	406	158	52575	490	55	1.21	107.30	129.50	8.91	0.83	7.38
80	Gopal Dhara T.E.	321	164	65447	386	42	1.20	169.55	204.13	9.19	0.83	7.63

81	Phugari T.E.	428	227	-	502	70	1.17	-	-	7.17	0.85	6.11
82	Ghaiyabari T.E.	613	310	234280	572	70	0.93	409.58	382.28	8.17	1.07	8.76
83	Marma T.E.	759	350	-	385	57	0.51	-	-	6.75	1.97	13.31
84	Thurboo T.E.	820	485	-	1600	165	1.95	-	-	9.70	0.51	4.97
85	Putung T.E.	594	-	-	340	54	0.57	-	-	6.30	1.75	11.01
86	Okaiti T.E.	448	213	167091	645	60	1.44	259.06	373.15	10.75	0.69	7.46
87	Sourani T.E.	137	96	608517	269	42	1.97	2262	4451	6.40	0.51	3.26
Sub-Total		5149	2303	1535339	6039	750	12.32	3687	6192	8.05	0.85	6.86

Source: Unpublished data collected from Trade Union office and Darjeeling Tea Association, Nov 2020