

**LIVELIHOOD SHIFT AMONG THE TRIBAL TEA GARDEN
WORKERS: DETERMINANTS AND CONSEQUENCES**

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Requirement for the Award of the Degree of**

MASTER OF PHILOSOPHY

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Date: 31st July, 2014

DECLARATION

I, Shakti Dutraj, hereby declare that the subject matter of this dissertation entitled “**Livelihood Shift Among the Tribal Tea Garden Workers: Determinants and Consequences**” is the record of work done by me, that the content of this did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and the dissertation has not been submitted by me to any other University/Institute.

This is being submitted in partial fulfillment of the requirements of the degree of **Master of Philosophy** in the Department of Geography, School of Human Sciences, Sikkim University.

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List of Abbreviations

1) CBNRM-	Community Based Natural Resource Management
2) CC-	Climate Change
3) CITU-	Centre of Indian Trade Unions
4) CPI(M)-	Communist Party of Indian Marxist
5) DFID-	Department for International Development
6) GIS-	Geographic Information System
7) ICDS-	Integrated Child Development Scheme
8) JFM-	Joint Forest Management
9) MDMS-	Mid Day Meal Scheme
10) MOU-	Memorandum of Understanding
11) MT-	Metric Tons
12) MW-	Mega Watt
13) NGO-	Non Government Organization
14) NTFP-	Non Timber Forest Product
15) RSP-	Revolutionary Socialist Party`
16) SL-	Sustainable Livelihood
17) TE-	Tea Estate
18) TG-	Tea Garden
19) UNDP-	United Nation Development Programme
20) UNEP-	United Nation Environment Programme

Chapter-I



Setting the Research Agenda

Chapter I

Setting the Research Agenda

1. 1 Introduction

Resources, livelihood and development are related terms that combine to become a frame for studying a livelihood perspective of a community or an individual. How far resources are governed, how far they are utilized and how development is achieved, depend upon needs of a community. There are a number of communities that are completely dependent on natural resources for their livelihood and any disturbance in the resource base adversely affects their earnings. Presently, such communities are suffering from many problems, arising from institutional lapses or due to policies that restricts them from utilizing the resources, over which once they had a full access without any obstruction and interference. While defining livelihood in general framework, it is a means of earning an occupation for a living. Chamber and Conway (1991) defines livelihood as *“a livelihood comprises of people, their capabilities, and their means of living, including food, income and asset. Tangible assets are resources and stores, and intangible assets are claims and assets. A livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generation.”*(Chambers, R and Conway, G 1991) .

The tribes of India depended on the natural resources like forest for their livelihood. They have been dependent on natural resources derived from forest, and had inhabited in complete isolation. Few adivasi groups practice hunting, food gathering as their sole occupation, but at most adivasi groups derive their livelihood from agriculture and forest and their dependence on forest is substantial. The forest has been, and continues to be, a major source of food for house construction and agricultural implements, fuel wood, medicines and other necessities of everyday life. Scholars have suggested that 50 to 80 percent of the food requirement of adivasi may in fact be provided from forest.(Munshi 2012).

The road map of the British Raj was the turning points in the history of India that added to the problem of change in livelihood pattern of all the tribes that depended on local natural resources i.e. forest for livelihood. The introduction of policies by the British and their scientific way of

management, all of a sudden raised the commercial value of the forest adding danger to the livelihood occupancy of the tribal. The policies not only affected the dependency of the adivasi on forest, it too affected the agricultural practice. The jhumming¹ agricultural practice which was once the mode of agricultural practice among adivasi tribes was banned by the British as they were incurring losses in revenue by such shifting pattern of the adivasi tribes.²

One major setback that the forest communities suffered from was the introduction of railway network by the British that added to the problem of deforestation. Great chunks of forest were destroyed to meet the demand of railway sleeper.(Guha 2012). With rapidly felling of trees for meeting the needs of railway track, the forest among the Himalayan region started declining, the trees like sal, teak and deodar³ was much in demand as such the forest had become exhaustible. .

The introduction of the tea plantation brought about changes in the workforce structure, affecting livelihood of the tribal's and Nepalese both positively and negatively too. By 1854 tea plantation was established around Darjeeling and Kurseong region, started as a small nursery for experiment, but by 1891 the number of tea gardens that grew was around 113. (Sharma, K and Das T 2008). The tribal people initially came to the Dooars from their homeland outside Bengal as tea garden workers, but later on the migrant tribal people settled permanently in the Dooars (Basu 2012).

Dooars also saw a growth in the tea plantation industries, with introduction of tea just as a venture project. The first tea garden that was introduced in Dooars was around 1875 in Gazalduba region, under the ownership of Dr. Richard Haughton. The plantation which was started as a commercial venture in 1856 brought a remarkable impact within a short period of time. The rapid commercialization of tea garden brought about a change in demographic profile, with sudden influx of labour migrants. Today there are almost 235 tea gardens in Dooars covering an area of 81,338 acres under cultivation.

Dooars today resembles a region of mixed ethnicity. The region has the mixed proportion of tea garden workers, among whom tribals to form a dominant population. Among tribal's peasant communities the Oraons, Mundas, Santhals forms the majority. The present shift in the

¹ The term jhumming is a usually used term in India for the shifting agricultural practice.

² Ibid. p.1

³ Sal, deodar and teak are three different types of trees, which posses a rich monetary value.

livelihood strategies due to deficit working of tea garden have added a great impact on sustenance of livelihood among all garden workers.

1.2. Literature Review

1.2.1 Defining Livelihood and Changes

The components of understanding livelihoods, among literatures have followed a trend, around which the definition of livelihood seems to be evolved. The literatures serve to understand livelihood from the perspective of poverty, resources, sustainability and adaptability framework. Thus defining livelihood Robert Chambers and Ellis definition of livelihood would be an appropriate meaning of defining livelihood “

Robert Chambers definition on Livelihood “ can cope with and recover from stress and shocks, maintains and enhance its capabilities and assets and provide opportunities for the next generation; and which contributes net benefits to other livelihoods at local and global levels and in short and long term.”(Chambers, R and Conway, G 1991)

Ellis defines livelihood “as a combination of assets (natural, human, physical, financial and social capital), activities and access to these (mediated by institutions and social relations) that together determines how an individual or a household make a living.”(Dekens 2005)

The above definitions on livelihood debates on two different perspectives, where Chamber and Conway focus on the capabilities of a person or communities to cope up with livelihood vulnerabilities, and emphasize on the sustainability approach of livelihood, Ellis on the other way considers livelihood to a combination of assets which is governed by social relations and institutions, which determines the livelihood approach of a individual or a community.

The understanding of livelihood got expanded with poverty issues and environment in different discussions during the period of 1980 and 1990. The focus on poverty and environment came across in UN Conference on Environment and Development in Rio in 1992.(Scoones 2009).

The focus of the issues related to livelihood had under gone change, today the concept of poverty stands different and similarly the concept of understanding livelihood. Today the term “poverty

is largely defined in terms of income, whereby extreme poverty is defined as existing for those people whose income and equivalent less than US \$ 2 a day. (Helen 2006).

The context of understanding livelihood changes is broadly elaborated in Scoones (2009) study in which he emphasizes to understand the changes that have occurred in understanding livelihood. He broadly finds out how livelihood have taken a shift from rural to central thinking, and points out the failure of early mechanism of understanding livelihood, where engagements to make the study a engaged scholars from every field to study livelihood, under framework of village studies tradition, where economists, Marxist and other discipline of social science reflected on the mechanism of power relations, which today is considered a complex nature of understanding livelihood.

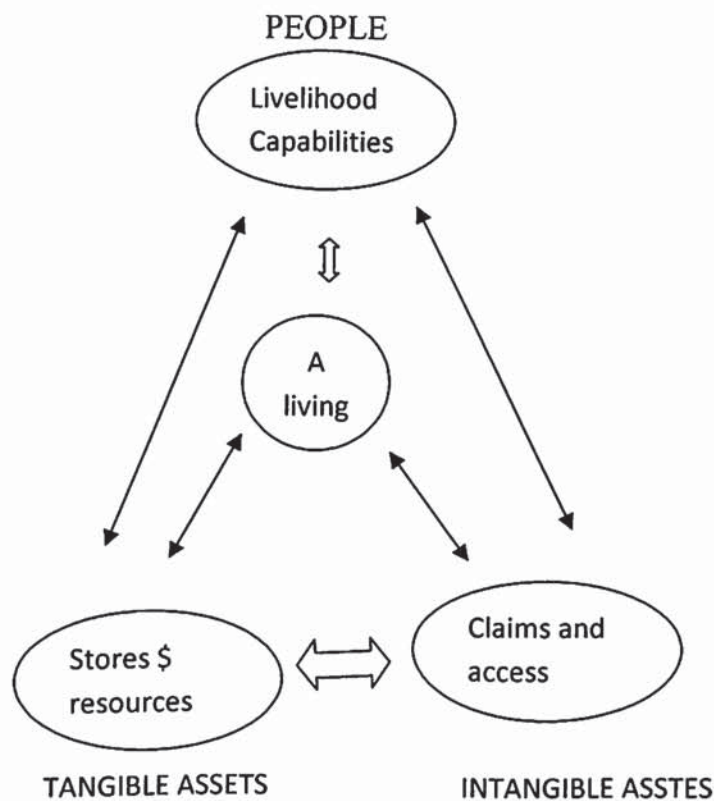
The expansion of livelihood study by incorporating many issues like poverty, food security, marginalization and vulnerability have to the misinterpretation of rural livelihood. The fact that incorporating changes in defining livelihood studies is necessary; a systematic approach should be maintained to avoid misinterpretation of the definition. Scoone in his work has provided a new dimension of understanding livelihood, where he comes out with ideas of relating livelihood issues with.

- Knowledge
- Power Politics Relation
- Scale
- Engagement with economic globalization.

1.2.2 Framework of studying Livelihood

The studies on livelihood issues, also figures out a strategies of understanding livelihood through a model framework. The work of Robert Chambers provides with a model of understanding livelihood with regard to the capability of an individual and assets. The model follows a components of people, living and resources both tangible and intangible assets.

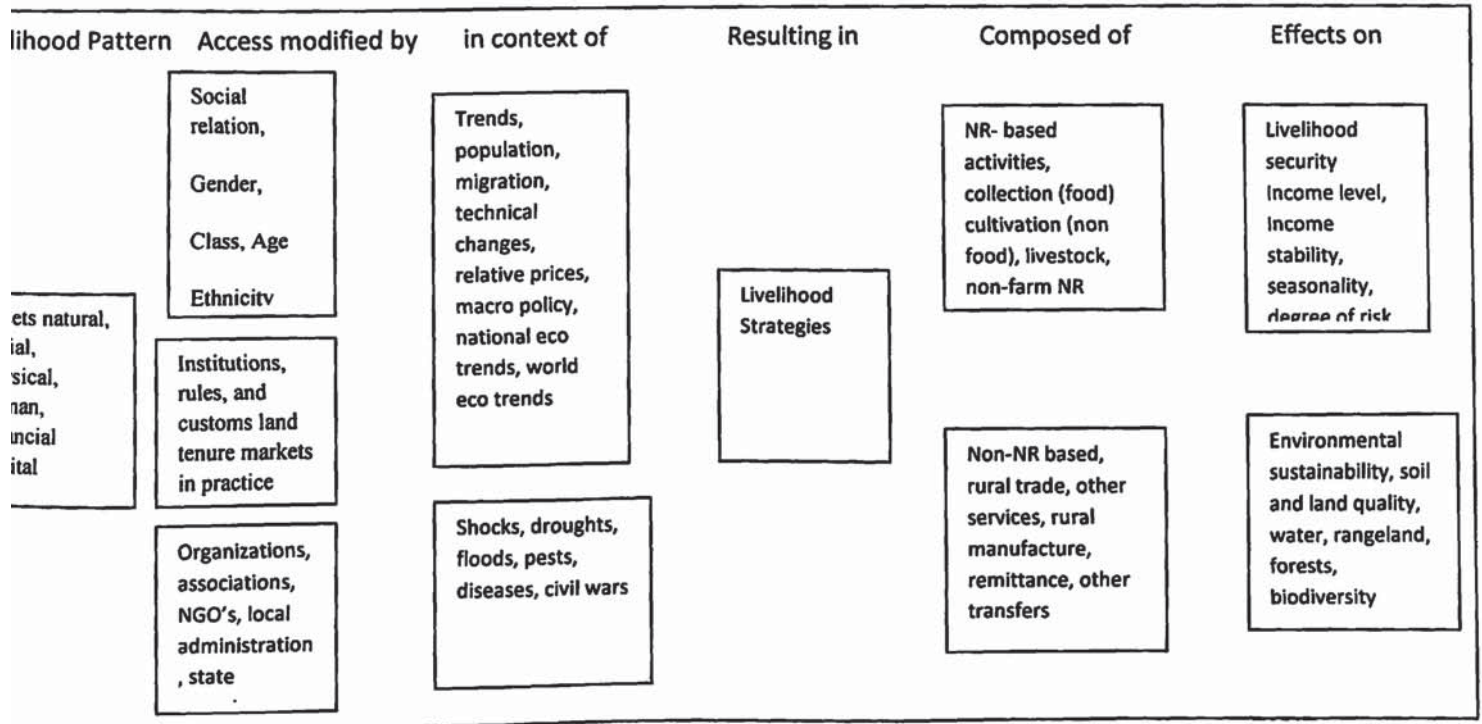
Fig1.1: Showing Robert Chambers Livelihood Component Framework



Julie Dekens work on livelihood and resilience building in Darjeeling, also adopts a model framework proposed by Ellis.

A study on livelihood research elaborates the work of Frank Ellis strategy of studying livelihood through a combination of survey and participatory method. He also advocates various different PRA methods (key informants, semi-structured interviews, informal group discussions, focus group discussions, Venn diagrams, etc.) for discovering, quite quickly, the mediating processes within which livelihood strategies are adopted, relating to social relations, institutions and organisations. He then offers a useful summary of the typical characteristics of different field methods, under the headings of large-scale sample surveys, small-scale sample surveys, semi-structured or participatory enquiry, and case-studies. This form of studies provides a better framework of understanding rural livelihood in a better way (Murray 2001)

Fig 1.2: Showing Ellis livelihood framework



1.2.3 Livelihood of Tribes

The literature on tribal's and livelihood, have been studied extensively. While grasping ideas on livelihood of the tribal's one common ground in every literature is the struggle of the tribal's for the livelihood has been a major issue of discussion.

The tribal's of the world and India face the same problem of struggle, but with different background realities. One of the works done on tribal livelihood comes out with an issue of how resources become a problem for tribal communities, and how resources have been used as a means of struggle in present context. The report "Livelihood Security: Climate Change, Mitigation and Conflict in the Sahel" is a work that tries to understand the adaptability issue of the tribal's living around the CLISS countries. The report is an investigating study of understanding the role of climate change in the livelihood patterns of the tribal population leaving along the CLISS countries. Though the background of understanding livelihood of the tribal may be with an issue related to adaptability caused due to climate change, but still the struggle of Tribal communities to survive for a livelihood, has been a problem in CLISS countries.

The struggle for livelihood does not only follow the mechanism of adaptability, where migration to other areas becomes a prime source of adaptability. Conflicts too have become a prime nature of adaptability form for livelihood struggle. A classic example that the report provides of such conflict is of farmer- herder conflict in Niger and Nigeria, where these two groups of tribal population have come across conflict many times, due to scarce resources (Livelihood Security: Climate Change, Mitigation and Conflict in the Shael 2011). The struggle not only affects the livelihood pattern but it too hampers the economic-social scenario of a countries profile. In a work done for understanding resource conflict, that have affected livelihood and social service, tries to find out how people make a living, educate their children, deal with illness and access other basic services in conflict-affected situations (CAS).The study focuses on newly created nation of the world known as South Sudan. The potentiality of South Sudan in terms of natural oil was one of the reasons that lead to conflict between North and South Sudan.

The war created a zone of conflict between the tribal populations of both the countries. Millions got displaced and the conflict also took a devastating toll on livelihoods. In the civil war period from 1983 to 2005, more than 2 million South Sudanese are estimated to have died; while some of these deaths were the direct result of fighting and violence, 97 percent died from disease and malnutrition. Additionally, 4 million people were displaced from their homes.(Maxwell 2012).

The overall issues of tribal livelihood become a study of struggle in world, where poverty and resource underdevelopment have been a reason for causing conflict in the world scenario.

1.2.4 Livelihood issues relating to Tribes of India

The livelihood story of tribal's too follows the path of struggle. The literature studied under the framework of tribal livelihood in India focuses on the livelihood agendas and struggle for survival. Many literatures come out with similar findings, how livelihood of tribal's has been disrupted with interventions coming all around from outsiders.

The term tribes, has always remained a contesting term. For a layman, generally tribes are those communities, whose livelihood is dependent on forest and hunting, but in the field of academics the term tribes have many definitions. One of the definitions defines tribe as "As a social organization consisting of a social contract between tribes, tribal members and sheikhs. Tribes offer protection from political pressure and are a means for tribal citizens to gain and demand

services through tribal leaders. Furthermore, the tribe creates a sense of belonging and solidarity as well as building a social safety net.”(Daswar 2010).

The study on livelihood of the tribes primarily focuses on their struggles to maintain their traditional livelihoods. The history of struggle goes back to the British regime. During the British regime, the controls over the resources were passed on the empire from the tribes. A study conducted by group of NGO’s on different tribal groups across the country, studies the intervention that has taken place among these communities in their livelihood, when their communal ownership became private ownership. The restrictions imposed on them by the British not only affected their traditional mode of earning livelihood, but also in losing their resource owned zones (Adivasis and Livelihood: Case Studies on Livelihood Inrevention in Adivasi Region of India 2007).

The acquisition of tribal lands for development projects and industries has displaced them from their livelihoods, adding further to their miseries. The tribal’s have been struggling in many parts of the country to protect their land. The literature on India’s Tribal Struggle for livelihood focuses on issues such as the role of the government and the implications of the. One of the studies provides an idea of how government policies relating to natural resources have affected the livelihood of tribes. The work has been focused on the tribal belts of Orissa where the tribal population forms the majority. The work focuses on government policies that have contributed a lot in bringing changes in livelihood. One of the example that book points out is on the forest resources.

Most of the land resources that used to be a property right of the tribal has been categorized as forest and hence the laws related to forest have played a major impact on them. The law denies them access to land or resources available to them earlier. The Orissa Forest Act 1972, the Forest Conservation Act 1980 and the Orissa Forest (Grazing of Cattle) Rules 1980, Sections 5 and 6, all have an immense impact on the livelihood resources of the tribal’s. In most cases the rights of the tribal people, which were prescribed in the/FA/927 audits amendment in 1954, were not followed and forests were created in survey and settlement processes.(Padhi, Tribal Movement and Livelihoods: Recent Development in Orissa 2011).

The role of government in the name of development has been one side perspective. The study of conflict between government and the tribal's have been studied in one of the literature, where the paper focuses on conflicts surrounding four natural resources in Jharkhand land, minerals, forests and agriculture, water.

The role of violence increased after 1975, when more development projects were greeted with more resistance of violence. The period 1973 and 1976, there were 120 violent incidents including 48 of forcible harvesting and looting of crops .Violent conflict also occurred in connection with land acquired by the state for broader development purposes. On 30 April 1978 at Chandil, police fired at a crowd of adivasi who were protesting about the acquisition of their land by the Subarnarekha Multi-Purpose Project. Three people were killed. In July 1978, meanwhile, N.E. Horo of the Jharkhand Party implemented a phase of 'direct action', in response to the Indian government's refusal to create a separate Jharkhand state, which included the surrounding of government to officials and the destruction of transport links to prevent vital natural resources from leaving Jharkhand.(Jewitt 2008).

Such contrasting form of literature work shows the real nature of tribal struggle for livelihood. The present scenario is still the same, where literary works on tribal livelihood follows the same framework of understanding.

1.2.5 Tea and Livelihood

The zone of tribal struggle remains very marginal when studied under the background of adopted plantation livelihood. The emergence of tea industries of India brought about a change in the livelihood structure of the people, more so among the tribes who migrated from Chhotanagpur region to tea gardens to work as labourers. The role of tribal's as plantation laborers have always been of immense important.

Studies on tea till now have focused on certain issues, where socio-economic studies, health studies of garden workers, studies related to different diseases, impact of climate change in production etc have dominated the study area. Today, the present situation of the Tea Gardens does not remain the same changes have occurred in tea plantation world. The Report provided by the Tea Board of India 2004 shows the real situation of tea gardens in India, where the closure of

tea gardens has affected a lot to the workers, and among whom the tribal workers to form a majority.

Table 1.1: The operational status of Tea Gardens In different states of India

State	No of garden closed between 2000-04	No of workers involved	No of gardens re-opened	No of workers involved	No of garden that still remain closed	No of workers closed involved
Assam	17	10134	14	6313	3	3821
West Bengal	53	43590	47	39245	6	4345
Tripura	7	466	6	394	1	72
Kerala	38	11829	24	4412	14	7417
Tamil Nadu	3	2423	3	2423	0	0
Total	118	68442	94	52787	24*	15655

Reproduced Source: 51st Annual Report 2004- 2005 (*Tea Board of India*)

While monitoring the situation of such closure, it was found that declining exports, sluggish domestic demand, higher cost of production and increased cost of input led to closure of the tea gardens.(51st Annual Report 2004- 2005 n.d.). Such mal functioning of tea gardens have been a major reason a shift in livelihood pattern of the workers in tea gardens.

The tribal's too suffer from this chronic problem of tea garden closure, especially in my study area, where there are around 235 tea gardens⁴, but some of them have been suffering from the closure of the tea garden affecting the livelihood and capacity of living.

The above literature provides a clear picture of how livelihood changes can be studied under different mode of framework and what has been the livelihood structure of tribal's both in world and India. The literary works lacks a gap of studying livelihood shift among tribal's who are dependent on permanent form of earning, and works done on tea garden workers focuses on issues like socio economic, health, poverty etc but with changes in plantation scenario, every aspects gets affected and where the needs lays to be studied.

⁴<http://www.doarsonline.in>

1.3 Objectives

- To analyze major shifts in livelihood practices and the associated consequences of such shifts.
- To analyze the livelihood strategies and resilience building among tribal workers in response to the erosion in livelihood base in tea gardens.
- To examine the impact of alternative livelihood strategies on the living conditions
- To understand the interventions of the community, government and civil society in the transformation of livelihoods.

1.4 Rationale of the Study

- The studies of literature provide a gap of series, where studies on tea plantation and tribal workers have been studied in a very negligible form.
- The study would focus on the recent changes of livelihood, caused due to many issues among which the closure of the tea garden has been a major one.
- The study would include issues that have been a major factor, for causing transformation in the livelihood of the tribal workers.

1.5 Research Approaches and Database

1.5.1 The Research Approach

The research study would include both qualitative and quantitative approach, in the form of participatory approach. The main focus of using participatory approach would be to understand the local knowledge and their sustainability in depth. The approach would help in understanding the link that exists between local peoples and resources that have played a curtail role in meeting out the needs at the time of stress.

The justification of using this approach in my field study is to bring out the link between people and resource that exists in the study area. Since the closure of tea garden the livelihood pattern of the people have been shifted and most of the household have no

other means than to rely on local resources. A close study with the help of participatory approach would help in depth understanding of such linkages.

1.5.2 Data collection

The collection of data is an important phase in a research. The mode of data collection varies, depending on the nature and scope of research. The study of field site is of immense important for data collection.

The data used in research includes both primary and secondary form. The need of collecting both forms of data is of vital importance for studying the analysis part of the research. The research study on the above topic would include the use of both primary and secondary data's. Following certain procedure the data would be collected, for enhancing the research.

1.5.3 Sources of Collecting Data

The source of data has been based on both primary and secondary data collection. The study of field site is one of the important aspects of engaging oneself to develop primary data sources. The procedure of data collection in filed would include:

- Household Surveys with the help of questionnaires'
- Interviews with local people, influential people of villages and leaders of tea garden workers.

Secondary data collection would include:

- Visiting government offices and tea garden offices of the study area
- Reports published by Tea Board of India.
- Various government official sites:
 - a) Census of India
 - b) Tea Statistics of India
 - c) State Human Development Report

1.6 Research Methodologies

1) The method for selecting tea garden for fieldwork has been based on certain criteria. The main criteria's would be:

- To select tea gardens which have been closed for at least 2- 10 years, and which has been functioning till date.
- The population of tribal household and tribal workers in the studied tea garden has been marginally high in proportion.

Depending on the above criteria Purposive Sampling has been used to choose the study area.

2) The method used for data collection has been done with the help of Random Sampling.

- The collection of household data has been based on the tribal households in studied tea garden. Depending on the tribal household population the percentage of the population would be determined.
- To acquire data on household's data from census on household has been utilized.
- Selection of household has been based on Random Sampling.
- Random Sampling includes different method of collecting household data, among which table random sampling has been used for choosing household for survey.

3) Methods used for data analysis:

- The data collected form field has been tabulated and coded for analysis part.
- Microsoft Excel would be used for data tabulation and coding.
- Depending on the parameters collected in questionnaire different analysis tools has been used for analysis purpose.

4) Use of GIS tools has been used for producing the map of the study area.

1.7 Limitations

Conducting the field study was quite difficult, due to few limitations that had to be faced in the field.

- The accessibility to the study area was quite difficult, though there were frequent trains till the main town, but reaching the field area but commuting from the town to the study area was quite difficult.
- Convincing people in the field was another big problem in the study area; the respondents in the field feared to the answer the questions.
- The other problem was that they considered the study as government project, and came up with few documents in a hope of solving the problem.
- Some of the respondents were quite violent while answering the queries.

Chapter-II



Livelihood Concept and Issues

Chapter II

Livelihood Concept and Issues

2.1 The Livelihood Study Approach

A mobile and flexible term, “livelihood” can be attached to all sorts of other words to construct whole field of development enquiry and practice. These relates to locales, occupation, social difference, dynamic patterns and many more. The perspective of livelihood starts how different people in different places live, and in recent times the approach has shift its focus from rural to central development thinking (Scoones 2009).

The modeling of livelihoods has a long history, with its roots in peasant studies by Chayanov, as well as other Soviet pioneers of development planning such as Bukharin. It later evolved through farming system studies of the 1960s, farm management studies and a wide range of micro-economic studies over the last thirty years. The linked notions of access to resources, income opportunities and access qualifications were developed in the 1980s, and quantitatively modeled as an iterative decision-making model. (Soussan, et al. n.d.)

The livelihood studies also made an impact after the structural perspective of dependencia and neo-Marxism of the 1970s and 1980s; and a more productive actor-oriented perspective was adopted in development studies. (Haan and Zoomers 2005). The area of livelihood study relates itself with poverty issues, rural livelihood issues, policies and livelihood issues, grounded political-ecological studies, rural studies, transforming livelihood studies and decision making studies.

Livelihood study approach from Neo-Marxist to present time has witnessed changes in its forms of studies. The 1990’s approaches of studying livelihood, with grounded focus on livelihood assets and sustainability has come across along milestone. The dimension of present livelihood study has many more new things to study. The era of 21st century, brought with itself the policies of liberalized free market, open economy and competition adding surplus to income generating options as well as to the livelihood option. The crossroads of globalization have added an immense impact on livelihood of both urban and rural population, bringing about changes in dimension of livelihood studies.

The context of livelihood has always been rural oriented, where focus on rural livelihood, with respect to development and poverty studies. The study of poverty linkage with livelihood and its impact on decision making has always been a key to livelihood studies. The studies on livelihood have basically focused on developing countries, where poverty produces to be a major inherent problem affecting the developmental process of the country.

2.2 Linking Poverty and Livelihood

Poverty in developing countries stands as a major threat to the nation itself, solving this problem is a challenge that needs to be accepted with great patience and courage. Linking poverty with degradation in resources and livelihood has been approach of studying livelihood. The livelihood- poverty study has basically concentrated on areas with depleting resources and degrading land issues. Among such region, the Asian mountain regions stands tall where poverty, deforestation and land degradation processes are major development challenges as poor socioeconomic condition and natural resource degradation follow a certain spatial gradient leading to further resources degradation and socioeconomic differentiation. (Chhettri 2011).

The linkage between livelihood and poverty is a protocol of understanding the limitation of sustainability. The livelihood process is a mechanism that includes resource both natural and man-made. The resource potential for sustaining population is limited to a certain extent. The rate at which the world population is increasing, many problems have arisen adding extreme pressure to support the livelihood of the peoples all across the globe. Increasing population imply a widening gap between food production and food needs. (Jones 1999)

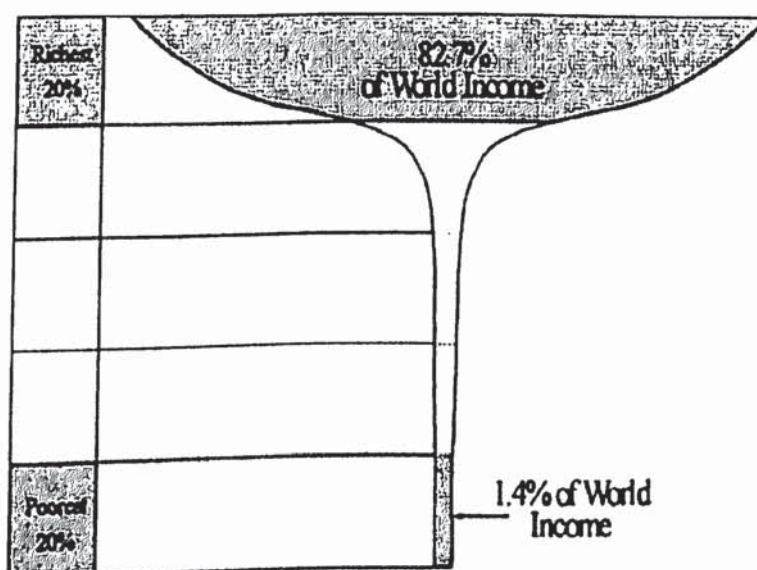
The need for linking poverty with resource management and livelihood is because, it is the poor who are deprived from resource, and they are the one who suffers extreme poverty and are subjected many vulnerabilities. 'Predominantly the poor of the world depend directly on natural resources, through cultivation, herding, collecting or hunting for their livelihoods. Therefore, for the livelihoods to be sustainable, the natural resources must be sustained.

The fact that the livelihood is a complex process and poverty is dynamics, the risk and vulnerabilities of the poor, in sustaining livelihood become a challenge to this section of population.

The earlier studies on poverty comes out with a finding that out of 5.6 billion of world population, 1.4% population lives in absolute poverty, 1.1% lives in subsistence level. 75% of the poverty is rural in nature in regions of poor resource endowments; women and children are more vulnerable to poverty.

The income source of the poor remains very marginal, to sustain their livelihood. The world distribution of income shows, how inequality prevails in distribution of resources, where resources are confined to the richest section of the society.

Fig2.1: Distribution of world income



Reproduced Source: Mountain Research and Development, Vol. 19, No. 3, Poverty, Rural Livelihoods, and Land Husbandry in Hillside Environments, Part 1 (Aug., 1999), pp. 179-190

The figure above provides a clear picture of how distribution of world income prevails; where 82.7% world's total income is diverted towards the world's richest people, whereas 1.4% of the world's income has been with the world's poor section of population. The wide disparity and inequality has been a concerning angle of thought, as the most marginalized and vulnerable section of society are the ones who are directly or indirectly related with resources for earning of livelihood.

The study of becomes more vibrant, when we come across case studies of the world's poor being acquainted to situations where they have come across many hard struggles to cope up from such stress with marginal options of livelihood earning with them.

The case studies based on livelihood of the people, have focused on many grounded issues subjected to the study of many broad forms, which resembles the impact of external forces that have apparently been a major cause for such degrading situation of livelihood. The impact doesn't only affects the livelihood coping strategies, but also affects the process of decision making on resource management individually or community altogether.

The cause of poverty, from external forces combines many factors that have really made an impact on the poor's. The impacts have been seen in both ways, where sometimes there have been benefits and sometimes they have stand on the other side of the situation. The factors of external forces stand in forms of

- Governance and Policies
- Depletion of Resources , Population Pressure and Resource Management
- Climate Change and Livelihood

Related works based on above factors have been studied, analyzed and issues related to poverty have been discussed relating to different regions of the world. The impact of these external forces has an immense role to play in challenging the issues of livelihood.

The concept of livelihood also focuses on the need of sustainable livelihood, which has been a far more discussed issue in the paradigm shift of livelihood concept. The concept of sustainability emphasized over livelihood, has somewhat been an issue of discussion. The need for addressing sustainability and livelihood together as an approach rose to prominence in DFID in 1998. The main objective of sustainable livelihood approach stands to focus on poverty-focused development activities. Even though the need for sustainability had been advocated in the works of Robert Chambers, the approaches of sustainability has been carried on focusing with certain principles:

- People-centered: sustainable poverty elimination will be achieved only if external support focuses on what matters to people, understands the difference between groups of people

and work with them in a way that is congruent with their current livelihood strategies, social environment and ability to adopt.

- Responsive and participatory: poor people must be key actors in identifying and addressing livelihood priorities. Outsider needs a process that enables them to listen and respond to the poor.
- Multi-level: poverty elimination is a numerous challenge that will overcome only by working at several levels, ensuring that micro-level activity informs the development of policy and an effective enabling environment, and that macro-level structures and process supports people to build their own strengths.
- Conducted in partnership: with both public and private sector
- Sustainable: there are four key dimensions to sustainability- economic, institutional, social and environmental sustainability. All are important- a balance must be found between them.
- Dynamic: external support must recognize the dynamic nature of livelihood strategies, respond flexibly to changes in people's situation, and develop longer term commitments.

The principles of SL approach seems to very much poverty oriented process, but sometimes such principles stands as a writing, where approaches are applied but found void, because of the external forces performing in negative passive form. Sometimes again these approaches to favour the root cause approach of sustaining livelihood for the poor's, by focusing themselves on the principles, highlighting the needs and performing with a goal of enhancing developmental process for providing better SL approach for the por.

The need of understanding the role of the external forces thus becomes a strong necessity, because the linkages of livelihood are not only with the issues of poverty or sustainability, but it too incorporates the beneficial factors and disadvantageous affects, where it has been working in both aspects.

2.2.1 Governance and Policies

“In practice good governance involves promoting the rule of law, tolerance of minority and opposition groups, transparent political processes, an independent judiciary, an impartial police force, a military that is strictly subject to civilian control. A free press and vibrant civil society,

institutions, as well as meaningful elections. Above all, good governance means respect for human rights." Kofi Annan, Preventing War and Disaster: 1999 Annual Report on the Work of the Organization.

The quality of good governance is reflected by the impact and changes that it can bring over with its policies and reforms providing equal opportunities and better facilities to its public. The concept of governance doesn't mean government; it encompasses complex yet universal force that exists in all societies. People use governance in their daily lives to manage human relationships, just as corporations and countries use it to manage their interaction and activities. The policies define a framework and reflect the governance mentality of a nation. The impact of such policies is seen with changes occurring in development or else in the form of the government itself.

The implementation of policies is a top to down approach, where it starts be smoothly but ends with rough sketched maps, with less development and more corruption, hampering the needs of the rural poor. The government schemes that have been developed in order to eradicate poverty not always seems to work in a parallel line, somehow it takes a curve, which resembles a symbol of sick government, who are deaf to poor cries and smart of impeaching dialogues of development and eradication of poverty.

The need of good governance not only implies free and fair democratic elections, it also implies right to take part in decision making processes and providing with better opportunities, with better governing policies. The role of policies stands as a strong tool for government. The policies though may be centre oriented aiming at rural problems, that exact extent of implementation of such policies has always been misleading.

The laws that have been developed in the name of the policies have made a remarkable impact on the poor peoples. Policy reforms, political injustices, political pressures have always been major difficulties for the poor's. The policy reforms don't include people's participation; as such the process of equity remains a question. Observing the land reform policy of India, which became a priority since independence, may have brought a instance of equity in providing lands to the poor from the rich, but looking it from the contextual frame work, the 1949 Constitution left the adoption and implementation of land and tenancy reforms to state governments., this lead

to a lot of variation in the implementation of these reforms across states and over time. (K. Basu 2003)

The land reforms in India may have brought a chance of equity for the poor's, but somewhere in the corners, who were left out earlier had to face the impact. The tribal's who were dependent on forest, had already suffered a lot in the British era, the introduction of reforms was adding a big scar on the existed injury. The instances of their suffering can still be seen today not only in the perspective of our countries reforms but over the whole world the suffering of the tribal's has been a cry for justice.

Their problems can be seen in works brought about in studies of Tribal regions of India, where the struggle for livelihood is massive encounters among the tribal counterparts and the government. The regions inhabited by the tribal's are always known for their rich resources. Their dependence on these resources has always been a source of income for them. The struggle started with the invasion of the British, who came across many forms of land revenue and land right systems, under which the few tribal areas were also incorporated. (Selvarajan 2012)

The struggle in recent times has witnessed more violent forms, where there has been mass protest and fights with government forces for safeguarding the livelihood. The era of the 21st century is a globalized era. We have witnessing development in many forms, for instances the growth of national economy, the coming of foreign markets and investments, multinational companies, incorporate sectors and many more. Though some are grateful that they have been witnessing changes with facilities, but some have to struggles for saving their livelihood, because poverty doesn't permit them to enjoy such facilities, and that is the state of tribal's in the country.

The incorporate world and multinationals are interested in the natural resources regions of any country, and those regions are inhabited by the tribal's. The road maps of development that has been sketched by the government have always created a state of panic among the tribal's. The tribal belts have witnessed struggles, where anti-government protest, arrests and even firing have been a form of oppressive forms of struggle.

The article "Is the Struggle for Livelihood a Criminal Offence" covers the struggle and the efforts put by the tribal's to come across the laws enforced on them to bring up multinational companies in their region, which would rather see a degradation of their resources and their

rights of accessing these resources being taken away under the name of development policies. The work focuses on the tribal belts of Orissa, where activities have been opposing the entry of the project named Utkal Alumina International Limited, now wholly owned by Hindalco.

These oppressive movements have witnessed a great struggle to overcome the enforced laws, where activist have been charged with many false allegation, and have been labeled a term as anti-social and anti-national. Though the oppressive measures have affected a little, which helped in withdraw of a Canadian company Alcan from these joint venture. The coming of a South Korean Company Posco in the Jagatsingpur district of Orissa brought about another struggle in this region. The tribal's of this region has been opposing the industrial policy which favors the multinational companies rather than its population. The oppressive measures adopted by the government shows the forms mentality of the governance and its extreme hard nature endowed over its people.

The root cause of the struggle seems to be the fact that Orissa as a state has been blessed with ample of natural resources in forms of, uranium, chromites, bauxite, graphite, manganese ore, and dolomite; fourth in total deposits of coal and fifth in the case of iron ore deposits. Within the last few years, as many as 56 memorandums of understanding (MoUs) have been signed with different companies just for the mining of natural resources. (Debaranjan 2008).

The policies that comes as an order rather than justice, has always been a misleading process of development, where development can be witnessed but not for all. The book "Seeing the State: Governance and Govern mentality in India" comes up with a better understanding of how government frame policies have been politicized to bring in the favour of the power elites than the people. The top to down power approach, where powers have been defragmented being vested even to small personnel have taken advantage to make more use of the power. The schemes for the poor just remain a scheme, and marginalized section is more deprived. The book focuses the role of decentralized form of government, with schemes that have been develop to address the need of the poor in eastern India, but remains official only in documents. (Corbridge, et al. 2005)

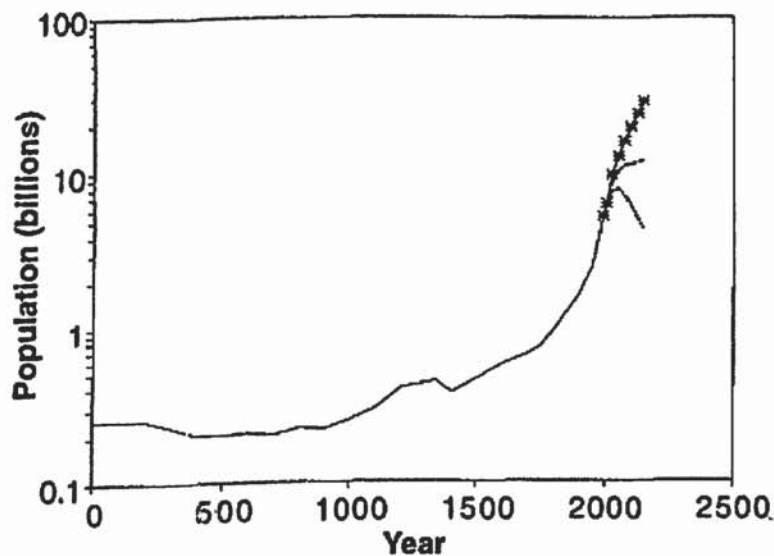
The role of governance and policies plays a critical role in addressing the need of people and addressing the problems of the nation. If the both works parallel confronting at juxtaposing

situation than every country would reform itself from developing to developed with its population being happy rather than oppressive for such misleading policies

2.2.2 Depletion of Resources, Population Pressure and Resource Management

Over the last 200 years, the annual rate of increase of human population grew about 50 fold from an average of 0.4% between A.D 1 and 1650 to its all time peak of 2.1% per year around 1965 to 1970. Human influence on planet has increased faster than human population. For example the, while the human population, more than quadrupled from 1860 to 1991 human use of inanimate energy increased from 1 billion megawatt hours/year to 93 billion MW hours/year. (Cohen 1995)

Fig2.2. Recent world population history A.D. 1 to 1990 (solid line) and 1992 population projection of UN (11) from 1990 to 2150: high solid line with asterisks; medium (dashed line); and low dotted line. Population growth was faster than exponential from about 1400 to 1970.



Reproduced Source: Population Growth and Earth's Human Carrying Capacity, Joel E Cohen

The urgency of understanding the relationship between resource depletion and population pressure, can be look backward, and highlight on the historical context of understanding population growth and theories that provided a breakthrough, giving importance to understand the need of controlling population with regard to the resources available in nature.

The need of understanding the importance of human impact on environment increase changed the focus of geographers from the study of environment to man. (Chandna 2010). The need of

addressing such massive growth came in the focus of the Geographers all over the world and theories eventually came across addressing the need of the problem.

The growth of the theories laid importance to the relationship between population and resources available. Among all the theories of population growth, "The Malthusian Theory" has been regarded as the base approach of understanding the relation between population and resources. In his work "An Essay on the Principles of Population,"⁵ he laid emphasis in two basic assumptions:

- Food is necessary to the existence of man
- Passion between the two sexes is necessary and will remain nearly in the present stage

Eventually the growth of the world population has reached a remarkable height, with more than 7 billion population the pressure on resources has really increased. There are exemplary thoughts that the few of the non-renewable resources would get over by this century. The eventual growth of population, with greater demand for goods and multination companies in hoards to fulfill their customer's needs, has played an immense part in the depletion of natural resources.

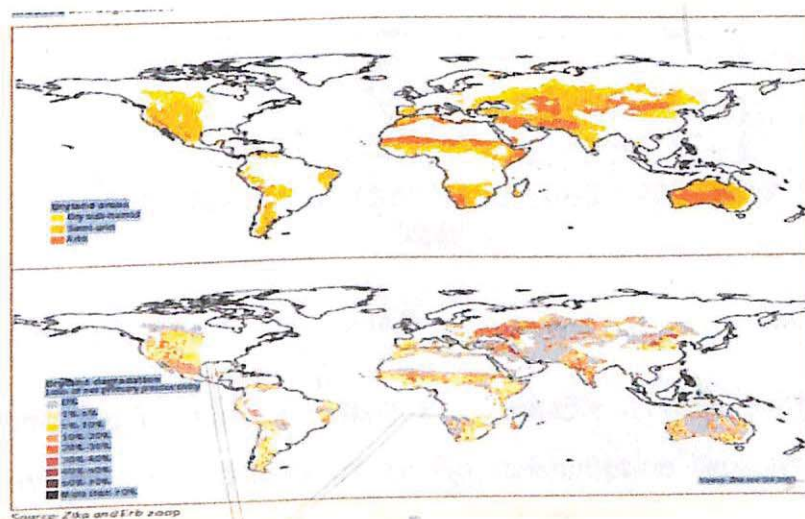
The depletion of these resources doesn't only hamper the environment conditions, but there are communities who directly or indirectly are related to the needs of natural resources. These natural resources allow them to earn their livelihood and sustain their family. The nature and form of resource depletion exist in different types; land degradation among the resources has been growing as a major threat to the world.

The process of land degradation takes in various forms, among which intensive farming uses of mechanized tools and sophisticated chemical, different approaches and methods implied on farming techniques has impacted on soil fertility and soil production. The rate of land degradation has been increasing enormously. Competing demands for the production of food, feed, fiber, and biofuel are intensifying pressures on land and water resources. Demands for food and livestock feed are surging due to population growth and changing diets that include more animal products.

⁵ <http://en.wikipedia.org>

The rate of resource depletion too has been to a great extent, where factors like over grazing, deforestation, increased cropping intensity, urbanization; catastrophic events have played a major impact on the degradation and depletion of world resources. Urbanization is projected to continue at a rapid rate throughout this century. Although urban areas occupy only about one per cent of the total land surface they account for as much as 60 to 70 per cent of anthropogenic greenhouse gas emissions and can encroach onto prime agricultural land and wetlands. Between 2007 and 2050, the world urban population is expected to increase by more than 3000 million. (UNEP 2012)

Figure 2.3: Global extent of dry lands (B) and dryland degradation (C) expressed as loss of net primary production from human induced soil degradation



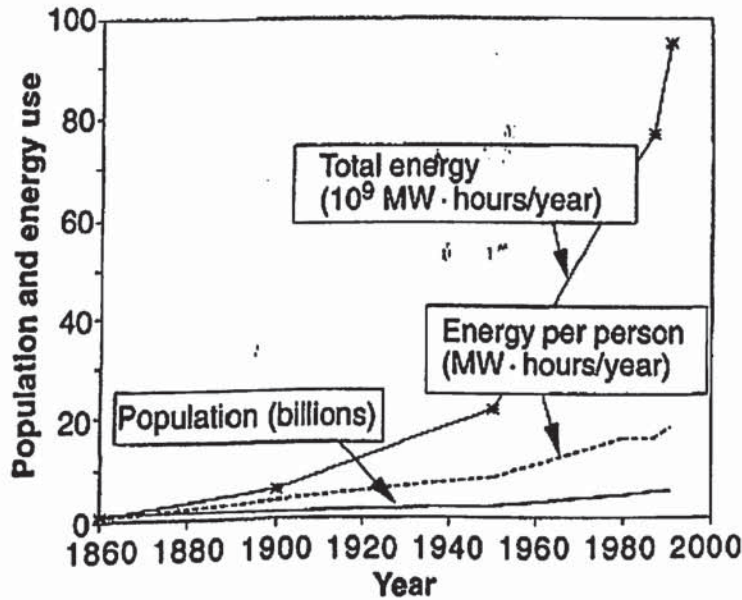
Reproduced Source: Managing Increasing Pressure on Land, UNDP, 2012(Global Environment Outlook)

One of the major impacts of resource depletion has been seen in the form of desertification, forest degradation has been regarded as a major reason induced with climate change. The rate of deforestation remain high in South America and Africa, with annual losses of 4.0 million hectares and 3.4 million hectares, respectively, driven by population and economic growth, poverty, globalization, insecurity of rights of local people, and undervaluation of forest ecosystems.

Deforestation of tropical dry forests continues unabated. Although there has been net reforestation in Europe and in some areas of Asia and the Pacific, increases in monoculture plantation crops in Asia are posing new threats to biodiversity, especially in China and India. On

the other hand, the global forest area designated for biodiversity conservation has increased by about 1.9%, demands for timber, fiber and agricultural land are likely to continue to grow, deforestation rates.

Fig2.4: Inanimate energy use from all sources from 1860 to 1991: aggregate (solid line with asterisks) and person (dashed line). Global population size is indicated by the solid line.



Reproduced Source: Population Growth and Earth's Human Carrying Capacity, Joel E Cohen

The resource consumption capacity has seen a remarkable increase with growing phases of population. The above figure resembles the energy consumption capacity of the world which grew up remarkably in certain time limit. The consumption increase witnesses the pressure building up to fulfill the needs of growing population, not only in the field of energy and bio-fuels but it encompasses food consumption, degradation of pastoral lands.

The depletion of resources has been a major cause of bringing a change in livelihood practices. The Millennium Ecosystem Assessment of 2005 found that 15 out of the 24 major ecosystem services it assessed are being degraded or used unsustainably. (UNDP, Roots of Resilience, Growing the Wealth of Poor: Ownership, Capacity, and Connection 2008).

The need of resource management in such vital phase is thus a necessity to overcome the fear of resource depletion. Resource Management Initiatives has taken many forms, where communities have taken active part to safeguard their resources. The government approach initiative has also

been a success in different parts of the world. Initiatives like Joint Forest Management or JFM and Community Based Natural Resource Management (CBNRM) have witnessed a remarkable change in sustaining livelihood implications in different parts of the world.

The road to CBNRM became popularized the 1990s this term came to be popularized in the rhetoric of donors, NGOs and development agencies, and was critically addressed by academics. It was applied to a very broad range of approaches and practices. A premise of CBNRM research was that the traditional and local knowledge of resource users deserved to be valued with respect. The conventional professional training of natural and social scientists has led them to dismiss traditional knowledge, especially when it is not formally codified or documented.(Tyler 2006)

Many communities have come up together to work and safeguard their livelihood practices, in order to enhance their income and sustainability of resources. The book Community Based Natural Resource Management provides us with case studies of the villages which have set an example across the world for safeguarding their resources and enhancing their livelihood.

The Case Study of Hivre Bazaar

Hivre Bazaar has set up itself as an AGY village. A village that suffered many problems, from water scarcity to noxious activities, came across many challenges from its settlement issues to the society underdevelopment. An election that change the course of village, brought about development, with initiatives from the newly elected member and with village initiatives, the priority to provide a watershed management was developed to solve the water crisis of the village. Many restrictions were brought in farming practices, felling of trees were stopped, grazing of animals were restricted to certain zones, selling of liquor was not permitted.

The result could be seen in productivity increase, more land under cultivation was brought in which rose from 7 to 72 ha. Farmers could grow 2-3 per year. Animal Husbandry was initiated and the per capita increase was from Rs 832 to 11,893. There were initiatives from Baji Rao than the panchayat member of initiating horticulture and dairy farming by installing dairy factory for increasing to increase the per capita income.

The overall effort helped Hivre Bazaar, a small village in the state of Maharashtra to set itself an example of AGY village in the world. (Menon, et al. 2007) .

The transformation of livelihood has taken place just because resource by now is unable to sustain human needs. The adverse impact of such depletion has directly fallen over the world's rural poor communities. Three-quarters of the poorest families live in rural areas; they still depend in large measure on natural resources for their existence; they remain vulnerable and their future insecure. The need of addressing the issue vital in order to safeguard their livelihood or else resource depletion will continue at much faster rate than today adding more to poverty and causing remarkable doubts o the question of sustainability.

2.2.3 Climate Change and Livelihood Prospects

The 21st millennium came across to witness one of the major impacts of development in the name of Climate Change. The need of addressing the issue became a consciousness and studies on to the topic took up a surge to identify the linkage between climate change and many other related issues. The issue of livelihood also covers substantial impacts of climate change along with environmental degradation.

Climate Change, Environmental Degradation and Livelihood are those precepts of understanding which can be lined to study of impact of one on other. The issue of climate change has been a global phenomenon, affecting many perspectives of livelihood, the changes witnessed in agricultural practices, decrease in production of food crops and other assets of livelihood. The mode of earning livelihood depends on the fact that "What people do for living, under the situation they live." There are regions in the world where accessibly to resources is a hardship of the day and in many countries of Asia and Sub-Saharan regions the rate of poverty remains high. The regions too suffer from adverse affect of climate change and hostile fragile environment. The option for livelihood aspects remains limited.

One of the remarkable examples that can witness with respect to climate change and livelihood is the rate at which the mountain communities are being vulnerable to the effects of climate change. Tourism among the mountain countries are one of the most important source of livelihood. The Nepal Himalayas are one the favourite destinations spots of the foreign as well as domestic tourist, but the impact of Climate Change are stretching the vulnerability climate change are further stretching the vulnerability of mountain communities, accelerating the already ongoing environmental degradation processes and the decline or disappearance of traditional livelihood

options, or making these increasingly unsustainable. Traditional and balanced adaptation mechanisms are losing their efficiency, creating an urgent need for new adaptation and coping mechanisms to manage these unprecedented changes, capitalizing upon the cultural and environmental strengths of the mountain landscape to secure alternative livelihood and survival options for the mountain population. (Kruk 2009)

The fact that the climate change has brought about a great impact on environment and livelihood of the poor and the vulnerable section of the society, can be witnessed with examples from the African countries, where the effect of CC is more worse than any other regions of the world.

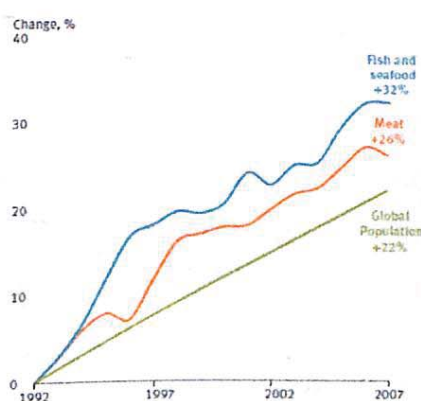
The African countries are homeland diverse flora and fauna, with rich diverse forest, variety of species of animals and plants, with one of the most important river of the world, and gifted with lakes, it's a home to much tribal population. The existence of poverty seems to be like a curse to this continent. Studies on CC have come across many important facts about the impacts of CC on livelihood perspective of the communities, who are dependent on fishing for their livelihood.

Fishing as a source of income has been a backbone to coastal communities, not only in Africa but all over the world. Fishing as economic prospects plays a vital role to upsurge the GDP of the country, but in recent times studies have revealed the impact of climate changes have played a dominant role in degrading the fishing grounds of the world. The source of fishing as a livelihood option plays a dominant role in fishing communities.

Fishing communities are one of the most poor, marginalized and vulnerable communities of Africa. The dependency on fishing of fishing communities in African countries is high. In Malawi fishing only adds 4% of GDP and provides livelihood to 40, 0000 peoples. In recent studies on fishing grounds of Africa, it was found that found that Africa contains most of the world's top 20 countries vulnerable to changes in fisheries production. Angola, The Democratic Republic of the Congo, Mauritania, Mali, Sierra Leone, Senegal, Niger, Malawi, Uganda and Mozambique are also classed as highly vulnerable due to their high nutritional dependence on fish for protein, high catch rates and high reliance on exports for national revenue. These countries also have high poverty levels and limited capacity to cope with the adverse impacts of climate change. (Njaya and Howard 2006)

The needs of addressing the impact of CC on every prospect have been taking a gradual leap, but still the impact is high. The relevance of the fact CC coupled with environmental degradation had added a serious problem to the nature, but to an extent human induced needs for resources have a big hand in promoting this problems, the rate at which the resources are being depleted and demands rising, more and more entrepreneurs have entered the world market. The consumption capacity of human being and carrying capacity of nature are moving in an opposite directions.

Fig2.5: Change in global population, meat, fish and sea food supply



Reproduced Source: Managing Increasing Pressure on Land, UNDP, 2012(Global Environment Outlook)

The rise in global temperature has added an adverse impact on human being. Some coastal hazards, including sea-level rise and extreme weather events, are expected to increase as a result of climate change. The vulnerabilities of coastal area may increase affecting the livelihood perspective of this region .Poverty coupled with marginalization will induce the rate of impact in coming times. The need of awareness to bring about a control, to human induced factor should be a major step in addressing the problem of CC, which to some extent may help in reducing the impact, saving livelihood of the vulnerable peoples and help in bringing the rate of poverty down to some extent.

2.3 Understanding Livelihood from Political Ecology Framework

The concept of political ecology is one of recently developed approach to study the relation between natures that includes resources, societies and policies that abides the users (population) to use the resources. The term society defines a complex mixture of diverse culture of

heterogeneous communities and social division. Political ecology from the concept of Watts *"To understand the complex relations between nature and society through a careful analysis of what one might call the form of access and control over resource and their implication for environmental health and sustainable livelihood."* (Robbins 2012)

The need of addressing political ecology is of immense importance, because the issues studied in political ecology are critically examined, providing a base understanding of how far policies implemented with ecologies and environment have played a immense role in addressing the problem of the people. It is widely accepted that debates concerning "political ecology" refer to the social and political conditions surrounding the causes, experiences, and management of environmental problems.

The concept becomes wider when the politics of ecology is addressed with livelihood. Even though the framework of political ecology stands by the policies abided for environmental degradation, the concept to some extent is related with livelihood issues. It implies many marked changes in world environmental policies that provide rights to use resources to a certain limit, to a certain section of society. These approaches in turn have given rise to the issue of marginalization enforced under harsh laws to follow.

To some extent the policies have made an effort to stop the process of environmental degradation. The process of livelihood is a intake step of extracting resources from environment, and especially the poor population whose source of dependence are these natural resources. The policies and measures that are implied over these poor communities are not sustaining their livelihood process. Illustrated examples from the Asian countries come with regard to the process of Shifting Cultivation.

The shifting cultivation is a traditionally practiced process. The process includes cutting and burning of trees, known as slash and burn. The practice has been sustaining millions of farmers of this region, but with now certain changes in policies the practices have been abounded in these regions. Though alternative methods of livelihood have been provided by the government but the farmers are unable to sustain themselves. Even though they have been abided with policies they have to sustain their livelihood with their old practices. (Kerkhoff 2006)

The traditional approaches, knowledge's and methods are one way of running a systematic livelihood of these poor and vulnerable people. The impact of policies on these people has always left them empty handed and marginalized struggling for their livelihood. The process beings as atop level approach but the impact are on the bottom section of the society accounted by poor and vulnerable. The framework policies always misguides the impact of urbanization and development and take into consideration the less harmful issues which have been sustaining peoples from decades.

The question that arises is "What is the difference?". At one hand a globalized world with mechanized tools, and on the other a small world with simple tools and traditional practices, but abided by laws in the periphery of marginalization. The process of marginalization begins with power. The consequences of power have always been fateful, and this truth can be witnessed from time immortal. The approach even today seems to same, an example of how power brought marginalization and degradation, has been captured from the highlands of New Guinea, where the production of cash crop for markets have forced the labours to produce a certain type of crop turning farm owner operators into something akin to wage labour, causing degradation and marginalization.

The above examples provide the answer to the question. The question of difference is the distribution and utilization of power. How poor is utilized and what have been its impacts, decides the fate of a person or a community. The difference of equality coped with transformation, where culture has been transformed to cultures and where globalized policies have been haunting the rich resources excluded from every law to enhance productivity.

Culturally dominated and economically(poor)groups which constitute the world's majority, the greater the tendency to exclude or dominate by the powerful few (rich) groups controlling the world's access to opportunities and resources for survival and development (Escobar 2006). The fact lies to be a truth and in recent times the world has witnessed many wars and protests for policies that have contributed in causing various environmental problems leading to degradation.

2.4 Globalized Era and Livelihood

The impact of globalization can be seen from a two grounded approach highlighting the positive effects of integration and competition on macroeconomic growth, technological innovation, and

cleaner, more efficient production. Gravitating to the other end are less sanguine appraisals that point to the deleterious effects of globalization on the use of resources, job security, income inequality, and the capacity of states to establish environmental and worker protections. (Bridge 2002).

The need of addressing the issues of Globalization is immense. At one aspect the global world economy and global markets gap have been bridged with the help of globalization process, but at other end the liberal economic process has been a reason of causing environmental degradation along with social issues. The developed world has always been above the developing countries in the process of globalization.

The rate, at which the globalized market is at success, has brought great impacts on the livelihood approach. The concept of sustainability is the question of discussion in this globalized world. An immense contribution of globalization has been providing opportunities to the countries that were once termed as the "Third World"⁶. Scaling out the differences between the Developed and the Third World, it provided opportunities for these countries to raise above the horizon, and in no matter of time some of the countries became the source of world market of the millennium. Countries like Taiwan, Hong Kong, Singapore, and Middle East made a remarkable approach to develop itself from the benefits of Globalization, providing sustainability to it grounded market. (Hann 2000).

The approach of globalization has been good and well to some of the nation, where they have succeeding well with sustainability and development. Easy market access has been of immense help to the farmers of the world to access better opportunities and earning a better mode of livelihood in few of the African countries. The globalized world has seen an era of development and opportunity access, but not all the globalized world has been lucky to take the benefits of the globalization process.

The issue of environmental degradation with regard to globalization process has always been a black remark on globalization. There are evidences of how the developed nations have contributed a lot with excess development, exploiting resources of the developed world and

⁶ The concept of Third World was developed in France, in 1950 before the revolution. The concept resembled that section of society who was poor, exploited and socially excluded in the society.

adding more problems to these nations. The developing countries of the world have been dumping grounds of the developed world, causing environmental crisis. Poor nations of Africa are witnessing problem, these countries have been used as the dumpsite, adding more problem to the process of development. The question is not only about the process of dumping, but about the exploitation of these nations and exclusion.

The process of globalization has been a debatable issue, where at one hand to some extent it has been able to sustain livelihood to some extent, but its critical way of looking at the developing world, has brought the concept of globalization at the cross roads of debatable argument. The studies of livelihood approach, before the era of globalization was restricted to rural studies of poor people, but at present it has witnessed a drastic change with globalization paving out its way to reform the world market.

The need of understanding livelihood approach has undergone changes with leaps in times. The concept which earlier used to be study focused and integrated with developmental approach, has undergone an immense change with the growing world. The options of livelihood has increased with growing competition in the market forces, providing better opportunities as in the cases of African countries like Togo, where the process of cocoa production needed to fulfill the needs of the globalized world, have added to the incomes sources of the people with increasing demand for labour supply.

The approach of livelihood studies has undergone transformation, which once uses to be a household study rather than focused approach, has come across changes with world leaping towards development, adding up with contrasting topics on the studies of livelihood approach. It is how people sustain to their needs with changes coming across them, would be a way to find a answer to the implications of globalization.

Chapter-III

History of Tea Plantation

III

History of Tea Plantation

3.1 The Tea Plantation History

The tea industry was established in China many centuries before the Christian era. The dominance of the China tea industry had two unfortunate effects on the development in India. The history of tea production in India goes back to the period of the East India Company, who at that time was the sole proprietor of tea production in India. The fact that the East India Company had the monopoly of the tea trade with China caused that company to discourage any tea venture in India. (Whittaker 1949)

The introduction of tea in India was known as early as in 1815 a British officer (Colonel Latter) had reported that certain of the hill tribes in North-East Assam made a drink from wild tea growing in the hills. In 1823 Major Robert Bruce took a trading expedition to Sibsagar and found wild tea, the seeds from which were collected by his brother, C. A. Bruce, in the following year and planted in the Commissioner's Garden at Gauhati and in Bruce's own garden at Sadiya. In 1825 this Society of Arts offered a gold medal - or fifty guineas - "to the person who shall grow and prepare 20 lb. of good quality tea"

The China's monopoly on tea was curtailed by 1833, and the Governor General than Lord William Bentinck, set up a commission to accomplish tea culture in India. The committee found that the tea s were very common in Upper Assam. The fact that the Chinese had an upper hand in the plantation process of tea, favour the growth of the Chinese tea seeds with labourers and seeds brought with great difficulties from China. The degraded wild tea seeds that were available in Assam were discarded.

The clearing of forest for tea plantation took a rapid pace. In 1838 the first shipment of manufactured Indian tea was ready. It consisted of eight chests, about 350 lb., which was sold in January 1839, in the Mincing Lane auctions at prices ranging from 21s to 34\$ a pound. In 1839 Upper Assam was brought under British control and the Government transferred its main tea-

growing interests in the following year to the Assam Company which appointed C. A. Bruce its first Superintendent.⁷

3.2 The Early Days of Tea Plantation in India

The growth of tea industry in India was a venture of the East India Company, From very small beginnings, which commenced in 1834 and in 1850 amounted to an area of 1,000 acres and a crop of 250,000 lbs., has arisen the present vast industry in India, consisting of a total planted area of 832,935 acres and a restricted crop of 383 million lbs., in which not less than £75,000,000 was invested. The average production for the past three years, including 1934-35, was 882,000,000 lbs.

The growth of the Indian tea market had supplanted the tea market that of China. in 1866 the United Kingdom consumed 102 million lbs. of tea, of which only 4 per cent, was Indian, all the rest being China, in 1935 consumption of tea amounted to no less than 44 million lbs., of which 9 million lbs, or only 2 per cent, was China, the consumption of Indian tea amounting to 259 million lbs, or 58 per cent. (Watson 1936)

The Gardens in India were mainly opened by the British but brought into the notice at present context in connection with tea plantations is the extent to which they are owned by Indians, particularly in North India. Of the 1,046 gardens in Assam in 1934, 336 were owned by Indians. Apart from this, Indians are very considerable shareholders in the European and Indian managed rupee companies.

In Assam and Jalpaiguri in North Bengal, Indian tea planters have their own In Assam and Jalpaiguri in North Bengal, Indian tea planters have their own Tea Associations which work in co-operation with the Indian Tea Association, Calcutta, and the latter's branch and local associations. I need hardly say it is a matter for very great satisfaction that, in the crises of recent years through which the industry has passed harmony has existed between the Europeans and Indian tea concerns. It is largely owing to such friendly relations that the negotiations for, and introduction of, the Regulation of Exports Scheme were successfully carried through.⁸

⁷ Ibid. p.35

⁸ Ibid. p.35

The tea plantation process has always been a labour intensive process, where the demand for workers is higher than any other commercial industries. The history of labour migration has a deep rooted connection with tea industry. The workers required for tea industries were basically the tribes who at that point of time were referred as jungle⁹ and their living place as jungly place¹⁰.

Watson in his article beautifully examines the ways of how the workers used to come all across to the Assam hills to work. He explains the condition very appropriately in his words of explanation of *"a man arriving at some jungly place a hundred miles from anywhere, where there is probably no house, no roads, nothing but jungle and wild animals, including mosquitoes. He arrives there probably with a tent, a nucleus of labour and a few necessities of life, and his first step, of course, is to pitch his tent in a clearing somewhere."*

The importance of the labour in the tea Industry always stands high on the ground. The period when tea as a commercial product, was introduced in India, the country at that time was fairly explored. The establishment of tea industry required huge acres of land in order for larger production. The need of such land was to be fulfilled by cutting jungles and for that purpose the need of labour became an essential factor. The clearing of forest for commercial production of tea carried on a big dimension, on one hand the forest are being cleared, on the other hand tea seeds are planted in nurseries before they are transferred to the field.

The overall mechanism of tea production burdens a need of extensive labour, which at that point of time was no doubt a major challenge to the East India Company. In his historical report of 10th February 1837 by Mr. C.A. Bruce, he clearly mentioned the need of deploying labours from other parts of India to Assam for tea plantation. The total labour engaged in the tea industry by 1933 was returned at 864,503, of whom 807,863 were permanently employed and 56,640 were temporarily employed. The number of adult labourers and children, living in garden lines and on garden land in Assam, amounted in 1933 to 1,089,490.

The wages of the labourers were fixed at around between RS 10 to Rs 5 among men, women and children, provided with facilities like free rented houses and medical facilities. The labourers

⁹ The term jungle refers to the barbaric nature

¹⁰ Jungly place is a term used for people who dwells in jungles without any shelter.

were given private land for other purpose like grazing which added an extra income to their earnings. The extent of the concession of garden land for private cultivation can be judged from the fact that in 1933 134, 370 acres of land were held by garden workers as tenants of the garden proprietor.¹¹

The early days of the tea industry had to come across many problems, with regard to the health issues. The labourers that had been brought from different parts of the country had to suffer from many diseases, among which malaria was a common of all. The company ran into difficulties for disease took a heavy toll of its managers and their labour forces. The main challenge for the industry was to maintain the labour forces, with little medicinal equipments.

Financially the company was also very hard to survive. The cost of clearing the forest was extremely high, at a point of time the company was on the verge of bankruptcy. Nevertheless, a number of British firms and individuals came forward to guarantee funds which led to the establishment of the Indian Branch of the Ross Institute, which now serves many other industries in India.

The growth of the tea industry in India brought a high stake to the East India Company. The company, who by now had a complete monopoly over the tea market of the world, had a major dependency on the tea produced in India. The undivided India, including Pakistan alone produced an approx figure of 600 million pounds, employing 1 1/4 million persons and housing over 3 million.

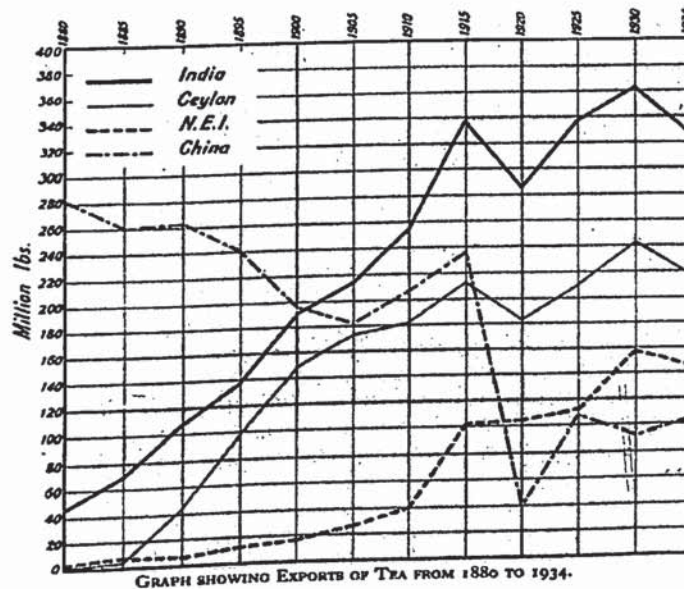
The tea plantation process which eventually grew from an experimental form to the commercial production process brought about enormous benefits to the erstwhile lone earner East India Company. The rapid growth of the tea industry in India, place itself to become one of the fastest growing market of the world. The tea industry of India had more customers in the world, which brought an enormous wealth to the East India Company.

The impact of such demand not only brought about economic benefit to the East India Company, brought also added a lot in the India's development context. The first and the foremost development that came across with tea industry was the exploration of the most difficult regions

¹¹ Ibid. p.35

of the country. The regions which were inhabited by the tribal's known for their barbaric nature were now being explored by the company, in the process of acquisition of land. The foremost region of invading their regime was the physical nature of the region. The tribal's have also inhabited in the forest which provided them with maximum resources.

Fig 3.1: Graph Showing Exports of Tea from 1880 to 1934



Reproduced Source: *Journal of Royal Society of Arts* "The Tea Industry in India" Vol.84 pp 445-465, 6th March 1936

The need for clearing the forest was the first necessity as the tea plantation required a huge area for cultivation, as such the encroachments of these regions was a required need. The second aspects of benefits from tea plantation were the restructure of the Indian society in these regions. The labours required to cut such big forest were basically poured in from distant lands of India and even from Nepal. The local tribal's were less interested to work with the company, and it was very hard to bring them under their control.

The new sets of population gave rise to a new spatial dimension to the region, with new people pouring from distant land with new culture, traditions, religion, food habits, language, there was a complete assimilation of new blend of society living in a common space with harmony

bringing a change in the demographic as well as social dimension. The company provided them with certain beneficiaries along with free rented housing, which were termed as labour lines¹².

The tea industry has always been a labour intensive industry, the efforts of the labours has always been of immense importance. The growth of tea industry saw a rapid increase, giving birth to more competitors in the market. The rapid growth has added immense pressure to the tea industry at present. The golden period of tea production has faded with teas from Darjeeling hills earning fame the tea industry of the Assam and north Bengal regions are facing stiff competition, adding a plight to the industry and to the workers, who has been dependent in this source of income from many generations.

Fig3.2: Showing the houses of labourers in Tea Plantation areas



COOLIE LINES.

Reproduced Source: *Journal of Royal Society of Arts* "The Tea Industry in India" Vol.84 pp 445-465, 6th March 1936

3.3 Introduction to Tea Plantation in West Bengal

The tea industry has a special significance in the industrial map of West Bengal. It is the largest organized industry in the two most backward districts of the state -Jalpaiguri and Darjeeling - providing employment to 218,848 permanent workers,' Half of them being women. The total

¹² The term labour line refers to the numbers provided to the different settlement with a region, as a mark of distinction. The tea garden too was given different numbers for better management purpose. The practice even today holds a great importance in the tea industry, even today there are numbers marked both for settlement and gardens for better management purpose.

employment of the industry is much larger if one takes into account the warehousing. (Prasâneswari 1984)

The history of tea plantation goes back to the emergence of British era, with the East India Company entering the country for business purpose and eventually settling themselves as our ruler.¹³ The experimentation of tea production was carried out in the two districts of West Bengal along with Assam. The geographical prospects of these regions favored the growth of tea plantation and eventually the region saw an immense increase in the tea production with investors from North India, and few English companies entering the tea market.

The invasion of Bengal after the Battle of Plassey in 1756, brought a setback in the Indian governing system, and on the most advantageous position were the East Indian Company, who by now had in their hand the control on the most important region of the country. The invasion of Bengal by the British changed the economic fortune of the state, as they came across with much new experiment.

The cultivation of tea in Bengal started a in the early 1800, in the Northern regions of Bengal. The geographical region of the northern part of Bengal favored the growth of tea plants resulting in the establishment any tea industries within a short period span. The need of understanding the geographical features is must because the physical features of any region define its economy and socio-cultural environment. A region is a mixture of physical, social and economic prospects; the blend of these combinations prepares a hub of human civilization. History has already witnessed the growth of human civilization has always taken on the banks of the greatest rivers of the world. These civilizations stood up to be one of the most developed and organized form of civilization, paving way to the future civilization.

3.4 The Geographical Position of Bengal

The economic prosperity of Bengal is an outcome of its geographical location that provides her the benefit of being one of the fertile regions of India. The regions is endowed with great

¹³ The East India Company, who entered India, with business intentions, during the last phase of Mughal Regime, acquired a firman from the Mughal Emperor than Salim Jahangir to build factories in Surat and other areas. The policy of the company lured the Emperor and the emperor sent a letter to James through Sir Thomas Roe. (<http://en.wikipedia.org>)

geographical setting, en-carved under the influence of many rivers, hills, fertile plains, deltas and rich economic prosperity.

The location of any region is defines by its position, the state of Bengal lies within the latitudinal and longitudinal range of 21degree20minutes N and 27degree3minutesN latitudes to 85degree50minutesE to 89degree52minutesE longitudes, sharing boundaries with neighboring countries of Bhutan, Nepal and Bangladesh. The state falls in the physiographic zones of the Eastern Himalayas and Eastern Plains and has two distinct natural divisions (State Forest Report: Government of West Bengal 2006-07)

- The Northern Himalayas
- South Alluvial Gangetic Plain

3.4.1 The Physiographic Aspect

The entire Bengal basin is that part of the great Indian shield which lies approximately east of longitude 87degree E and disappears below a blanket of Gangetic alluvium. West of it are a number of intracratonic Gondwana basins along the Damodar Valley and a few early 'tertiary exposures near Durgapur and Baripada and the late Mesozoic volcanoes of the Rajmahal Hills. The Archaean Shield crops out again in the Shillong Plateau, which faces the Garo- Rajmahal gap through which the Ganga and its tributaries flow to the sea. Further the physiography of West Bengal can be divided into two major regions: (De 1990)

A. Himalayan Region

B. Gangetic Plains

A. Himalayan Region

This is sub-divided further into two parts:

i Darjeeling Himalayas

This zone consists of Darjeeling district (except the Siliguri Sub-Division). The hills are comparatively of recent origin, generally steep sided and prone to landslides. Soils are brown,

loamy in nature, rich in nutrients, organically rich and acidic in reaction. Most of the rivers originate here.

ii Sub-Himalayan

This zone comprises of the plains districts of Jalpaiguri and Cooch Behar and Siliguri Sub-Division of Darjeeling district. Soils are mostly sandy, highly acidic, heavily leached and poor in base and plant nutrients. Since most of the hilly river flow through this region, these areas are flood prone.

B. Gangetic Plains

The Lower Ganga Plain in West Bengal forms a part of the Indo-Gangetic Plains. 14 districts of West Bengal are contained in this physiographic region. This region is further divided into four micro physiographic zones. These are:

- Barind tract comprising Cooch Behar, Malda, North and South Dinajpur districts.
- Moribund Delta comprising of Murshidabad, and Nadia districts.
- Proper Delta consisting of the districts of Burdwan, Kolkata, Hooghly, Howrah, South & North 24-Parganas.
- Rarh plain is spread over Purba and Paschim Medinipur districts, Bankura, Birbhum and Purulia.

Agro climatic zoning refers to the division of an area of land into land resource units, based on numerical expressions of crop climate quantified in the form of agro-climatic indices, having a unique combination of landforms,

North Bengal basin is the Barind tract of north-west Malda and West Dinajpur districts were the post-Pleistocene southern limit of the Himalayas, and then separated from it by a swamp shallow lake of indeterminable length from east to west. The left bank tributaries of the Ganga in Bihar and eastern Uttar Pradesh then used to flow with their alluviums towards this lacustrine area at a time when Himalayan glacial action deposited sedimentation in North Bengal, and the river eroded material from the Himalayas.

3.4.2 Climate and Soil

The state has a diverse climate, varying from moist tropical in south east to dry tropical in south west and from sub tropical to temperate in the mountains of the north. Annual rainfall varies from 900mm in southwest to 5000mm in the northern parts of the state. The temperature also ranges from sub zero in the hills during winter to 46degreeC in the southern parts during the summer.

Heavy rainfall occurs in the northern part of West Bengal and gradually decreases towards South forming an area of moderate rainfall zone around central part of West Bengal. The annual rainfall is maximum (>3000 mm) at the foothill region on the north (sub-Himalayan West Bengal). Whereas, the coastal region in the south receives around 1500-2000 mm of rainfall, and it decreases to 900 mm in South West.

The average annual rainfall in the state is about 1,900 mm of which 1,600 mm occurs during monsoon months. In the Northern part of the state that includes the mountain region (Himalayas), temperature ranges from freezing point to 10°C in winter. It hovers around 12°C to 18°C in the plains. January is the coldest month and winter starts from the end of November and extends to February.

Darjeeling has a normal mean temperature ranging from 5.8°C to 17.0°C where snowfall also occurs occasionally. Rest of the area has mean winter temperature ranging from 9°C to 14°C. The summer season begins from the month of March and temperature starts rising up to June. May is the hottest month. The summer temperature shows variation from 20°C in Darjeeling district to about 48°C in Purulia district..

Subtle differences with the Gangetic basin to its north-west have been noted. With regard to the most distinctive element in its climate, the monsoon rhythm is the dominating characteristic in West Bengal as elsewhere in India; but in the onset, duration, date of withdrawal and intensity of the rainfall West Bengal differs from the Upper Ganga plain. It has three seasons hot-dry from March to early June, hot-wet from mid- June to September, cold from October to February.¹⁴

The "north-western' thundershowers, generally in the late afternoon which brought welcome relief in the Bengali month of Baisakh (March-April) appear to have diminished in recent years.

¹⁴ Ibid.p.41

The weather during June to September is determined by the strength of the south-west monsoon. This is not a steady current. It undergoes a series of pulsations. In recent years a large amount of uncertainty has been associated with some of the fundamental aspects of monsoon.

The quality of the soil differs as it passes through different physiographic structure. In the Himalayan region the soils are predominantly shallow to moderately shallow but also deep at places, well drained, coarse-loamy to gravelly loamy in texture. These soils occur on steep side slopes. They are classified as Typic Haplumbrepts and Typic Udorthents. In the foothills of Himalayas and in piedmont plains the soils are deep to very deep, imperfectly drained and coarse-loamy to fine loamy in texture and are placed in Aquic Ustifluvents and Fluventic Eutrochrepts. Soils of the alluvial plain which includes Indo-Gangetic alluvium (recent, active and old) are also very deep, imperfectly to poorly drained, fine-loamy and also coarse-loamy in texture and with moderate flooding problem in some cases.

These soils are classified as Aeric Haplaquepts, Typic Fluvaquents, Typic Haplaquepts, and Typic Ustochrepts. Undulating plain area is represented by very deep, fine-loamy and coarse-loamy soils with moderate erosion and classified as Aeric Ochraqualfs, Typic Ustifluvents and Typic Haplustalfs. The western part of the state i.e., predominantly Chhotanagpur plateau area have soils shallow to very shallow, well-drained and gravelly loam and coarse-loamy in texture with moderate erosion whereas soils in the remaining part are deep to very deep, well drained, fine loamy in texture. They are classified as Lithic Haplustalfs and Typic Haplustalfs.

Coastal plain is represented by soils of both sandy as well as fine in texture, very deep with salinity problems in some places. Soils are placed in Aquic Ustipsamments and Vertic Haplaquepts. Whereas soils of delta plain are very deep, imperfectly to poorly drained, fine in texture and has the problem of inundation and salinity and classified as Aeric Haplaquepts and Typic Haplaquepts

In Darjeeling district, the "Terai deposits" are similar in nutrient inferiority, mostly sandy raw humus type, and deep black to grey black. Lower down in the north Bengal plains up to West Malda and in central south Bengal, the soils are alluvial, divisible into two types of original derivation, Vindhyan (from Chhotanagpur erosion) in the western plain, which is poorer in

organic and nutrient value than the other type, Ganga alluvium along the central longitudinal tract from Kuch Bihar to the lower delta-which is the most fertile region within West Bengal.

3.4.3 Minerals

The mineral deposits of the state are found in two regions: the Darjeeling rampart and the lateritic-ferrallitic landforms where red and gravelly soil merges with the Laterite. The hill minerals have not been much exploited-the coal of Tindharia and Bagrakote used for cement factories, electric power generation and brick kilns, which have to be briquetted before more sophisticated use for instance for locomotives: contiguous lignite and brown coal in discontinuous patches: graphite of poor quality, some hematite north of the Box Duar used by local iron smelters known as Agarias: copper, pyrites, lead, silver, zinc and talc in the same region: and considerable amount of lime, Kaolin and magnesium sulphate of relatively good quality.

Quantities of lead, zinc, copper, silver, pyrites, wolframite, allanite, kyanite, graphite, limestone, dolomite, pegmatite's bearing mica and beryl's, potstone and clays have been mined in places like Chendapathar in West Bankura, contiguous areas of Purulia, etc. The heyday of this region from the 1850s to the 1940s lay in the development of some of India's earliest rail lines through these areas towards the upper Gangetic plains; and the induced demand in the British imperial system during two World wars. But industrial planning for India was at a discount during the colonial period which ended many years ago.¹⁵

3.5 Land Use Cover and Forest Cover

The rapid development that has taken both vertical and horizontal form has brought a great impact on the land use pattern and forest cover. The human dependence on forest has been immense. It has been historically studied, that how people have settled themselves by clearing forest and starting agricultural practices in the forest cover regions of the world.

The primitive way of agricultural practices has followed a method of slash and burn, which to some extent had positive and negative point. The pattern of forest utilization in recent time has witnessed any changes. To some extent the practice of Slash and Burn has been abolished, under

¹⁵ Ibid.p.41

the different forest policies of the country. The need of the forest land became an importance for the British, for their plantation business. They came up with different practices to bring the forest under their regime, and also came across different tax system to avoid traditional practices as well as to increase their revenue.

This was the important period for the forest dependent population. The idea of bringing forest areas under the revenue regions, provided a set back to the forest dependent population. They forest population had no other problems other than to work as agricultural labourer in plantation fields. It was the period when the use of the tribal indigenous population was in demand with tea plantation as the most commercial industry in the world market.

The labour force even today in the tea plantation remains the same, with tribal's forming the majority along with Nepalese population. The importance of these two sections of population has been immense. With changes in time there have been changes in the policies of the state, regard to its forest policies and land utilization system. At present the forest cover and land utilization pattern of the state has been as follows.

Table 3.1: Land Use Pattern of West Bengal

Land Use	Area in '000 ha	Percentage
Total Geographical Area	8,875	
Reporting Area for Land Utilization	8,864	100.00
Forest	1,174	13.52
Not available for Cultivation	1,814	20.08
Permanent Pasture and other Grazing Land	7	0.08

Land under misc. Tree crops and grooves	55	0.63
Cultivable land	32	0.37
Fallow lands other than current fallows	22	0.25
Current fallows	287	3.30
Net Sown Area	5,294	60.96

Reproduced Source: Forest and Tree Resource in States and Union Territories, Forest Survey of India

Table 3.2: District Wise Forest Cover of West Bengal

District Wise Forest Cover							(Area in Km)	
District	Geographical Area	2011 Assessment					Change	Scrub
		Very Dense Forest	Moderate Dense Forest	Open Forest	Total	% of GA		
Bankura	6,882	213	510	333	1,065	15.34	0	4
Bardhaman	7,024	44	135	82	261	3.72	0	1
Birbhum	4,545	0	42	63	105	2.31	0	2
Kolkata	185	0	0	0	0	0.00	0	0
Coochbehar	3,387	0	15	79	94	2.78	0	1
Dakshin Dinajpur	2,219	0	2	13	15	0.68	0	0
Darjeeling	3,149	714	663	912	2,289	72.69	0	0
Howrah	1,467	0	53	93	146	9.95	0	0
Hoogli	3,149	0	9	52	61	1.94	0	0
Jalpaiguri	6,227	681	514	1,309	2,504	40.21	-2	8
Malda	3,733	0	113	51	164	4.39	0	0

Medinipur	14,081	253	1,171	1,172	2,596	18.44	1	0
Murshidabad	5,324	0	63	44	107	2.01	0	0
Nadia	3,927	2	74	53	129	3.28	0	0
North 24 Pargana	4,094	20	18	51	89	2.17	0	0
Purulia	6,259	43	373	381	797	12.73	0	13
South 24 Pargana	9,960	1,014	889	503	2,406	24.16	2	0
Uttar Dinajpur	3,140	0	2	174	176	5.61	0	0
Grand Total	88,752	2,984	4,646	5,365	12,995	14.64	1	29

Reproduced Source: Forest and Tree Resource in States and Union Territories, Forest Survey of India

3.6 Demographic Profile of the State

Table 3.3: District Wise Population of West Bengal 2011

District	Population	Growth Rate	Sex-Ratio	Literacy	Density/km
North 24 Pargana	10,082,852	12.86	949	84.95	2463
South 24 Pargana	8,153,176	18.05	949	78.57	819
Bardhaman	7,723,663	12.01	943	77.15	1100
Murshidabad	7,102,430	21.07	957	67.53	1334
West Medinipur	5,943,300	14.44	960	79.04	636
Hoogli	5,520,389	9.49	958	82.55	1753
Nadia	5,168,488	12.24	947	75.58	1316
East Medinipur	5,094,238	15.32	936	87.66	1076
Howrah	4,841,638	13.31	935	83.85	3300
Kolkata	4,486,679	-1.88	899	87.14	24252

Malda	3,997,970	21.50	939	62.71	1071
Jalpaiguri	3,869,675	13.77	954	73.79	621
Bankura	3,596,292	12.64	954	70.95	523
Birbhum	3,502,387	16.15	956	70.90	771
North Dinajpur	3,000,849	22.90	936	60.13	956
Purulia	2,927,965	15.43	955	65.38	468
Coochbehar	2,822,780	13.86	942	75.49	833
Darjeeling	1,842,034	14.47	971	79.92	585
South Dinajpur	1,670,931	11.16	954	73.86	753
West Bengal	9,13,47,736	13.93	950	77.08	1029

Source: Census of India 2011

The demographic profile of any region determines the social and economic status of the region. The population of any region defines the workforce structure and resource utilization of a region. The state of West Bengal is one of the prominent agricultural state of India, though in recent, the pace of urbanization has increased, but still today agricultural labourers constitute a very important component of the rural population in West Bengal , accounting for two-fifths of the agricultural population.

North Bengal covers an area of about 21,000 square kilometers, which is about 24percent of the State. The snow-fed rivers of the Himalayas – Teesta, Mahananda and Jaldhaka flow through the region. These rivers are characterized by erratic changes in their courses and flooding. The hills and adjacent areas are covered with temperate and tropical forest composed of Pine, Fir and other evergreen types like *Gurjan*. *Sal* is also quite abundant in the forest. About 18 percent of the region is classified as forest land much of which is concentrated in the districts of Darjeeling and Jalpaiguri. (Report on Comparative Backwardness Of West Bengal Region: Planning Commission of India 2002)

The district of Jalpaiguri is also one of the agricultural regions of the state. The region Jalpaiguri is a district of West Bengal in northern part of the state, lies in between 26° 0'16 and 27 0' 00 N parallels of latitude and between 88° 00'4 and 89° 0'53 E longitudes, formed in 1869 A.D. It

has 13 blocks with 688139 household. The long international border with the countries of Bhutan and Bangladesh has made Jalpaiguri a strategic location so far as the defence, development and economy of region are concerned. (Das 2012)

The region is predominantly rural. The districts of Coochbehar, Jalpaiguri and West Dinajpur are characterized by incidence of higher proportion of Scheduled caste population (well above the State average). In Jalpaiguri and Darjeeling districts, the Scheduled tribe population account for a sizeable proportion, i.e. 21.0 per cent and 13.8 per cent respectively as compared to the State average of 5.6 per cent.¹⁶

The tribals of this region have inhabited in the most backward regions of the district, and are most engaged in tea plantation industry. Tea plantation industry is one of the biggest industry and one of the major sources of livelihood for these tribals. The main tribal population engaged in tea production comprises of Oraon, Munda, Malpaharia, Santhal, Lodha, Lohar along with other community among which the Nepali speaking community also has a good proportion of workers engaged in tea industry.

The roles of the tribal workers in tea gardens have been immense, and their contribution in tea plantation has been of valuable importance. The increase in the proportion of tribal workers in tea gardens reflects the importance of the tea garden to the tribal workers and for the tea garden owners also. The hard working nature of the tribal workers have always been appreciated by the owners even during the British regime, these group of population was considered to be a better option to engage in the tea plantation process.

The growth of tea industries in Jalpaiguri district though saw a rapid increase within a short span of time, but the development of the tribal workers in tea gardens has been stagnant. To some extent backwardness and lack of infrastructural facilities like education, road, etc have been major reasons that have a major reason for such a set back among these hard-working communities.

¹⁶ Ibid.p.50

Malda	3,997,970	21.50	939	62.71	1071
Jalpaiguri	3,869,675	13.77	954	73.79	621
Bankura	3,596,292	12.64	954	70.95	523
Birbhum	3,502,387	16.15	956	70.90	771
North Dinajpur	3,000,849	22.90	936	60.13	956
Purulia	2,927,965	15.43	955	65.38	468
Coochbehar	2,822,780	13.86	942	75.49	833
Darjeeling	1,842,034	14.47	971	79.92	585
South Dinajpur	1,670,931	11.16	954	73.86	753
West Bengal	9,13,47,736	13.93	950	77.08	1029

Source: Census of India 2011

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¹⁶ Ibid.p.50

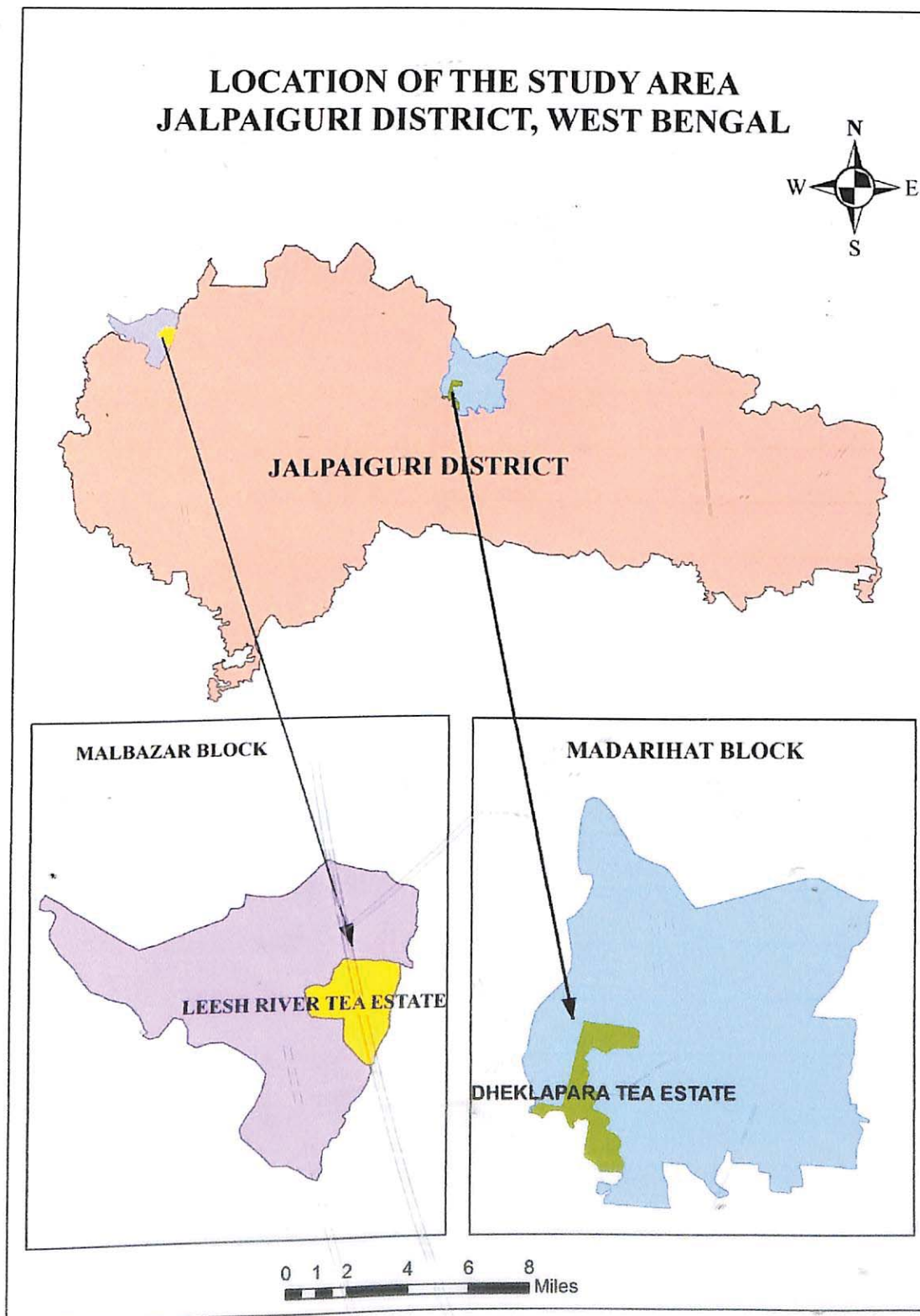


Fig 3.3 Map of the Study Area

3.7 Tribal's in the tea industry

The tea industry today is regarded as one of the major industries in the field of plantation. The discovery of tea-plant set in motion the process of colonization in Assam and West Bengal by European planters. A new avenue of investment of capital and exploitation of resources was found. The industry which grew as an experiment has now been one of the most important in the states of West Bengal and Assam, adding up a great significance to its economy.

The tea plantation process was a task that required the support of hard working peoples. The plantation required a huge area for converting it into a tea garden. The only way of obtaining such huge areas was clearing the forest. Substantially there was a crisis of workers in the tea plantation process. The tea plantation which started in Assam during the early 1830's could not garner the support of the locals in clearing the forest.

To facilitate the development of this nexus a scheme of 'Waste Land Rules' was initiated in 1838 at extremely favorable rates for the European tea entrepreneurs. Under the new government grants, land was to be held by planters almost free of revenue for the first 20 years and assessments were to be made only after the lapse of that period. It was specially seen that no grant was to be made of less than 400 acres at Rs 3 per acre. In 1854, the concessional rate was further increased.

Henceforth, no grant was to be made of less than 590 acres with 125 acres exempt from assessment in perpetuity. In 1861, Lord Canning passed the new 'Free- Simple Rules' which allowed outright sale of land to the planters at extremely low rates. From these rules for the reclamation of waste land it is evident that only entrepreneurs possessing huge capital could take up tea-cultivation. Difficulties for the indigenous entrepreneurs were thus increased during a nearly three-decade period, initially by the government, and later by the government and the planters in conjunction. With the extension of tea-cultivation emerged the problem of tea labourer.¹⁷

The historical background of how tribal population was engaged in tea plantation has a linkage with the condition that the British had to face in the early days of tea plantations. The tea plants

¹⁷ Ibid.p.43

that were discovered in Assam was not up to the mark to become an excellent beverage in the tea market, as such tea plants from China were imported to India long with the Chinese labourers. The Chinese labourers were not as hard working that the British planters were looking for and the local's tribes of Assam were not interested to engage themselves in this field.

The enactment of law by the British rulers such as Assam Land Act 1834 followed by the Wasteland Grant Rules 1838 in order to get land easily for the tea estates could not work.. They hoped that once deprived of their livelihood, the Ahom, Koch and Boro landowners of Assam would work in the plantations. But they were not ready to become wage labourers on their own land alienated unjustly from them. Also the Chinese whom the British brought to the Assam could not become the type of workers they needed. The tribal's of Jharkhand, Orissa and Chhattisgarh were thus the next choice. (Fernandes 2003)

Consequently, the labourers were recruited from various cultural, linguistic, and ethnic heritages from other provinces. Different groups were recruited from different places, e.g., the Munda and Gond from Bihar; Santal, Tanti, and Bhumij from Bengal and Bihar; Oraon from Bihar and Orissa; Savara from Bengal, Bihar, and Orissa; Goala from Bengal, Bihar, Orissa, and Madhya Pradesh; Lohar from Bihar, Orissa, Madhya Pradesh, and Uttar Pradesh; Khond from Andhra Pradesh; and Boya from Tamil Nadu. Desperate poverty of the countryside probably made available this supply of huge labour group.

All these peoples were branded as "Coolie," and the world at large also recognizes them accordingly and not by their group affiliation. The word "Coolie" is, however, now considered derogatory and has been replaced in official documents by the term mazdoor¹⁸. The tribal's were known for their hard work of wood-cutting, jungle-clearing, etc, these thus they were the right kind of people to adjust with the labour-process required in the tea-gardens

The early days of the tribal workers in tea garden were very hard. In the beginning, a good number of labourers suffered from mal-adjustment, some of them died, others went back home after the expiry of the contracted period, and still others fled away before the expiry of that period. A major section of the groups, however, survived that stage and had gradually settled in the new habitat, in a new economy, and far remote from their original home (Kar 1984)

¹⁸ The term mazdoor refers to the labor work force engaged in different cultivation and primary activities

The recruitment process of the tribal's as labour forces was not just because they were hard working, but were cheap and were easily available. The inflow of immigrants from different region of the country increased during a certain period of time. The far cry for labour force in tea plantation was substituted by the immigrant tribal labour forces, by 1994 the tea plantations in India employed 10, 28,694 permanent workers of whom 4, 96505 were women and 4.80,067 were men. Adolescents and children (workers below 18 and below 14 years respectively) totaled 52,122.'The figures for West Bengal for the same year were, 2.58,448 workers with 1, 27.869 women, 1, 18,482 men and 12,097 adolescents and children. (Sarkar and Bhowmik 1998)

3.8 The Tea Industry at Present and Past

The tea industry in India received an overwhelming response, during the early phases of plantation and production. Most of the buyers had been the Europeans, and the trend of tea production in India was basically to meet the demands of the UK. Thus considering the production process of tea and its market, the tea industry can be divided into two phases.

One phase resembles the pre-independence period where tea production was in great heights, the entire rural workforce was engaged in the tea plantations. The other phase is the post independence period, when plantations started becoming sick, especially during the post-independence period, the displaced plantation workers started searching for alternative of employment. (Bhowmik 1985)

The first phase of tea plantation was boosted by many factors, where the British policies had a great impact on the expansion of plantation industry, expansion of plantations in Assam which were backed by land reforms favorable to the planters and which resulted in eviction of local cultivators.

The quantity of all teas sold during a week normally amounts to about 80,000 chests (8,800,000 lbs.); the quantity of all teas sold during 1934 amounted to 3,592,446 chests, or approximately 395,160,000 lbs. In the first place the value of tea exported from India during 1933-34 amounted to Rs.20, 13, 08,642 (£15, 098, 14) employing 864,503, of whom 8, 07,863 were permanently employed and 56,640 were temporarily employed¹⁹

¹⁹ Ibid.p.43

The first phase too some extent worked as a phase of development for section of population, providing employment, economic development and bringing social changes as well as adding up pressure on agricultural lands and labour supplies in agricultural activities.

The second phase or the post-independence period was a dwindling period in the tea industry, the tea units had been performing very low. The production had undergone a great fall, and there was a major shift in the occupation structure of the tea garden workers. It was a period, when there was an increase in the agricultural labour of West Bengal, especially in the North Bengal region of the state, since 1965 Indian tea, especially Jalpaiguri tea, started facing adverse conditions in the international market. This unfavorable market situation continued through the quinquennium 1965-70. (Bandyopadhyaya 1977)

It had its backlash in the form of lower production targets and consequent shrinkage in the employment of seasonal labour which constituted about 40 to 50 per cent of the total labour force in the 'tipping' (plucking) season. Large-scale transfers of ownership of tea gar-dens (particularly the foreign ones) occurred and there was intrusion of speculative and trade interest on a large scale. Considerable erosion of capital resources of important gardens and factories also took place during this period. In sum, there was a perceptible slump in the tea industry, during the period under review.

Tea plantations not only lost their pull on the growing surplus labour force in the district; they even started pushing out a growing number of unemployed members of tea garden labour families. Thus there was a considerable spill over from the plantation into agricultural occupations during the second quinquennium of the decade under review. Besides the problems of shrinkage in tea labour force, there was developing trend amongst plantation workers in favour of purchasing cultivable land in adjacent areas for settling down as cultivators after their retirement or retrenchment from the gardens.

Table 3.4: Share of agricultural labour increase (1961-1971)

District	No of Agricultural Labourers(1961)	Total Rural Workers(1961)	No of Agricultural Labourers(1971)	Total Rural Workers(1971)	%increase between 1961-1971
West Bengal	1,774,612 20.23	8,619,911	3,172,565 34.99	9,065,656	81.84
Darjeeling	7,162 3.31	215,983	24,982 10.87	229,327	248.81
Jalpaiguri	14,810 3.04	486,047	53,930 10.83	497,801	264.14
Malda	57,564 14.88	386,835	147,798 35.19	419,980	156.75

Reproduced Source: Causes of Sharp Increase in Agricultural Labourers, 1961-71: A Case Study of Social-Existence Forms of Labour in North Bengal, *Economic and Political Weekly* Vol. 12, No. 53 (Dec. 31, 1977)

Table 3.5: Indian Tea Industry Overview

Year	Production (million kg)	Export (million kg)	Import (million kg)	Consumption (million kg)	Auction price(Rs)
2005	945	199	11.34	757	68
2006	982	218	17.41	771	61
2007	986	179	15.99	786	67
2008	980	203	20.28	802	87
2009	979	197	22.03	819	105
2010	966	193	25.84	837	103

Reproduced Source: Tea Tribes are lagging behind in the Process of Urbanization: A Study on Selected Tea Gardens of Jorhat District, Assam. *International Journal of Trends in Economic Management and Technology*, Vol I, Issue 6, 2012

The tea industry in West Bengal for the past few years has been in a state of crisis. The owners have abandoned tea plantations, causing much misery to workers and their families. Workers were dependent on their employers not just for wages. They used to receive a number of other facilities, such as subsidised rations, free quarters, drinking water and electricity. The

management used to also provide workers and their families with health care at the tea plantation's hospital. Transport for their school and college-going children was also provided by the plantation management.

As tea plantations are situated in very interior areas with their workers living on the plantation itself, the abandonment of the plantation by the owners and managers has meant hardship for the workers in many ways. The cutting of electricity has also affected the supply of drinking water, since the supply of water dependent on electricity supply. As labour lines are far away from any other habitation and therefore there are no other source of drinking water, workers and their families have in some cases been forced to depend on river water that is unsafe for drinking purposes. Children in school and college have been forced to stop their education due to the general situation of unemployment in their families and the more particular problem that the plantation's tractor is no longer available to take them to their schools and colleges. (Report on Hunger in Tea Plantations of North Bengal: West Bengal Advisor to the Commissioner of Supreme Court 2004)

There has been a rapid change in the livelihood structure, and the workers of these regions have to survive in different modes of livelihood, to earning their living. The forms of earning livelihood changes from time to time, depending on the situation demanded, adding crises to their misery.

Chapter-IV

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Livelihood Shifts among the Tribal Workers in the Tea
Gardens

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Livelihood Shifts among the Tribal Workers in the Tea Gardens

4.1 Introduction

Modern livelihoods studies found their intellectual inspiration in the general understanding of the lives of poor people advocated by Gordon Conway and Robert Chambers in an IDS discussion paper in 1992. In their interpretation, a livelihood refers to the means of gaining a living, including livelihood capabilities, tangible assets, such as stores and resources, and intangible assets, such as claims and access. (Zoomer and Haan 2005).

In a generation of cultural and political-ecological research on rural people in the Third World, the nature of their livelihoods has changed profoundly. These changes in turn have important implications for analytical debates and constructs. (Bebbington and Batterbury 2001) . The changes that have taken place in recent times have been greatly affected by the factors like globalization, environmental degradation, policies, growing competition in the market etc. These all external factors have played a prominent role in determining the changes of livelihood of the rural people in recent times.

There is a considerable debate, at times very contested, on the concept of livelihood. Human needs are a necessity that needs to be fulfilled. The growth of the human needs has been increasing tremendously with technological advancement; as such the resources on which the human needs are dependent are on the side of extreme pressure.

The relationship between human being and natural resources profoundly is a negative form of relationship; with a growth in population there has been a decrease in the resource, which in turn has affected the human being back. For instance one of the studies on livelihood issues where the relationship between forest dependent population and resources available from forest shows how an increase in forest population has affected many spheres of forest resources.

The forest fringe communities not just collect these forest products for their own consumption but also for commercial sale, which fetch them some income. The income from sale of the forest products for households living in and around forest constitutes 40 to 60 per cent of their total

income. A study on the extent of NTFP use in north east India suggests that the tribal communities use 343 NTFPs for diverse purposes like medicinal (163 species), edible fruits (75 species) and vegetables (65 species). The dependence for firewood and house construction material is 100 and NTFPs contributed 19–32% there are 6.41 lakh villages in India as per the 2011 census of total household income for the communities under study. Forests are not only a source of subsistence income for millions of poor households but also provide employment to poor in these hinterlands. This makes forests an important contributor to the rural economy in the forested landscapes in the country. The widespread poverty and lack of other income generating opportunities often make these people resort to over-exploitation of forest resources.

The collection of firewood for sale in the market, though it is illegal, is also extensive in many parts of the forested regions in the country and constitutes the source of livelihood for 11 per cent of the population. However, many other forest products have been sustainably harvested by local communities for many years, and are a constant source of household income. Agriculture and livestock are two other major sources of livelihoods in the forest fringe villages, which in turn depend extensively on the forest for various inputs. People rear both bovine and ruminant livestock and forests and other local common land are the major source of grass and tree fodder.

Open grazing in the forest is the conventional rearing practices for forest fringe communities and this has adverse impact on growing stock as well as regeneration capacity of forest when there is over grazing due to more livestock. Estimates suggest that India's forest support 270 million cattle for grazing against its carrying capacity of 30 million. The incidence of grazing is estimated to be affecting 78 per cent of the India's forests of which 18 per cent are highly affected with remaining 31 per cent and 29 per cent medium and low respectively (World bank 2006; MoEF, 2006). The large livestock population also results in huge collection of tree fodder, which affects the forest quality adversely.

The annual requirement of dry and green fodder is estimated to be 569 MT and 1025 MT respectively against the availability of 385 MT and 356 MT. This explains the pressure on India's forest from livestock sector and its contribution to the state of degradation of forests in human dominated landscapes of the country. Agricultural systems in the forested regions also inextricably related to the forest ecosystem. Farmers collect small timber, poles, and other

materials from forest for agricultural implements and fencing the agricultural fields, leaf litter for manure, herbs, and medicinal plants to deal so on.

Shifting cultivation that is still being practiced in some regions of the country contributes to the forest degradation. With increased crop cycles and declining fallow period in shifting cultivation practices in recent decades the impact of traditional agricultural practice is more severe. Different estimates for area under shifting cultivation ranges from 5 million ha to 11.6 million ha involving 3 to 26 million people in 16 different states in the country. The practice is more prominent in north eastern states. (Nayak, Kohli and Sharma 2011)

The above example opens up a field of debate in two core section of resource and livelihood linkages. The first field of debate is on the sustainable approach and the other way of understanding the debate is about the impact of such dependence on resource, causing degradation of resources leading to livelihood diversification.

Livelihood diversification or livelihood changes occur when certain determinants of livelihood fails to works. The mechanism of livelihood is solely dependent on the linkages of resources and human aspects that binds up together and works as a mechanism supporting each other in a long run. With a slight change in one of the linkages there would be a failure in the long run of the livelihood mechanism.

Thus the livelihood mechanism is dependent on two forms of resources one in tangible and intangible form, along with capability, equity and sustainability. Tangible assets are resources and intangible are claims and assets. The interdependency of these sources and the capability process together provides a basic knowledge of livelihood studies and has been referenced for understanding the approaches of livelihood process.

4.2 Coping up Strategies and Capacity Building Mechanism

Vulnerability accounts for one of the major causes affecting human lives. The world growing up with rapid technologies have given rise to many problems that has been a challenge and threat to human survival. Vulnerability may arise from both natural and manmade factors that invariably affects livelihoods in different forms.

The impact of such vulnerabilities on livelihood disrupts the existing structure of the communities who are completely dependent on natural resources. The process of building back the livelihood structure thus implies the understanding of coping up strategies, and capacity building mechanism. These approaches emphasize on the response of the communities to vulnerabilities, by adapting themselves to different mechanisms of livelihood. The adaptability approach to vulnerabilities thus defines the coping up and the capacity mechanism of the community.

Thus the understanding of the coping up strategies, capacity building mechanism and the adaptability approach is one the way of studying the response of the communities to vulnerabilities, and building up with the existing resources.

4.3 The Scaling Up Mechanism

The utilization of resources by communities for fulfilling their basic needs, have been a trend that has continued even today. The dependence of resource is much higher in rural areas of the world, where they play a prominent role in increasing the livelihood option, providing employment and income generation opportunities.

The community based approach has been the driving force in today's perspective that has provided income and livelihood opportunities to millions of population living in rural areas of the world. The World Resource Report, 2008 has been a beneficial study, that has come across with findings showing the utilization of community resources in a way that have lead to the development of the communities in different regions of the rural world.

It provides with an excellent mechanism of developing the community with its resources available in and around them and providing opportunities for development. One of the approaches of the study has been empowering the poor by means of resilience building and decision making. The study also focuses on the connection of the rural with the outside world, benefiting them with better market opportunities and better entrepreneurship. (Roots of Resilience: Growing the Wealth of Poor, UNDP 2008)

This approach has focused on poverty reduction, which is regarded as one of the biggest enemy to the development process. The need of addressing the problem is important and it has been

well addressed in the report of World Resource by UNDP. The resilience capacity building focuses on the mechanism of the driving forces where ownership of the resources has been regarded as the prime priority in the community development process.

Ownership over resources provides access for the utilization of the resources in a better form. The report comes up with ample examples from all over the world that looks over the management of the resources by communities enhancing the right to the ownership of the resources for providing better livelihood opportunities and income generating prospects. The approach of sustainable environment has also been taken into consideration providing a base for better livelihood keeping in mind that the environment should be sustainable enough to drive the mechanism of scaling up the livelihood prospects without degrading resources.

4.4 The Tea Gardens of North Bengal are in a critical phase

Tea gardens of North Bengal especially of the Dooars region are in a critical phase where problems like reduction in production and wage, labour-management conflict and garden lockouts have surfaced over the recent decade. The most prominent problem have been garden lockouts for many days due to late payment as well as non-payment of wages to workers pushing the tea gardens to function as sick units of production.

Starting with the year 2000, many tea gardens have been looked out affecting the working classes who are dependent on tea gardens for their income generation and livelihood sustenance. There are 6 gardens that have remained closed till date, depriving the workers from livelihood. The closing down of tea gardens has displaced the workers from their earlier livelihoods and have compelled them to look for alternative livelihood options. The workers are struggling very hard to fulfill their minimum needs in the absence of suitable livelihood alternatives.

Although tea garden workers belonging to different population groups are suffering from the adversial impacts of closure of tea gardens, the tribal groups have become the most vulnerable as they form a very large share of workers in such gardens. Tea gardens saw its decline in the early years of 1960 and 1970, which eventually lead to the growth of agricultural labourers in the North Bengal. (Bandyopadhyaya, N, 1997)

The existing literature on tea gardens focuses on these problems of the tea gardens, but we need to understand the livelihood struggle of the tribal workers in the tea gardens especially taking note of the closed tea gardens. The tribal tea garden workers have been engaged in these plantation activities for more than century by now.

Even though there are as many as 6 tea gardens closed in the Dooars region, not all the functioning tea garden are doing well, the struggle for livelihood also seems to be high even among the tribal workers in the tea gardens that have been functioning and providing livelihood to its workers.

4.5 Analyzing Government Reports on Closed Tea Gardens

The livelihood issues especially in the close tea gardens can be understood from the problems that the labourers are facing in common. The main reason for such struggle is that they don't have any assets of their own, and the resource on which their livelihood seems to be dependent is now just a resource, helpless to provide any income generation from it. The government reports suggest that some initial steps have been taken to address the problems of livelihood but it is just a beginning and there is a lot to do.

One of the reports "*Report on Hunger in Tea Plantations in North Bengal*" on the problems of the closed tea gardens commissioned by the West Bengal Advisor to the Commissioners of the Supreme Court takes a closer look at the situation. The purpose of the study was to look whether these reports on hunger and starvation were true. The report specifically aimed at seeing whether the Supreme Court's interim orders in Writ Petition 196/2001 on the Right to Food and Right to Work are being implemented by the Government to prevent misery to people. The intention was also to understand what the best intervention in this situation was.

The report was prepared after a two visit of the closed tea gardens in the Dooars region, during the period 12th December to 31st December, 2003. The tea gardens that were visited were basically closed and were suffering from problems of hunger and starvation. The main tea gardens that were visited were.

- Kathalguri
- Kalchini

- Raimatong
- Mujnai
- Dheklapara
- Ramjhora

The visiting team conducted a household survey in these gardens and also recorded the following:

- Deaths that occurred in the past five years in 204 families spread over 4 labour lines of Dheklapara Tea Estate (TE) and Ramjhora TE'
- Measuring height, weight and age of 144 children below 8 years in 204 families in 4 labour lines.

4.6 Findings of the Report

The findings of the report come up with the issues of death, hunger and malnutrition that have occurred in these closed tea gardens for a certain period. The main problem that has been highlighted in the report seems to be their struggle for earning a livelihood which in turn has affected the other aspects of a normal living.

The report also focuses on the case studies of certain household especially of those ones, whose one or two members have been deceased during the reporting periods.. One of problems that is observed in the report is the fluctuations in the data with regard to the death of the labourers.

4.6.1 Reports on Deaths

According to a report provided by the District Magistrate, there are 183 tea plantations in Jalpaiguri district. 22 of these had been closed or abandoned or are sick. The earliest date of closure was February 2002.

The total number of permanent workers in these 22 gardens was around 20847 and the total affected population was 94347 people. Besides this, there were number of people who used to work as "bigha" or temporary labour in the plantations. They had also been thrown out of work, and their families are suffering.

Than the agriculture Minister, Kamal Guha stated that 320 workers have died of starvation in the last one year. Besides 50,000 workers of 14 tea plantations has passed their days in distress having been denied food, electricity, medicines and other amenities for months together.

The evidence of death collected by the members preparing the report seems to be different. As per the record collected from the field, based on the records of government hospitals seem to be as follows

Table 4.1: Number of Deaths in the Closed Tea Gardens based on the Records of the Plantation Hospital

Year	Mujnai	Raimatong	Dheklapara	Ramjhora	Total
1998	29	53	24	24	130
1999	26	41	25	16	108
2000	11	30	32	22	95
2001	7	43	19	23	92
2002	41	63	24	41	169
2003	54	73	31	54	212
Average number of death per year (before the crisis)	18	42	25	21	106
Average number of deaths per year (after closure)	48	68	28	48	191
Percentage increase in deaths	62	39	9	55	44

Reproduced Source: Report on Hunger in Tea Plantations in North Bengal, January, 2004.

According to a report by the Centre for Education and Communication (July 2003), where they examined the number of deaths reported month by month in 4 tea plantations from March 2002 to February 2003, the number of deaths increased phenomenally from July 2002 onwards, after the plantations had closed down. The report showed that 240 deaths had taken place in one year in just 4 plantations. Similarly the Joint Forum of Voluntary Organisations that had been

organising much needed relief for the affected plantations gave the number of deaths after closure as 610 for 9 gardens.

Table 4.2: Number of Deaths in the Closed Tea Gardens based on the Data of house to house survey

Year	Below 6 years	6-18 years	18-55 years	Above 55 years	Total
1999	5	2	6	3	16
2000	2	1	7	1	11
2001	2	1	4	6	13
2002	6	6	23	9	44
2003	10	3	13	21	47
Total	25	13	53	40	131
Average number of death per year (before the crisis)	3	1	6	3	13
Average number of deaths per year (after closure)	8	5	18	15	46
Percentage increase in deaths	167	238	218	350	241

Reproduced Source: Report on Hunger in Tea Plantations in North Bengal, January, 2004.

4.6.2 Reports on Findings of Hunger

As per the report the immediate cause of death in most cases had been varied, the underlying cause of deaths, was malnutrition and starvation combined with the total collapse in the health facilities that were available to tea plantation workers earlier at the plantation.

A survey of 6 families in Ramjhora TE showed that families that were consuming 1200 to 2900 calories per person per day before closure had been surviving on as little as 200 calories per person per day.

Table 4.3: The affected population due to hunger

Number mentioning malnutrition	22
Number mentioning poor general condition	21
Number mentioning anaemia	9
Number with no mention of the above three	6
Total number of prescriptions	58

Reproduced Source: Report on Hunger in Tea Plantations in North Bengal, January, 2004

Table 4.4: Proportion of children with weight-for-age and height-for-age below the 5th percentile of the international reference population published by the National Center for Health Statistics.

	Weight for age		Height for age	
	On tea gardens	On West Bengal	On tea gardens	On West Bengal
Girls	62	52.3	50	47.0
Boys	68	45.5	76	36.6
Combined	65	48.7	63	41.5

Reproduced Source: Report on Hunger in Tea Plantations in North Bengal, January, 2004

The report also focused on the issues of schemes that had been allotted to the district of Jalpaiguri. The report came out with a finding of in-appropriate uses of the funds by the Government of West Bengal in the district. The Government of West Bengal did not utilise its funds under the scheme completely in the district of Jalpaiguri, 37% of the cash component of the SGRY scheme and 45 % of the grains lay unutilised even though people at that time in a crisis and on the verge of starvation.

An in-depth study needs to be conducted since the problems seems to be more harsh from the reports that have been analyzed, where peoples had been struggling to survive with the closing down of tea gardens.

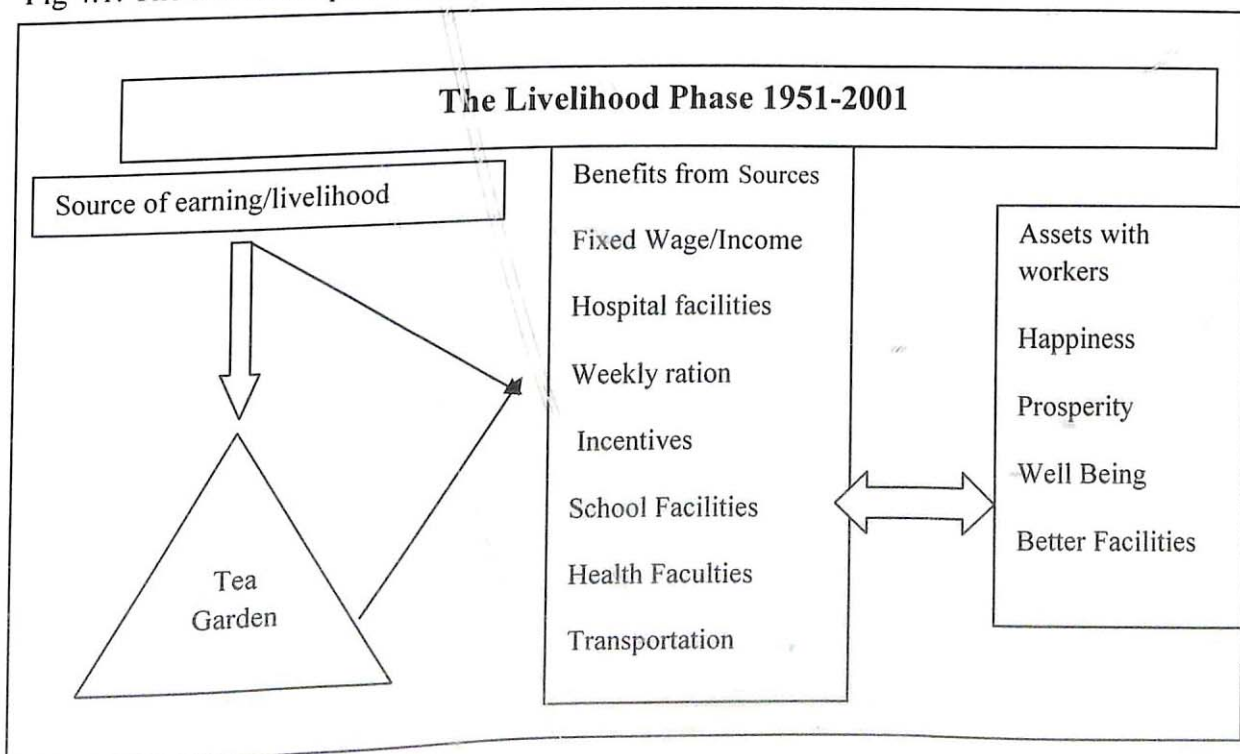
The report should have included some suggestions, with regard to the opportunities that can be provided by the government for welfare of the deprived workers.

4.7 The Livelihood practices in the Study Area

The livelihood practices in the study area can be divided into two phases. The study area is also a one of the close tea gardens of Dooars region. The Dheklapara Tea Garden situated in Birpara under Madrihat Block, had around 600 workers, who used to work in tea garden earning their livelihood as a tea labourer. The garden was started during the year 1951 and had functioned till 2001. The status of the garden at present date remains to be closed, and the tribal workers along with other community workers have been suffering from livelihood issues and challenges till date.

The first phase was the period of 1951-2001, when the workers had an easy go earning a fixed income along with other beneficiaries from the tea garden. They were provided incentives, facilities, housing, and transportation for their children, school, nursery crèches, etc from the tea garden. The workers were paid 15days a month, i.e. per 2 weeks and were provided with bonus during the festival seasons.

Fig 4.1: The livelihood phase of Dheklapara Tea Garden 1951-2001



4.8 The Livelihood Practices in the post closure phase (2001- 2014): Coping Strategy or desperate attempts of survival

The livelihood practice in the tea garden during the post-closure phase can be considered as narrative of livelihood struggles. The year 2001-2003 was the most struggling phase. The closing of the tea garden in 2001 left the workers unemployed and to struggle for livelihood in the initial years. The workers and their families did not receive any help from the government and suffered from problems like malnutrition and hunger. The period also saw the maximum number of deaths in the tea garden.

Both male and female of different age group were now facing the impact of sudden closure of tea garden. Since alternative livelihood options were very limited, the erstwhile workers opted for livelihoods based on their physical strength like engaging oneself in quarrying or risking their lives by opting illegal mode of livelihood like extracting logs from the forest.

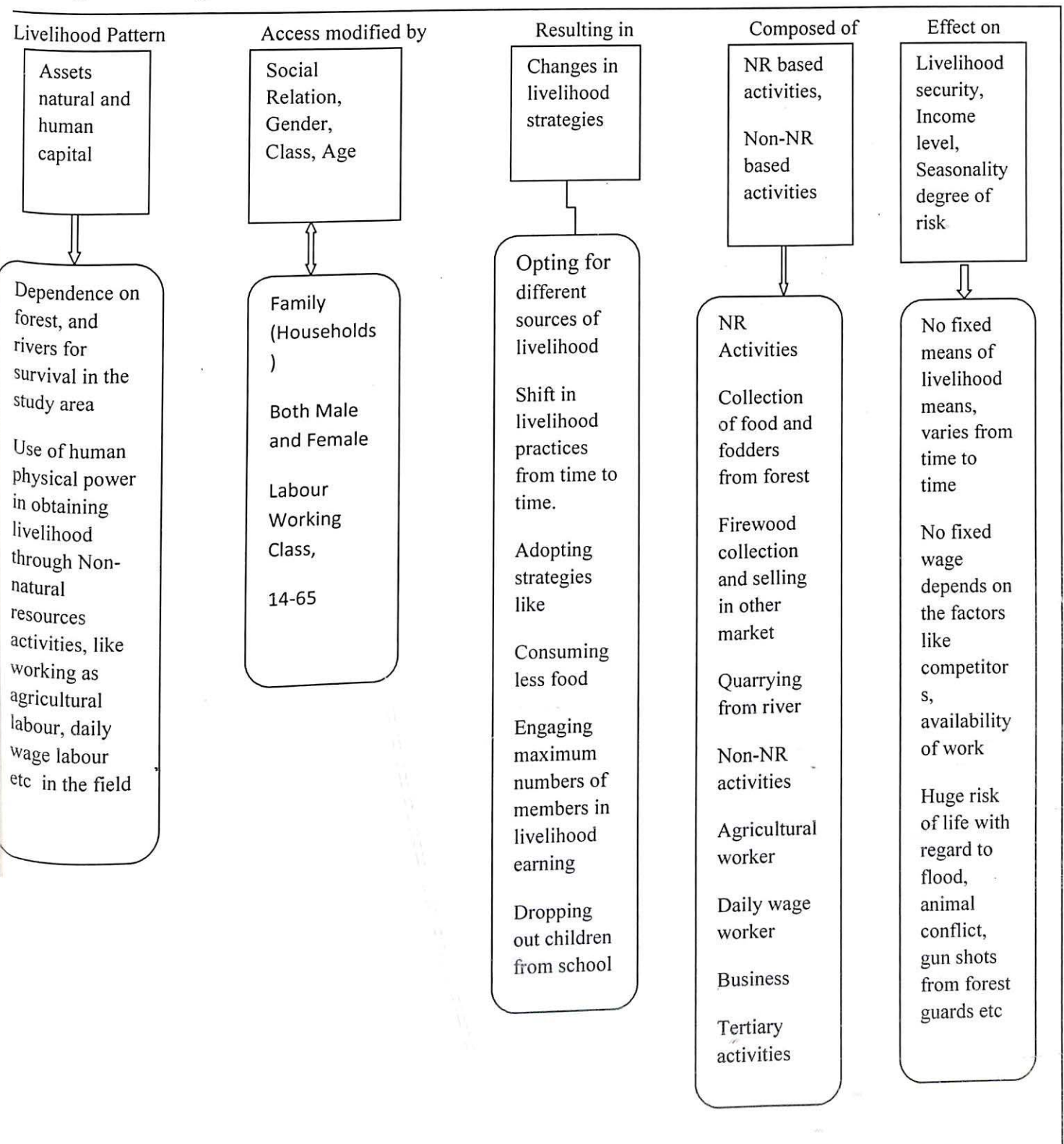
Though the workers have adapted themselves to different modes of livelihood like quarrying, collecting firewood, working as agricultural labourers etc, but even today they are facing difficulties in fulfilling their minimum needs for survival. The livelihood practice at present in the closed tea garden consists of coping up with available resources in the area. The workers in the study area has been shifting themselves from one livelihood source to other from time to time, in order to add extra income to run their household.

The resources available are mainly natural in forms like forest and rivers. The workers have adapted themselves to this source of livelihood, where a day of hard work provides them with a little amount, which though may not be enough to sustain the family, but they have tried to content with the small amount.

The livelihood model of the study area (Fig No 4.2) provides with a framework of understanding the livelihood shift among the tribal workers at present time. The livelihood model is a method implied to understand the shift in the livelihood among workers. The model has been adopted from Ellis livelihood framework for analyzing the overall structure of livelihood practice in the study area.

4.9 The Livelihood Model of the Study Area from 2001-2014

Fig4.2: Showing the Livelihood practice of Dheklapara Tea Garden at present



The dependence of the workers on quarrying is much more than other source of livelihood. The use of physical strength in quarrying is higher than other livelihood sources. The workers are also dependent on livelihood like working on other's agricultural field on daily wage basis, working as daily wage labourers in nearby army camps i.e. around 3-4 kilometers, selling firewood's to nearby places.

Competition among the different group of workers in this form of quarrying can be seen as a major challenge. The dependence on quarrying for livelihood provides income to maximum number of workers. The workers compete among themselves to sell their crushed stones on daily basis.

The tribal women in the study area toils hard in the quarrying filed but .They also receive very less amount for their hard work. They receive around Rs 30-50 for pile of stone that weigh around 250-300gms of stones and sometimes they have to return back empty hand. In some cases it has been found that the women have been unpaid while they had been working as daily labourers in railway department as well as in army camps. Similarly the male members sometimes receives very less money for their firewood, as they travel around 5-8 kilometers to the nearest market for selling their firewood.



Plate4.1: Quarrying activities in the study area

Source: Field Survey, March –April 2014



Plate 4.2: A tribal tea garden worker collecting firewood's for selling in nearest market

Source: Field Survey, March –April 2014

The risking of lives to earn a living has also been a major way of earning a living. Floods, human-elephant conflict, and firing by forest guards while sneaking into forest for extracting woods are some of the examples of risking life in the study area. There were couple of persons who were facing trials of forest department, as they had been caught by the forest guards while sneaking into the forest for illegal processing of logs. The human-elephant conflict very much common in the study area and from time to time the elephants have destroyed houses of the workers.

The opening of tea garden back is the first priority among the workers. Though even today the workers suffers hardship and struggle hard to earn a living, the strategy adapted by the workers to survive in such difficult time is based on certain prospects, among which migration, selling up properties, dropping out children from school to work in the field or in quarrying, having inadequate diet are some of the strategies adapted to cope such hard situation.

4.10 The Livelihood Shift in the functioning Tea Garden

The tea garden in Dooars region may have been suffering from sudden close downs, but there are some tea gardens that have been functioning well since its opening and still at present date has been doing well with sufficient labourers and better working conditions. There are certain section of working population who may not find tea garden as an appropriate place of working

but have been working as compulsion, for instance he/she may be working just because he/she may be the only bread earner of the house.

The livelihood shift in the tea garden was basically seen among the youth workers, who considered being unhappy working in the tea garden. The tea garden has good number of working population, but very few workers have shifted themselves from tea garden to other means of livelihood, among which the youth stood to be the highest. Out of the 80 sample surveyed, 50 percent of the working population was youth, who considered working in tea garden as an unsatisfactory job.

The youths had been working in tea garden with compulsion, like home security or as a sole bread earned. The tea garden workers as per the Plantation Act are provided with a house for living, commonly known as labour lines. The minimum criteria is engagement of a family member in tea garden and in some cases it was found that the youths had been a source of earning for the houses, where old age of parents had been a reason for compulsion.

Table 4.5: Respondents in Leesh River Tea Garden

Total Number of Respondent	80
Total Number of Youth Workers	55
Total Number of Middle Aged Workers	20
Total Number of Old Aged Workers	5

Source: Field Survey March-April 2014

The most common reasons for livelihood shift among the respondents were the income prospects. The limitation of being promoted to higher post was also a reason for change in livelihood. Some of the youths considered working in tea garden as a bondage job.

A response of a Youth Respondent

Sandeep Thapa used to work in tea garden as a daily wage labourer out of compulsion as no other job opportunity was available. He had applied for a promotional examination, but he was not shortlisted for sitting in the examination, even though he possessed a graduation degree. The way he was growing in tea garden had made him more violent and had developed drinking habits and abusing others using inappropriate words.

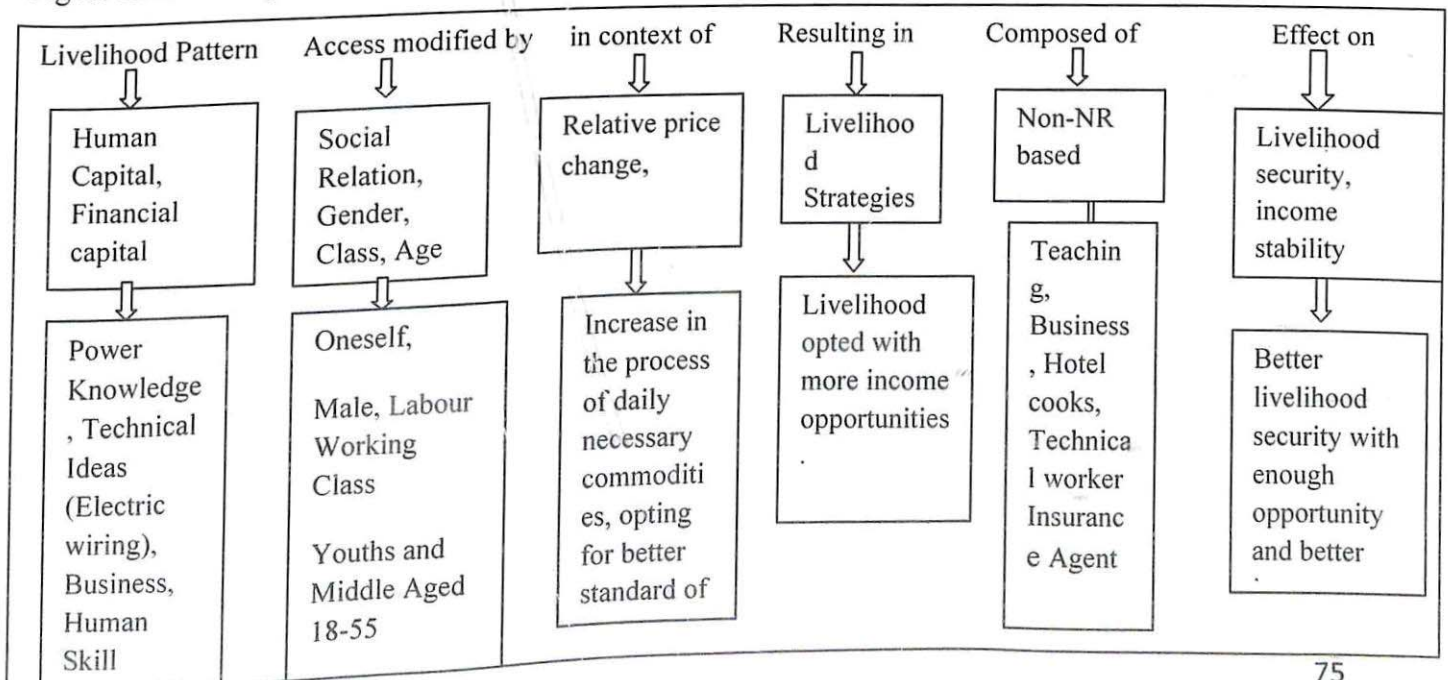
He himself by now was in a dilemma to question his capability. He used to hide around the tea bushes to save him from taunts of others. He did not want to be an example, showing the world that even after studying hard and graduating, he was still a *coolie* in a tea garden.

Today he has opted for a new means of livelihood and a better means of earning. He gives tuition's and has opened a school in the premises of his house and runs the school earning him a respect and dignity, which he lacked in the tea garden work. Today he stands high and find his freedom and confidence back, which he had left behind when he used to work as a bonded labourer.

4.11 The Livelihood Model in Functioning Tea Garden

The livelihood model of this tea garden (Fig 4.12) shows the utilization of human capabilities in different ways like using technical skills, knowledge, adapting to demanded situation busing such skills, providing them a good opportunity to engage themselves in different and better livelihood options.

Fig4.3 Livelihood practice in functioning tea garden among the shifted workers



Chapter-V



Consequences of Livelihood Shifts

Chapter V

Consequences of Livelihood Shifts

5.1 Analyzing the Determinants of Livelihood Change

Two certain conditions play an important role in determining the factors for developing a ground for livelihood transition, the first one being natural and the other being man-made. The natural conditions can be defined in the form of natural calamities affecting livelihoods of the people, like flood, drought etc. The man-made conditions are the rules, laws and policies governing the human society and having an impact on livelihood practices too.

Sometimes the choice of changing a livelihood also involves one's own rationale decision, depending on the conditions that develop either in positive ways and or in negative way, for instance a transitional shift of a village from agricultural to a tourist village is a strategy and a choice involving a decision for earning a better mode of livelihood, where a shift due to failure of certain mechanism defines a compulsion, with no choices than to adapt to other options of livelihood.

Today the tea industry portrays a picture of both compulsion and rational decisions choices for determining the shift in livelihood option in context of the study area. At one hand it has been doing well but not enough to win hearts of workers, on the other hand it has completely broken down running into debts and sudden closure of tea garden leaving no other options for workers than to adapt to different means for earning a new living.

The fact that certain factors have been playing an important role in malfunctioning of tea garden is understood from the problems suffered by the tea gardens. The accumulations of such factors have made tea industries either to be sick or closed. These certain factors are as follows.

- Decrease in yield production
- Stiff growing market competition
- Owners going into debts
- Tea bushes growing old
- Shift in ownership of tea garden
- Abandonment of the plantation by the owners and managers

- Climate Change, Shortage in Rainfall has also been an acute problem

The above factor has been a major reason of industries functioning as a sick unit or being closed, leaving its workers in the without any livelihood means and without food supplies and medicine, causing them to starve and malnourished.

The understanding of the main determinants has been based on perceptions from field and reports on tea gardens, but understanding the people's perception also determines the factor to an extent. As per study conducted in the field, to understand the people's perception of sudden closure of tea garden, it was found that in a closed tea garden, the certain factors that have played vital role were

Table 5.1: Reason for Sudden Closure of Tea garden as stated by workers

Reasons	Percentage of Workers
Reduction in Production	12
Non-Payment of Wages	67
Political Influences	10
Industry Running in Loss	11

Source: Field Survey March - April 2014

Most of the workers considered the delay in payment as a major reason for sudden closure of tea garden. The workers were unpaid since 6 months and they had been demanding for the wages since many days. The manager of the garden absconded the tea garden. The other factors have very little influence on the workers perceptions of sudden closure of tea garden.

The role of political influence though has been important, as per the understanding from the field, few of the workers considered the managerial issue and political influences has also been a determinant of sudden closure of tea garden. Though the workers were aware of the political impact, but were not open with their thoughts on political determinants.

The other two determinants also had an impact on sudden closure of tea garden. The decrease in production of tea was also a major reason that influenced the livelihood shift of the workers. The

decrease in production caused the tea industry to run in losses which impacted a lot in determining the livelihood shift.

The decision of rationale choices also matters in determining the process livelihood shift. Tea Garden since few years has been an industry which has failed to provide a better atmosphere for its workers, and it has always been a labour intensive job. The working population in tea garden includes youths too, and has been much more affected by the working condition provided in Tea Garden. This section of working population is now shifting to other means of livelihood on their own rational decisions to earn a better living.

As per the study conducted for understanding the determinants of livelihood change in functioning tea garden, it was found that the youths were the major working population who had shifted to other means of livelihood on the basis of their skills. The determinants for such change in livelihood in the field were.

Table 5.2: Reasons for Livelihood Shift in Functioning Tea Gardens

Determinants for Livelihood Shifts	Percentage of Workers
Less Income	30
Promotion Limitation	12
Unsatisfied With Job	24
Temporary Jobs	10
Hierarchal Domination	4

Source: Field Survey March 2014- April 2014

The parameters for understanding the livelihood shift among the workers in the functioning tea garden was computed after visiting the field. The problem of less income has been a major factor among the tea garden workers. The amount the workers are paid is very less and becomes difficult to sustain their household needs.

The limitation of being promoted was also one of the major factors that had compelled the workers to change their means of livelihood. The other parameters were temporary jobs, unsatisfaction with jobs, and domination by higher authorities played a curtail role in determining the livelihood shift among the workers.

5.2 Impact of Livelihood Shift among the Workers in two Tea Gardens

“If a Tea Garden is functioning, than there is an atmosphere of prosperity and well being in the whole garden. We are able to provide our children’s with better facilities and are able to provide them with good education. In times of festivals the incentives we receive helps us in celebrating the festival. Today we are desperate and unable to sustain our livelihood.

When we see the workers of other Tea Garden we feel helpless. It is good that the garden re-opens and brings back that happiness and fortune of a good atmosphere.”

A worker from a closed Tea
Garden

The shift in livelihood has been analyzed by studying two tea gardens closed and operating one. The shift in a close tea garden has been in the age group of 35-60, where as in an operating tea garden the shift has been mostly among youths. It is understood that if the tea garden is closed than the workers take up or are compelled to take up other source of livelihood.

Though it is understood that there will be changes in the livelihood of the close tea garden, but similar shift will be observed in operational tea garden, which has not been revealed in previous studies.

- With the closure of tea garden, the workers are no longer able to avail the facilities, like housing, electricity, medicine, education, hence they have to purchase all the facilities impacting their income.
- In case of functioning tea garden the workers are still availing the facilities provided by tea garden, since a member of the family is still engage in tea garden.

5.3 Impacts of Sudden Closure of Tea Garden

5.3.1 Impact on Livelihood

The displacement of the workers from their permanent livelihood to uncertain and insecure livelihood mode has been a major impact of sudden closure of TG in the study area. From the total number of household surveyed there were around 124 workers that have been employed in the TG for last many years and with sudden closure of TG their livelihood option had been displaced leaving them with very little options to survive along with their families. The livelihood assets of the workers have completely ruined and have to cope with sudden strategies to survive. The change in livelihood has been based either on natural resources or on non-natural resources, though they are now able to sustain themselves with the present livelihood option but with the loss in livelihood the question of security in terms of money remains priority and concerns to the workers.

Table 5.3: Occupation Structure of the Affected Workers of Close Tea Garden

Occupation Structure of the Affected Worker	Percentage of Workers
Quarrying	42.74
Forest Dependence	15.32
Daily Wage Labour	20.16
Agricultural Labour	7.25
Shops	4
Private Sector	1.61
Migrated labour	6.45
Cattle rearing	1.61

Source: Field Survey March 2014-April 2014

The above chart describes the present livelihood option of the workers, where quarrying has been the major livelihood options for the workers. The percentage of household engaged in the quarrying is highest. The number of household dependent on forest and as daily wage labourer is again another most dependent source of livelihood among the workers. The other sources of livelihood contribute to a small proportion of the all livelihood option that has been adopted by the workers in the TG.

5.3.2 Challenges in Present Source of Livelihood

The present source of livelihood though may be sustaining them to run their households, but within these livelihood practices they have lot of difficulties which stands as a challenge to them.

The major problems from the finding have been:

- Uncertainty of daily employment
- Competition among themselves in quarrying activity
- Unable to sell the crushed stones on daily basis
- Women workers have to suffer the domination of male workers in the quarrying
- Fear of getting caught while sneaking into forest
- Unable to fetch handsome money by selling piles of wood
- Unable to ride bicycle in old age
- Creating a bad atmosphere by selling and consumption liquors in the shop

These daily challenges have stood as a grave problem for the workers. The women workers who has been working in quarrying and as daily wage labourer has been suffering the most, due to engagement of maximum number of workers in the quarrying filed.

The number of workers who worked as daily wage labourer had been suffering from uncertainty of jobs. The area where they work is a military cantonment and certain rules and restrictions have to be followed to work in the cantonment. Agricultural labourers working in a nearby village either has to return empty due to lack of jobs or have to work by earning a daily wage of Rs 45. The shops that are located in a village sell home-made liquors which have created a bad atmosphere in the labour lines.

5.3.3 Impacts of Livelihood Shift on the Workers

It has been noticed that though the individual income has gone down, but the household income has gone up, with engagement of family members in income earning activities.

- They have been receiving a monthly allowance of Rs1500 from the government termed as *fawlai*

- At least a single member of the household has been enrolled in MGNREGA entitled to get a job for 100 days a year
- Some of the household has been receiving remittance from the migrants to sustain their leaving.

Table 5.4: Number of Households Entitled to MGNREGA Scheme

Number of Household Entitled in MGNREGA	Household in Percentage
Yes	90.19
No	9.80

Source: Field Survey March-April 2014

The above charts show the impact of livelihood change among the workers, where there has been an increase in the level of income at one end, there has been a rise in expenditure. The basic facilities that were available before has to be brought with their own expenses. For instance the medical facilities have been cut down along with other facilities like weekly ration supplies. At present the workers have to spend an amount of their income to purchase these required facilities.

Table 5.5: Distance travelled by affected workers in close Tea garden

Distance Travelled By the Workers in Kms	Number of Workers in Percent
1-3	48.38
3-5	40.3
5km and above	11.29

Source: Field Survey March -April 2014

The consequence has not only hampered the needs of basic facilities but instead the distance of travelling and the cost of travelling has been a burden to the workers. Even most of the houses have bicycles, but some of the workers do not possess good health to ride bicycle to long distances. The daily expenditure cost on travelling has been a burden to the workers who have been travelling long distances for earning livelihood. 41.9% Of workers prefers ride in their bicycle and 17.7% prefers to walk within a radius of around 3-4 kms.

Table 5.6: Amount spent by the workers in travelling

Amount Spent in RS	Percentage of workers
0-15	29.8
15-30	9.6
50 and above	1

Source: Field Survey March -April 2014

5.3.4 Impact on basic facilities

The impact of any form of economic depression has direct affect on the socio-economic condition of an individual or a household. The sudden closure of TG brought along with it many vital problems, which has left its impact even at the present time; the first impact that needs to be recognized is the basic facilities withdrawn by the TG for the workers. Basic facilities like electricity supplies, medical, crèches, education system have broken down over these long phase of time. The phase of 2001-2003 saw struggles for making a living. It was during these phase during which loss of life due to starvation and malnutrition was at its peak.

The study area during this phase saw a maximum loss of human life which counted around 69 people during these two phases. Even today the conditions remain same with basic facilities falling apart in times of need, the conditions of the workers remains in plight. The main problem that they have been facing now is to buy every basic facility from the income they earn on daily or weekly basis.

The health facilities, provided at primary level has been falling apart, the supply of weekly ration is now completely dependent on the income that the workers can generate on daily basis. The electricity though has been in continuous supply but has been bought by paying electricity bill by them. Though they had to pay for all the facilities earlier, but the amount they used to pay was deducted from their income, but at present date the uncertainty of job has left a great impact on the workers who struggles to purchase their require basic needs.

Table 5.7: Housing category of the workers

Category of Houses	Households in Percentage
Tea Garden Quarters	73.50
Government Scheme Houses	19.60
Homeless	6.90

Source: Field Survey March -April 2014



The image shows a worker who has been living with his wife in one of the quarters of the TG. He has not been provided with any household facility by the TG and has been left alone by his children's in these old age

Plate no 5,1



Image showing the house of the affected worker that has been built under the government scheme known as Indira Gandhi Awas Yojana. The amount the worker received was around 15,000 by which he built up this house for his living

Plate No 5.2

Table 5.8: Electricity Facilities Among the households of the Workers

Households having Electricity Facilities	Households in Percentage
Households paying electricity bills	53.90
Households having government scheme supply	29.40
Households without electricity	16.70

Source: Field Survey March -April 2014

Table 5.9: Amount spent on weekly consumption of Ration

Amount Spent on Weekly Ration Consumption in Rs	Households in Percentage
20-25	77.45
35-50	16.66
50-65	5.88

Source: Field Survey March -April 2014

The data on housing facilities shows the number of houses of different categories that has been inhabited by the workers. The number of houses in quarter category is highest, as the workers had been residing their and with sudden closure of TG, there has been no changes in their residential leaving.

The other categories of houses have been houses that have been constructed under the government scheme known as Indira Awas Yojana²⁰. There are families who are homeless and haven't been provided with any houses, but have been residing in empty quarters that used to be owned by the higher officials and workers in TG.

The burden of household has rather increased by the amount that they have to spend on buying weekly ration²¹ supplies. Out of the total households surveyed 77% of the household spends around an amount of Rs 25-35 in buying their weekly ration. 17% of the households spend Rs 35-50 on the same consumption and the remaining 6% invests around Rs 50-60 on the ration facility. As per the data the, amount paid by the households are quite less, depending on the quantity of the items purchased. The rules of the Public distribution supply or commonly known

²⁰ The scheme Indira Awas Yojana is meant to provide help in constructing two rooms for people who stands Below Poverty Line

²¹ Weekly ration refers to the buying of basic food items, from government owned shops at a minimal price

as rations entitles a fixed quantity on every item, as per the information obtained from the field the quantity of every item was fixed around 200gms per individual, and depending on the size of the family the amount varies, and households in the field were mostly nucleated, having small size families, but the uncertainty of the work was a reason that made the households to pay even a small amount as a burden impacting on their daily income.

The monthly expenditure of the households in the field was much more than the workers income. In some cases it was found that even the income that was earned after involving the women and children was not enough to sustain their families. The workers used to bring their daily necessity items on credits, and used to repay back after they received income from MGNREGA or from fawlai.

5.3.5 Impact on Health

The nature of human being has always been a concerning, especially when matters are concerned with health. The issue of health in the study area seems to be very different and concerning one. The people in the garden have been suffering from many health issues due to lack of good consumption of food and due to heavy physical work.

The period 2001-2003 saw a huge loss of life, due to decline in health facilities. Many households had lost their loved ones and for the one who lost their head of the family was a setback to family. Even today the problem seems to be grave and hard with regard to the health issues. No proper primary medical facilities are available in the garden, people doesn't have enough income to support private treatment, as such the impact on health has seen a negative approach with closure and shift in livelihood.

Since the closure of tea garden the common facilities like free medicines, ambulance facilities, has been disrupted and affording private ambulances and buying medicine from private shops is unaffordable by most of the workers. In most of the cases the households complained about diseases like Tuberculosis that had also been a main reason for deaths along with malnutrition in the study are. The primary health facilities need to be developed in the study area for the betterment of the workers.



Plate 5.3

Plate showing a women who have lost her 5 male members of the houses, including her husband during the struggling phase of 2001-2003. The reason behind the death either has been disease like tuberculosis or due to malnutrition.

She at present stays with her grandchild, and doesn't have a house to stay. She is dependent on the income that she receives as incentives and a little that she earns from quarrying.

5.3.6 Impact on their Daily Needs

The struggle for fulfilling our daily basic needs have been a major problem among us. The situation was even worse during the closure phase of 2001-2003. I used to stay hungry for 2 times a day, and my children too had to stay hungry at least two times a day. At times there were no supplies of food products and grains at home. We used to survive on wild fruits and grounded yams. Even today there is no proper routine of our diet. It varies from day to day; sometimes we can consume twice a day and sometimes thrice a day.

The hardship for earning a livelihood has really been a struggle and women like me who has lost her husband it is very difficult to leave a life of hardship with children's growing.

A women respondent form the field

Fulfilling the daily basic needs can be seen as one of the severe impact of livelihood shift on the workers. Reports on human starvation, malnutrition, death due to fewer intakes of calories has been highest in the closed tea gardens of North Bengal.

The consumption of food on daily basis is completely dependent on income of the household that they have been earning, since the closure of TG. Even today the consumption of food taken is in inadequate form, leading to many health problems. The consumption of food is either of 2 times

basis or even one time basis. Very few households have been able to consume the daily basic required amount of food.

Table 5.10: Food intake on daily basis among the households

Consumption of Food	Households in Percentage
2 times	54.9
3 times	44.1

Source: Field Survey March -April 2014

5.3.7 Impact on Education

The consequence of livelihood change could never been worse than had been imagined. The one of the strategies that were adopted for sustaining the livelihood, was dropping out children's from education, in order to increase the livelihood assets, by engaging everyone in livelihood earning.

The main reasons that stood behind the dropping out children from education were economic disadvantage.

- The workers who had been affected by the sudden closure of TG, and were economically handicapped to pay the fees of their children.
- They were unable to pay their expenses of travelling on daily basis since the facility of providing vehicles for the students by now had been stopped.
- Some of the households were unable to buy books and copies for their children
- Some of them had managed to sell their properties, breaking up bonds to complete their children's education

Table 5.11: Impact on Education

Impact on Education	Households in Percentage
Dropouts	60.7
Education Gap	14.7
Selling of Property	4.9
Unaffected	19.6

Source: Field Survey March -April 2014

5.3.8 Migration a Consequence of Livelihood Shift

Migration as a consequence of livelihood change has been a growing trend among the youths in the study area. The option to migrate to urban peripheries is one of the strategies of the households to fulfill the needs of the household and provide them with an option to add an income source. The destination of migrants has been to the main urban centers of India, where they have working as construction labourers, domestic helpers, in agricultural fields, in factories etc.

The main finding with regard to migration was that, a network had been set up in the area, in which one member of the household would push the other to come out from the field to the urban areas. Many cases with regard to migration were of similar kind and a trend of migrating outside had been common in the study area.

Table 5.12: Destination of the Migrants

Destination of Migrants	Percentage of Migrants
Delhi	48.38
Kerala	3.22
Bihar	3.22
Hyderabad	3.22
Punjab and Haryana	22.58
Mumbai	6.45
Madhya Pradesh	3.22
Uttar Pradesh	3.22
Gujarat	6.45

Source: Field Survey March -April 2014

Table 5.13: Households receiving remittance from the Migrants

Number of households receiving Remittance	Households in Percentage
Yes	60.86
No	39.13

Source: Field Survey March -April 2014

The role of the migrants in supporting the household has been very much vital. The financial support that they provide to the households, has been sustaining the daily needs of the households, but not every households are able to receive financial remittance monthly, some of the households of have been neglected by their migrated ones and some of them are unable to receive remittance because the migrated person is either been unpaid or else their wages seems to be less.

In some cases it was found the migrants brings the amount along with them when they return back home from the source of destination. In some cases, especially who have been working as domestic helper it has been seen that they have been receiving less amounts than they should have receive, and their monthly income are kept by the owner himself/herself.



Plate No 5.3

The girl in the picture is Shalu Tanti, who lost her father at the age of 10. She had to migrate to Karnal, Haryana, where she worked as a domestic helper, at the monthly salary of RS 2000. She was provided with food and leaving place at the working place and worked there for 2 years. She came back home after 2 years bringing an amount of Rs 15,000 only. She was not given her payment properly when she returned home.

Today she works as daily wage labourer, and have suffered Tuberculosis due to the hard work. The amount she brought was spent in repairing the houses that had been damaged by elephant which is very common in the study area.

5.3.9 The Other Impacts of Livelihood Shifts

The other ways of solving financial problems among the workers is by taking debts from different sources, mainly from relatives and private financing institutions. The main reasons for taking up debt has either been

- To support the household during the phase of 2001-2003, when they had struggle a lot
- To cover the medical expenses in respect to health problems and illness
- To send their sons to other urban areas
- To complete the rituals and last rights of the dead ones

The source of debt has either been formal or informal. The formal debts have been taken as a loan from their won provident funds and the informal loans as been either from relatives or the known ones.

Table 5.14: Households in Debt

Households in Debts	Households in Percentage
Yes	33.33
No	66.66

Source: Field Survey March - April 2014

Table 5.15: Households in different forms of debts

Types of Debts	Number of Households in Percentage
Formal	85.29
Informal	14.07

Source: Field Survey March - April 2014

The other impact of livelihood change has been noticed is the increase in drinking habits of the affected workers. Though the workers usually used to consume liquors in the village, but it has been noticed that out of the total affected workers, the data that has been extracted from the field on consumption of liquors seems to be high. The main reason behind the drinking habits has been psychological impacts like depressions and tensions. Few workers had a usual habit of drinking before the closure of TG also. The number of shops selling *hariya*²² is also very high and as such the social atmosphere of the village seems to be quite different in the evening.

Table 5.16: Consumption of Liquor among the affected workers

Drinking Habits	Percentage of Workers
Yes	62.90
No	37.06

Source: Field Survey March - April 2014

²² Hariya is an homemade brew from fermented rice

5.3.10 The Challenges they face

Providing livelihood also includes overcoming challenges that they have to face during the work or after the work.. To understand the challenges the workers overcome in the working place was very important aspect of the study, but the parameters of were not fixed, it was after visiting the field the facts given challenges were figured out:

- Animal Conflict, especially elephant encroaching the village or the working place
- Seasonal flooding fear of getting drowned while crossing the river
- Health Issues
- Growing Competitions
- Sometimes they become late while returning home
- Riding bicycles have become difficult in old ages

Animal Conflict has been a major problem in the garden, there has been cases where houses have been destroyed by elephants, which has been a common form of disaster in the village. The fear of encountering elephants while returning home is very much high and in one of the cases a person had been killed recently by elephant. The other problems also have possessed great difficulties in meeting up the daily needs of the workers.



The plate shows the destruction of the house by elephant that has been a common problem in the TG

Plate 5.5

5.4 The Role of Government and Local Institutions:

The government and local institution like gram panchayat, labour union seems to show a kind of gesture in solving the problems of the workers. Even though the local unions have been trying their best by engaging women workers in plucking the tea leaves of the garden, and selling them to other garden, the process somehow has been providing a financial assistance to the workers. The amount they receive is around Rs 35 a day but still they have engaging the women workforce for the required purpose.

The role of Government has been very negligible in respect of solving the matter. The only assistance they have been receiving is *fawlai*²³. The amount has not been received at proper time as such the workers have been going in debts since many days.

Though the 100 days employment scheme has been functioning, but it too suffers from the same problem of delaying in payment. The only benefit of MGNREGA that has been seen and reported is the amount that they receive is enough to pay the debts that have been going long in the grocery shops.

In respect to education the government hasn't taken any initiatives to provide them with transportation facilities, which is a necessity for the children of the village. The District Magistrate had promised to look into the matter, and to provide a bus for the students, but still today the promise has remained to be a promise only.

The only initiative of the government is a free meal to the aged person above 60 years on daily basis who doesn't have anyone to feed them. The NGO's had been very active during the struggling phase by providing them with foods and clothes, but today the overall support from the government and local bodies seems to be lost.

Table 5.17: Number of households benefiting from the MGNREGA Scheme

Benefits from MGNREGA	Percentage of Workers
Yes	70.65
No	29.34

Source: Field Survey March - April 2014

²³ A monthly amount of Rs 1500 provided by the government as an incentive



The plate shows aged women waiting for meal, provided as per the government scheme

Plate 5.6

5.5 Impact of Livelihood Shift in Functioning Tea Garden

The analysis of the livelihood shift impact seems to follow a positive trend of mark among the workers of the functioning TG. The impact of the shift is basically seen over the youths workers, who have been either working by force under certain circumstances or unwillingly due to a need to work. The main reasons that stand to understand to understand their compulsion are basically for:

- Housing facilities
- Other facilities

The shift of the livelihood is seen as a freedom of doing a respective job without any objections from others. The youths consider the work as shackles of orders that have been restraining them from doing their own will. The major impact that has been seen among the workers of the functioning TG is migration.

Table 5.18: Destination of shifted workers in Functioning Tea Garden

Destination of the Migrated Workers	Percentage of Workers
Delhi	37.5
Mumbai	12.5
Siliguri	25
Sikkim	12.5
Punjab	2.5

Source: Field Survey March - April 2014

The workers who have migrated to different regions of India have either been working as cooks in hotels or daily wage labourers in other regions of India. Some of the workers have been working as agricultural labourers in Punjab and other as industrial labourers in Mumbai and Delhi. The labourers who have migrated to Sikkim have been working in road construction and have been supporting their family with their present source of income.

The impact of livelihood shift on other aspects seems to be unchanged except their psychological ideas since by now they are free from the so called the “Bonded Labour Work”. The main dissatisfaction was the income and limitation on promotions as the TG work did not provided them with better source of livelihood and a freedom to enjoy their choice of work.

Since one member from the household is engaged with the TG work, they do not have to worry for the facilities that would be snatched from them. The engagements of a family member have provided them the freedom to enjoy their life and they have been sustaining the household with their better income. The only difficulty that has been seen is the problems they incur in their new source of livelihood is growing competition in every field. The problems faced by them seem to be rather less challenging than the problems faced by the closed TG workers.

Tea garden as a source of livelihood for tribals has always been a first priority, but lately with growing problems in tea gardens with respect to failure in payment of wages in time, failing apart in providing basic facilities and many other factors have changed the scenario of tea garden. The young working populations have started finding tea garden as a burden and eventually a change in the workforce structure is being noticed in tea garden.

The globalized world which has been moving fast, though may have provide momentum to tea production, but should have also considered in respect of human prosperity along with the economic development. The lacks of development process in tea gardens have left the workers behind, struggling to adapt themselves to recent problems of the present world.

Chapter-VI



Conclusion

Chapter VI

Conclusion

The growing vulnerability among the tribal tea garden workers, with regard to livelihood security is really an issue of concern for the tribal tea garden community. The shift in the livelihood pattern among these tribal workers has given rise to the issues of sustainability of livelihood from tea, future of the small tea gardens and the other growing consequences at present. The fact that the food is a basic need for survival can make a person to cross any limit for making a living, and in circumstances where a whole community have been affected various consequences are bound to happen.

The studied consequences among the tribal workers provide a clear picture of failure of tea garden to sustain livelihood in the study areas. The growth of the tea industry in India was a phase of economic boom for tea industry and was capable of sustaining as many as lives with it. The phase also saw a rapid migration from Nepal and from within the tribal belts of India, which continued till last few decades.

Today tea industry in India is facing a period of recession. It is not only India that produces tea, there are more than 40 countries that have been contributing in tea production and competing in world tea markets. (Shah and Viswanathan 2012) The reason for recession cannot just be blamed on growing competition, but r factors like Climate Change have also contributed in tea recession.

A recent study on the impact of Climate Change in tea production shows that the decline in rainfall has greatly affected the production of tea leaves and the consequences has especially fall on the small tea gardens. North Bengal is a hub of small tea garden production, and the impact of Climate Change has also affected the tea production among the small tea garden workers in the region. The study shows the lack of rainfall in the months of February, March and April this season has really impacted the growth of tea leaves. (Outlook, July 2014)

The fact that the Climate Change has predominantly affected the growth of the of tea leaves have directly impacted the livelihood of the tea garden workers, whose dependence on the tea industry is very much high not only for sustaining a living but also in enjoying other facilities which supports their need for a living.

The growing recession in tea industry has been a major reason for growing vulnerabilities among the tribal workers. The workers has been subjected to more poverty, health problems and insecure livelihood option, affecting day to day routines and activities,

The recent closure of two tea gardens provides a clear picture of failing tea industry and the growing concern of sustainable living from tea garden in the region. The failure of tea gardens to provide livelihood have affected the workers. The collapse of the livelihood means have left them unemployed, deprived of basic facilities and even to struggle for earning a living. The approach from the government has been very negligible. The government action of listing of all the close and tea gardens has already been ordered, but if critically examined similar work had been conducted where 24 tea gardens both sick and closed were studied, and a detailed report had been prepared (The report has been discussed in chapter IV), discussing the impact of such closure of tea garden

The question of sustainability is an important issue that needs to be studied for understanding the prospects of tea garden and its workers. The functioning and non-functioning of tea gardens in this region has been a growing problem. The need for the government intervention is must. The development of better government schemes with proper management and better approach is a most necessary step that should be initiated by the government in resolving the problems of the workers.

The reason behind approaching such initiatives is that, the efforts from the locals seems to be less and their believe on government to step ahead to solve the problem is more, even the tea unions are in continues talks with the government and to looking forward for increasing the wages of the workers and resolving the problems of close tea gardens. The other problem is the accessibility to natural resources and other resources is less and dependency on the resources is being high. The third reason is the adaptability approach seems to be weak. Their dependence on natural resources is being affected by factors like flood, climate change and wild animal conflicts; as a result their daily wage income is insufficient to provide them better diet as required.

The initiatives from the government would be able to at least minimize their problems, though the implementation of one of the government scheme had benefited the workers in a small

amount, but that seems to be very small step of minimizing the problems. The weakness of the owners of paying out debts and unable to run the tea garden though has fall upon the workers, but if initiatives from the government becomes strong than the development of the workers can be ensured.

The government initiative should focus on developing the livelihood source, by providing tribal women's with trainings in handicrafts, and handing out them with micro-credit finance. The reason for taking up such initiative is Dooars as region is known for its beauty and wildlife, thousands of tourist visits the place and the market for local handicrafts would find a better market in the local region. The scheme of micro-finance has been functioning well in many parts of India, and many private companies have come up in market that can access small amount of loans to the women's, as the women's are regarded more dependable as compared to men's.

The efforts of women's are always appreciated. Much success related to micro finance and women has been studied and seen as an achievement, for instance micro financing of rural Bangladeshi women's by local banks have seen a success in the region. The initiatives really need a boost in the tea gardens also, looking at the present situation of the tea gardens. The development plans of the government with respect to Dooars region for enhancing eco-tourism seems to be great initiative, by providing little bit of space for the tribal men's in small percentage would also help the workers to adapt themselves with such chronic problems.

Dooars really seems to be hot-spot of eco-tourism; several tourist spots can be developed within the region. What if needed is to boost the development plans of the region with respect to eco-tourism and identifying the spots that can be utilized for eco-tourism development, as well as implementing the development plans for the tribal workers along the project.

It is a known fact that tea contributes a good proportion of GDP to the state, but not all tea industries are in a situation to contribute to the economy of the state. The tea gardens that have been doing well are enjoying a great benefit and small tea gardens have been really suffering and are facing a tough time in tea market.

The major problem that has been witness in tea garden has been the wage problem among the workers. The Plantation Labour Act of 1951 that was drafted for the welfare of the labour and to regulate the conditions of work, tended to benefit the workers under certain perspectives. Two of

the important acts were the Payment of Wage Act 1936 and Industrial Dispute Act 1947. The present drafted bill provides provisions for better facilities for the workers when compared to the facilities received by industrial workers.

Even today the tug of war between the tea union, tea boards and government continues with regard to an increase in the payment of the tea workers and it has been notice that most of these meeting and shared dialogues have gone against the benefits of the workers It has been claimed that employment conditions in the tea industry in West Bengal are highly exploitative as the wages of workers in the state and Assam are the lowest among all tea-growing states in the country(Ghosh 2014).Recent newspaper reports on demand for wage payment hikes of tea workers saw no results at all.

The need for increasing the daily wage amount should be taken into consideration, because at a phase were earnings from other sources are much higher than tea garden, the shift of the worker from the tea garden is a genuine one. With young generations taking over the older ones in tea garden the future prospects of shifting in other livelihood option would be much higher. The impact of such would on one hand would benefit the workers but would put a massive set back to the tea industry and the government.

The other reason for fulfilling their demand is to stop the growing consequences of trafficking that at present is being seen as a grave consequence of tea garden failing to provide better livelihood to their workers. A study on Vulnerability, Forced Migration and Trafficking in Children and Women has come up with a finding that there has been an increase in trafficking of women in children from the tea gardens of North Bengal, who are either performing as a sick unit or has been closed. (Ghosh,2014)

The study reveals the fact the regions has been an exposure to placement agencies who enjoys the benefits of illiteracy and unskilled workers providing hope to the youth workers of placements outside the region. The growing incident of such trafficking is becoming worse and worse with parents of the victims not raising up their voices for the problem. The problem is not only found in the closed or the sick tea gardens, but it has also been very common in working tea gardens, as less income has contributed to the exposure of youths to the outside world.

The main reason of all such grave problems in tea garden can be credited to the lack of development in the region. Tea garden authorities still tries to dominate its workers with various rules and regulations which have compelled the workers to work in the tea garden from generation to generation, though a shift is being noticed in the labour workforce of the tea garden, but how far the shift would impact the tea garden would be interesting to figure out.

The need for shelter, which has been provided by the tea garden, has been a dominant factor as found from the field that compels the youths to work in tea garden. The youths who are employed in tea garden are unskilled and have no options rather to continue in tea garden, but on other hand it was found that skilled workers have found themselves a better hub of earning than tea garden.

The lack of knowledge and wisdom among the workers can be a reason that have compelled them to work in tea garden, but looking at the grave problem of the tea garden, it shows the necessity of developing the skills of the workers in other fields too, because the sustainability from tea is now a question that needs to find solution with tea gardens performing very low and suffering from recessions.

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APPENDIX-I

Questionnaire for M.Phil Dissertation 2012-2014:

Department of Geography and Natural Resource Management

Sikkim University

Topic: "Livelihood Shift Among Tribal Tea Garden Workers: Determinants and Consequences

Part-I

1 a. Name of the Tea Garden:

b. District:

2 a. Year of establishment of the tea garden:

b. Status of the Tea Garden:

3. Number of households in tea garden.....

4. Name of the respondent.....

a. Religion.....Caste.....

b. Relationship with the family.....

c. Occupation of the respondent.....

5. Family details of the respondent:

Sl.No	Name of the member	Age	Sex	Marital Status	Education	Occupation
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

Part-II

6. How many members from the household used to work in tea garden?

Ans)

7. What was the total number of working days earlier in tea garden?

Ans)

8. What was the total monthly income from tea garden before?

Ans)

9. What were the facilities provided from the tea garden for the workers?

Ans) a. Health facilities Yes/ No

b. Education facilities Yes/No

c. Water Supplies Yes/No

d. Incentives during festivals Yes/No

e. Housing Facilities Yes/No

f. Food Supplies in weekly basis Yes/No

g. Housing Facilities Yes/No (Kutcha/Pucca/Mud Type/Others)

h. Food Supplies in weekly basis Yes/No (if yes)

10. At present are you being able to avail the above facilities from tea garden or form any government sources?

Ans) Yes/no

11. What were the food supplies given by tea garden on weekly basis?

Ans)

Serial No	Commodities	Quantity	Price
1	Rice		
2	Flour		
3	Wheat		
4	Sugar		
5	Kerosene		
6	Others		

Part-III

12. What have been the main reasons for sudden closure of the tea garden?

- Ans.) a. Industry working as a sick production unit
 b. Lack of workers
 c. Reduction in the production
 d. Others

13. What have been the others options of livelihood after sudden closure of tea garden?

- Ans.) a. Dependence on forest
 b. Working as daily wage labourers
 c. Working as migrated labourers
 d. Querying
 e. Others

14. What is the total amount of monthly income at present?

Ans.).....

15. What changes have taken place in day to day life with shift in livelihood pattern?

Ans.)

Serial No	Problems	Yes/No	Impact
1	Fulfilling basic needs		
2	Health facilities		
3	Children's Education		
4	Livelihood Shift		
5	Future Security		
6	Socio-Economic Hardships		
7	Psychological Issues		

16. How do you cope with sudden shift in livelihood and changes coming up with such shift?

Ans.)

.....
.....
.....
.....
.....

17. What is the maximum distance and cost you cover to earn a livelihood at present?

Ans.).....

18. Did you ever receive any incentives from the government since the closure of tea garden?

Ans.) Yes/No (If yes mention the type)

Part IV

19. Has there been any form of migration from the household?

Ans.) Yes/No

20. If Yes than, migration of which form?

Ans a) Rural to Rural

b) Rural to Urban

21. Number of members who have migrated from the household?

Ans).

22. Does the migrated person help financially?

Ans.)

23. Is the amounts send by the migrated member enough to sustain your livelihood?

Ans.) Yes/No

24. What is the total consumption of food that you avail at daily basis?

Ans.).....

25 What is the total amount of expenditure out of the monthly/weekly income on the following items?

Serial no	Items	Expenditure Income
1	Food	
2	Clothing	
3	Education	
4	Health	
5	Leisure Items	
6	Others	

26. What are the items do you possess as assets at present?

Serial No	Items	Yes/No (type)
1	Animals(pig, cow, hen, duck, buffalo, goat etc)	
2	Television	
3	Two wheller/four wheller	
4	Land(agricultural/fallow)	
5	Bicycles	
6		
7		

27. Have you taken any form of debt before or after the closure of tea garden?

Ans. Yes/No (If ye mention the type)

Formal /Informal

Part V

28. What has been the role of local governing bodies and NGO's in such important time?

Ans.)

.....

.....

.....

.....

29. What has been the role of local tea union members in solving the problem?

Ans.)

.....

.....

.....

30. Do you see any chance of re-functioning of tea garden in near future?

Ans.) Yes/No

31. What type of changes do you notice in the day to day activities of workers with such little option left for livelihood?

Ans.)

.....
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32. Have you ever been entitled to government scheme works in present like MGNREGA?

Ans.) Yes/No

33. If Yes than, than what have been the benefits from such schemes?

Ans.)

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34. How do you compare the present livelihood mode with livelihood that you were earning as tea garden works?

Ans.....

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35. Is the present source of livelihood able to sustain you and your family for daily household needs?

Ans. Yes/No

36. What are the challenges you meet while you are accessing other sources of livelihood, after the closure of tea garden?

Ans

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37. Will tea as a source of livelihood would be able to sustain the future generation and provide a better mode of earning a livelihood than present?

Ans. Yes/No