

**LABOUR AND HEALTH IN TEA
PLANTATIONS: A CASE STUDY OF PHUGURI
TEA ESTATE, DARJEELING**

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Fulfillment Of The Requirements For The
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DOCTOR OF PHILOSOPHY

RINJU RASAILY



**CENTRE FOR SOCIAL MEDICINE AND COMMUNITY HEALTH
SCHOOL OF SOCIAL SCIENCES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
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CENTRE OF SOCIAL MEDICINE & COMMUNITY HEALTH
SCHOOL OF SOCIAL SCIENCES

JAWAHARLAL NEHRU UNIVERSITY

New Delhi-110067

CERTIFICATE

This thesis entitled "*Labour And Health In Tea Plantations: A Case Study Of Phuguri Tea Estate Darjeeling*" submitted for the award of degree of **Doctor of Philosophy** has not been previously submitted for any degree of this or any other University and is my original work.

Rinju Rasally

We recommend that the thesis be placed before the examiners for evaluation for the award of Ph.D. degree of this university.

DR. RAMA V. BARU
SUPERVISOR

DR. RAMA V. BARU
CHAIRPERSON

Dedicated
To
The Workers of Phuguri Tea Estate

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LIST OF ABBREVIATIONS

D.G.H.C.	: Darjeeling Gorkha Hill Council
DDCKSS	: Darjeeling District Chia Kaman Shramik Sangh
DGHC	: Darjeeling Gorkha Hill Council
DPA	: Darjeeling Planters' Association
DTDCKMU	: Darjeeling Terai and Doors Chia Kaman Mazdoor Union
e. l. p.	: extra leaf price
G.N.L.F.	: Gorkha National Liberation Front
HPWU	: Himalayan Plantation Workers Union
PLA	: Plantation Labour Act
RCLI	: Royal Commission of Labour Inquiry Report
T.E.	: Tea Estate
WBSPLR	: West Bengal State Plantation Labour Rules

INTRODUCTION

“Chia patti sanga hamro jewan pani pisse sakiyo”
“Our lives are ‘rolled’ along with the tea leaves”¹

These words of Chelimaya Khati, a tea labourer narrate the pain and hardship about their lives in the green tea gardens of Darjeeling hills.² According to her, their lives do not personify the freshness that we generally associate with tea. Have we ever thought for a moment what goes behind the making of this magic drink? The words of Chelimaya Khati, says something else, a truth, which very few of us know or ever tried to know.

History is an important component for social science research and any sociological analysis requires the subset of history. This thesis examines the interrelationship between the conditions of work, living and health among the tea plantation workers of Darjeeling hills. By drawing out the process involved in the formation of the tea industry historically, this study attempts at linking the past remnants of history to the present situation through a case study of Phuguri tea estate.

This thesis builds on the researcher’s study, entitled “Influence of Socio-Economic and Working Conditions on the Health of the Tea Garden Female Workers”- A case study of Phuguri Tea Estate in Darjeeling district of West Bengal”³. This study demonstrated the association between social hierarchy and health. The major findings of this study were:

- a) Work, social hierarchy and gender collectively influenced the women workers’ position in access to basic services.
- b) There was a strong relation between the caste background and the family size. For example, the nuclear families were mostly from the scheduled castes, which comprised 33% of the women respondents.
- c) The ‘triple burden of work’ was highest among them.
- d) More that 50% of the women were single earners. Their husbands were involved in seasonal employment as carpenters and blacksmiths.

¹ Interview with Chelimaya Khati, female worker in Phuguri T.E., 19th November, 2000. She compares her life in the tea garden to the fate of the tea leaves that get rolled in the rolling machines.

² Darjeeling hills implies the tea gardens of all the hill sub-divisions comprising of Kurseong, Kalimpong and Darjeeling.

³Rinju Rasaily: “Influence of Socio-Economic and Working Conditions on the Health of the Tea Garden Female Workers”- A case study of Phuguri Tea Estate in Darjeeling district of West Bengal, M. Phil dissertation, Centre of Social Medicine and Community Health, School of Social Sciences, Jawaharlal Nehru University, New Delhi, 1998.

- e) Questions of rest and leisure hardly existed for the women workers. Their notion of being ill is only when it affects their capacity to work.
- f) Their drive to earn the maximum, during the 'peak season'⁴ costs on their physical health. This further added to their already stressful life.
- g) Some of the common complaints were general weakness, lethargy, backaches, and acute headaches with dizziness (vertigo). Almost 70% of the respondents suffered from leucorrhoea.
- h) The common medical treatment sought were the traditional healers and from the tea garden dispensary.

By focusing on the same tea garden, this thesis seeks to explore the relationship between conditions of labour and health of the workers historically and as reflected through the lives of the tea garden workers of Phuguri Tea Estate. Study of a single tea garden acts as a window to understand the social relations of production and health in a plantation structure.

Factors of income, housing, caste composition are some of the aspects examined. Medical benefits and other subsidies of the welfare state are reflected through the workers narratives. Workers' perception of work and health across hierarchy is also examined. Phuguri T.E. is chosen as a case study as it is one of the oldest tea estates in Darjeeling district, West Bengal comprising of one hundred percent Nepali labour force.

The thesis is divided schematically into the following seven chapters. Chapter I provides a review of literature, conceptual framework and methodology. It covers certain important theoretical and empirical literature of the plantation system. Health is conceptualised as a 'socially produced phenomenon', where social factors hold importance in disease causation. The methodology has also been discussed in this chapter. Chapter II presents the overall backdrop of inception and growth of the Darjeeling tea industry. It includes the socio-demographic history, causes of movement of labour into Darjeeling. It also examines the labour recruitment processes in the north east of India, with special reference to Darjeeling tea plantations.

⁴ Plucking is maximum in the months from April to September when the flush is the highest

Chapter III enlightens the history of work conditions, housing, sanitation, and diet along with the morbidity and mortality data in plantations. Literature on Assam, Bengal and other plantations has been incorporated to illustrate similarities and contrasts with the conditions in Darjeeling hills.

Chapter IV presents the welfare interventions both during the colonial and post-colonial period. Some of the strategies used by the management were land allotment policy, health care interventions, which included 'birthday reward', subsidised food and cloth distribution. Food hoardings later led to labour unrests and along with the political situation led to the formation of various organisations that were politically affiliated. With independence there were various legal interventions; one of them is the Plantation Labour Act, 1951 which was implemented only in 1954. The government also set-up governing bodies like the Department of Labour Welfare and the Tea Board for the welfare of the workers as well as the working of the tea gardens. These are some of the aspects discussed in this chapter. Chapter V reflects the current situation of the Darjeeling tea industry through a case study of Phuguri Tea Estate. Plantation work structures, social composition, education, living conditions, income expenditure are some of the aspects covered to draw trends across the plantation work hierarchy. Selective cases of the workers occupation like plucking, spraying etc. dealing with tea production demonstrates the relationship between working conditions and health. Workers' formal and informal mechanisms through caste-based *samajs*, *ghummori* (chit-fund) act as important social support systems. The role of the trade unions in the plantation is another important aspect covered in this chapter.

Chapter VI discusses the workers' perceptions of health vis-à-vis their self-reported morbidity, perceptions of illness in relation to their work occupation-related complaints, income, food intake and drudgery. Data on morbidity and mortality patterns furnish as an epidemiological profile of the area. The range of health services both formal and informal for the workers is explored in this chapter. Welfare services provided to the workers in the tea garden as under the West Bengal State Plantations Rules, (WBSPLR) 1956, government services and welfare and other health benefits are incorporated within these chapters.

Chapter VII ends with the discussion and conclusion of the thesis, which essentially aims at knitting issues arising from the study. By drawing out from the historical section and from the contemporary situation this chapter seeks to encompass the factors important for the understanding of health. Availability of water, food, fuel, and sanitation all are crucial determinants of health. Wage structure, household incomes, level of education, patterns of illness, utilisation of health services are some of the important issues discussed in this section. This chapter also throws light on some emerging issues of concern both for the tea industry and the workers. It also points out some recommendations and areas of further research.

CHAPTER I

***Conceptualising A Theoretical Framework : From
The Classical Epidemiology To Present Times***

CONCEPTUALISING A THEORETICAL FRAMEWORK: FROM THE CLASSICAL EPIDEMIOLOGY TO PRESENT TIMES

During the late 19th century, the predominant understanding of disease causation was miasma, which attributed disease to noxious air and vapours. Several empirical studies established the relationship between poor environmental conditions, ill health and mortality. Communicable diseases like plague, typhoid, cholera and tuberculosis were the major causes of mortality and were referred to as the 'disease of the poor'. Various sociological and epidemiological inquiries establish a strong linkage between poverty and ill health. They also provide descriptive and empirical insights into the poor conditions of the working class. This chapter provides a review of relevant literature for the conceptualisation of our study. It also covers the methodology taken to undertake this study.

The Period of Classical Epidemiology

There is a genre of studies on the conditions of the working class during the period of industrialisation in England. Factors like wages, work and living conditions were some of the important dimensions addressed. One of the pioneering works in this field is Engels's, (1845) *Conditions of The Working Class in England*. His study illustrates the squalor-like living conditions, meagre wages, inhuman working conditions, poor food or at times no food, which resulted in pestilence and even death among the working class. These conditions inevitably led to the widespread prevalence of stealing and prostitution among them. Apart from ill health, problems of overcrowding, destitution, crime, alcoholism became rampant in such areas.

As Engels observes on the conditions of the working class:

"...If the population of great cities is too dense in general, it is they in particular who are packed into the least space. As though the vitiated atmosphere of the streets were not enough, they are penned in dozens into single rooms so that the air which they breathe at night is enough in itself to stifle them. They are given damp dwellings, cellar dens that are not waterproof from below, or garrets that leak from above. Their houses are so built that the clammy air cannot escape. They are supplied bad, tattered or rotten clothing, adulterated and indigestible food..." (Engels 1845: 136-137).

The Report of the Sanitary Conditions of the Labouring Population in Great Britain by Chadwick (1842) showed that mortality rates were far higher than the national average among the poorer sections of the population. The rates fell as one moved up the social hierarchy, with the population's richest sections experiencing mortality rates, which were much lower than that of the national average.

Other studies like Snow (in Buck et. al. 1998) on the cholera outbreak in London from 1848 to 1854, explicates the outbreak to impurities in the pumped water caused by the proximity to sewers, drains, and cesspools. Faar's (ibid) study shows higher number of deaths among the miners of Cornwall districts for five years between 1848-1853 (inclusive) and for 1860-62 (for a triennial period) across different age categories as compared to the non-miners. He classified the causes of deaths as a) due to all causes and b) due to pulmonary diseases, which include phthisis, laryngitis, bronchitis, pleurisy, pneumonia, asthma and all cases returned as 'diseases of the lungs'. His evidence show deaths due to pulmonary diseases as the main cause of excessive mortality among the miners and were attributed to the conditions incident to the miners' labour.

These set of studies show that multiple factors like working and living conditions are associated with disease causation and have enormous implications on the health of a population. By the late 19th century, Pasteur's discovery of germ and Koch's postulate resulted in a shift from miasmatic to germ theory. This meant that the environmental factors as being important in causation became secondary. The germ theory got further strengthened; however, a few scholars pursued the classical epidemiological approach during the 20th century.

Mckeown's (1976) study was based on the death rates in England and Wales from 1841 for each infectious disease till the time when effective modern medical prevention and treatment techniques were available. He observed that death rates declined well before medical interventions (like antibiotics, immunisation, intravenous rehydration, and vitamin supplements). He attributed the decline of mortality due to diseases like diarrhoea, dysentery, and typhoid fever to the general resistance to infectious disease through 'improvements in nutrition', clean water supply

and sewerage system. He concluded that the 'improvement in the nutrition' was linked to the 'transformation in health'.

Zurbrigg (1992, a) argues that nutrition means food i.e. carbohydrates, fats and proteins, which overlooks the 'whole question of hunger'. She critically argues by making a sharp distinction between acute and chronic hunger. Acute hunger is 'starvation or little or nothing to eat which leads to famine', while chronic hunger is 'under nourishment or not enough to eat i.e. inadequate food to eat' (Zurbrigg a 1992).

She underlines the importance of hunger both acute and chronic and its implications for health. Through her study (1992 b) of malaria mortality in Punjab (1868-1908) she shows association between acute hunger and mortality giving centrality to the importance of food for health. Her study demonstrates that malaria mortality appeared to have declined mainly due to a decline in acute hunger (starvation); especially in 1908 there is a sudden drop in malaria mortality. According to her there is little evidence of change in a) levels of malaria transmission (reflected in spleen and parasite rates) b) no significant change in rainfall and no substantial change in incidence of floods. But one factor that changed was the incidence of famine. She argues that link between famine and epidemic mortality may be related primarily to increased exposure to disease through famine migration and lack of hygiene rather than reduced immunity and resistance to disease.

She draws the link to the question of hunger from Banerji's (1981) study which showed that over 36% of families of landless agricultural workers in the nineteen Indian villages studied did not get 'two square meals a day'¹ to satisfy their hunger for at least three to six months. More than 80% of the families spend their income on food and more than half of them failed to meet the basic calorie needs. Banerji classified food intake as zero, one and two squares meals per day. Sometimes the one square meal could even drop to zero square meal. He argues that acute hunger is endemic in South Asia. Food therefore has an important relationship to life expectancy and economic conditions are an important factor for the analysis of health. Thus access to food is also an important determinant for health.

¹ 'Square' defined as purely in caloric terms as enough staple food (usually a coarse millet or rice) to satisfy hunger.

The Relationship between Inequality and Health

Class inequalities in health exist and are important dimensions of various studies of health status of a population. In fact differences even within class are prevalent, as Hobsbwan (1954) examined stratification within the working class during the period of 1870-1914 in Great Britain. He categorised the labour aristocracy with regular wages at the top, comprising some fifteen percent of the class. Next were the ordinary skilled men, the better-paid labourers, and the growing body of semi-skilled workers. These together comprised some 45 percent of the class. The bottom 40% were unskilled, mostly living below the 'harshest poverty line', and two-thirds of them mainly in old age, became paupers. In his study, wages were used as the basis of stratification, which affected the living conditions even within the working class.

The Black Report (1992) shows the marked inequalities in health between the social classes in Britain. It defines the concept of a social class as "a segment of the population sharing broadly similar types and levels of resources, with broadly similar styles of living and (for some sociologists) some shared perceptions of their collective condition" (Townsend & Nick Davidson 1992: 39). Distribution of health or ill health among and between populations is expressed through 'inequality'. According to this report, there are various other factors in determining class viz. income, wealth, type of housing tenure, education, style of consumption, mode of behaviour, social origins, family and local connections.

This Report shows the relationship between occupational class and mortality by using the Registrar General's categories for classification viz. I- Professional, II- Intermediate, III N- Skilled Non-Manual, III M- Skilled Manual, IV- Partly Skilled, V-Unskilled (ibid: 41). It states "a class gradient can be observed for most causes of death and is particularly steep for both sexes in the case of diseases of the respiratory system and infective and parasitic diseases" (ibid:55).

Doyal (1979) maintains that the distribution of ill health in capitalist societies broadly follows the distribution of income. She considers income as a major determinant of the standard and location of housing, ability to remain warm and well clothed and the 'quality of life' influenced by the access to goods and services. Another class difference according to Doyal is

the difference in health risks of specific occupations with regard to the physical proximity to the production process, for example workers residing near the factories or industries.

Turshen (1989) restated the understanding of the 'social production of health and illness'. This understanding claims that, "mortality is non-specific, that overall community health is not affected by the elimination of any one cause of death" (Turshen 1989: 19). Health status is understood not simply as 'absence of illness' but comprises access to socio economic opportunities, mobility in terms of promotion in their work place, better wages etc.

Apart from the criterion of income, there are studies specific to occupational health. Hazards vary in relation to work, for example in factories, mines, plantations etc. Work hazards are also responsible for certain specific occupational diseases example silicosis in mines, pneumoconiosis in coalmines, byssinosis among textile workers asbestosis among asbestos workers, lead poisoning among workers handling batteries, jute dermatitis among jute mill workers and so on. Pesticide poisoning among the workers resulting in deformity of limbs, dysfunction of joints, amputations and visual disabilities due to indiscriminate use of lethal pesticides are some of the work hazards (Qadeer and Roy 1989: 41). An important social indicator for health is the social origins of the workforce. Certain specific studies show the predominance of certain castes/tribes in the work hierarchy.

Work, Social Hierarchy and Health

An important study on social stratification and health in the context of Indian Society is Qadeer and Roy (1989), who did a pioneering work on the various industries of India. This study draws the relationship between social roots of the working population in different industries and their health status. They argue that social hierarchy reflects the hierarchy of work, which determines access to basic amenities. They observe: -

"The overall social stratification penetrates deep into the labour force. Links with land, patterns of migration, education and skill determine which level of labour one enters, and where in that level one is placed. The implications of stratification for health are that, given the scarcity of

facilities, those who are privileged and control resources, also control the facilities. The classes at the bottom, who have no control and no access, are deprived of even the basic minimum facilities of life" (ibid: 61).

Morris (1965) in his study of Bombay cotton mills (1854-1947) pointed out that group of landless labourers and 'submarginal' peasants constituted a large part of the proletarian labour force. His study demonstrates that absenteeism, supply of labour were linked to other factors like employers' policies of labour utilisation, viz. the existence of an informal 'shift system' and not necessarily the 'agricultural calendar'. Seasonal variation in absenteeism was also associated with the seasonal variation of the incidence of disease. Epidemic diseases like smallpox, cholera, malaria and after 1896 plague were common in these areas.

In the Bengal jute mills too an informal shift system operated as in the Bombay cotton mills. By the mid 1890's workloads increased with the introduction of electric light. In May 1895, mills functioned till around 9 p.m. with electric light. Ghosh (1994) argues that the employers systematically ignored the working conditions with regard to hours of work and minimum age during 1880-1930. This was made possible with the help of the colonial state.

Certain unidisciplinary studies on social stratification provide a framework for understanding the relationship between social stratification and work hierarchy especially in the Indian context. Lambert (1965) in his study of factory workers in Pune has used caste designations to understand whether the hierarchical ranking of a workers' caste or ethnic affiliation predicts his career and position within a factory, whether vertically or horizontally. He classified the factories into three types: Type A includes gang organised, i.e. the paper, chocolate, biscuit and rubber factories; Type B consists of individual operators that require skill although with minimal experience for example the cotton textile factory and lastly, Type C where workers feed and individually direct the machines, for example the oil engine factory.

His study shows the dominance of the upper and middle castes at the skilled and the supervisory levels in certain factories. The Brahmins comprising 56% in biscuit factory 36.7% in oil-engine, 30.1% rubber products factory- while it was 10.8% in paper and 4.2% in textile

respectively. Such proportion of Brahmins in the three newer factories (i.e. biscuit, oil-engine and rubber) according to him was a function of the demand for higher educational levels in the workforce rather than any specific caste selection.

He observed that at the extremes of the hierarchy caste is associated with occupational class, viz. Brahmans among the clerks in the combined factory workshop is 64.1%, on the other hand there are no clerks from the Backward Classes except in the paper factory of 7.4% and less than 3% of the Backward Classes are supervisors. Between these two extremes no stable relationship appears from his data. His study highlights a linkage between educational attainment and the possibility of economic betterment, thus mobility vis-à-vis the 'achieved status'.

Holmstrom's (1986) study has shown that even among the Scheduled Castes where the Bombay based *Harijans* opted for factory jobs; the migrant *harijans* (largely from the south) joined the strata of casual labour, especially construction labour. Holmstrom's argument that work hierarchy replicates social hierarchy has been emphasized in the above studies. An important indicator for health therefore is the social origins of the workforce as clearly illustrated by Qadeer and Roy (1989).

The above literature available on different industries both in India and Great Britain show a relationship between social and work hierarchy as well as health status. Also, studies have shown the association between occupation and health. Such historical and empirical studies of virtual labour force in India indicate a pertinent relationship between work, social hierarchy and health status. Plantations provide an extremely important site for examining the above issues. Firstly, because plantations are perhaps the largest in the organisation of labour force in India with the oldest plantation complex set up in Assam in 1834. And secondly, till the middle of the 20th century plantations in north-east and south were the largest employers of labour in India.

The Plantation System

Plantations in colonial conditions are viewed as "a particular type of 'capitalist' enterprise with the following basic features: an agro industrial enterprise raising one or several crops on a large scale under tropical or

semi-tropical climatic conditions; an international market orientation; the launching and subsequent maintenance of plantations under the ownership and control of foreign capital with the backing of the colonial state; the employment of a large number of producers and labourers (not necessarily wage workers) doing hard manual work under conditions of a primitive labour process; the use of a migrant and/or immigrant labour system; and the mobilisation and control of direct producers through economic and extra-economic coercive methods with the direct and indirect support of the colonial state. The class structure thus created through the use of coercion, open or concealed, was sharply divided between white or sahib owners, managers and supervisors on one hand and non-white labour on the other” (Das Gupta 1992: 173).

Two more features of colonial capitalism were “the maintenance of links between the pre-capitalist/ non-capitalist subsistence economy and the plantation sector, and the externalisation of at least part of the cost of reproduction of labour power.² These features of plantation society originated in, and were maintained as a part of the wider colonial economy” (ibid: 174).

The International Encyclopaedia of Social Sciences (1968) defines a plantation as “an economic unit producing agricultural commodities (field crops or horticultural products, but not livestock) for sale and employing a relatively large number of unskilled labourers whose activities are closely supervised. Plantations usually employ a year round labour crew of some size, and they usually specialize in the production of only one or two marketable products. They differ from other kinds of farms in which the factors of production, primarily management and labour are combined” (International Encyclopaedia of Social Sciences 1968: 154).

There are various forms of plantations:

i) Private, for example small companies, large joint stock companies, sterling companies and ii) public i.e. companies run by the government.

Beckford (1972) considers plantation as the means by which “economically underdeveloped areas of the world were brought into the

² Das Gupta argues that by providing land as a source of income, the low wages in plantations were justified by the planters, thus externalising part of the cost of reproduction of the labour power.

modern world economy” (Beckford 1972: xxiii). According to him the term plantation system refers to the institutional set-up required for the production and marketing of plantation crops. It has two dimensions: a social system and an economic system. First, the plantation as a social system in the territory in which it is located i.e. the internal dimension and the economic system both in the territory of its location and in the wider community as an external dimension (ibid: 10). The latter characterised by export orientation and foreign ownership.

Bhowmik (1980) argues that in the context of Indian plantations the role of the state has created a change in the system after Independence. The plantation system has to be understood not just in terms of the economic consideration but also the social relations that have shaped the plantation structure. He argues that the social process should not be dismissed while defining a plantation viz. the way in which people of certain social origins were transferred to a totally different production process. The larger social system is important in shaping or restructuring the plantation system. There is a change from the classical plantation system characterised by low wages, poor working conditions, isolation etc. due to a change in the social system brought about by the state. For example, political pressure led to welfare inputs, improvement in communication led to organisation of the working class and so on. There is a continuous process of social change, Bhowmik maintains.

Das Gupta (1999) argues that the Darjeeling and Duars plantations of West Bengal cannot be called ‘enclave economy’ i.e. complete isolation from the mainland. According to him, an important aspect of an enclave theory is that ‘growth of tea (or coffee) plantation results in pauperisation of agriculture’.³ But in the case of the Darjeeling and Duars Terai regions of North Bengal, tea plantations led to the growth of agriculture, rural settlements and other small-scale ancillary industries. The population grew with large migration. This resulted in a certain demographic transition, which created a new type of ‘assimilation and socio-economic transformation’ (Das Gupta 1999: 42). Labour was essentially a

³ Das Gupta cites the study of Dawood that the growth of plantation economy in Sri Lanka resulted in the “pauperisation” of agriculture. Dawood mentions that the plantation labour was ethnically and culturally different from the agriculturists and that it was an ‘enclave economy’ (Das Gupta 1999).

'transplanted labour', with a homogenous ethnic composition. He maintains that plantation industry and agriculture was 'supplementary and complementary to each other'. Agriculture did not decline due to rapid growth of plantations; instead, agriculture got a boost due to the plantation economy.

While Subba (1984) contends, in Assam and other parts of North Bengal, where colonial plantation systems co-existed with a neo-feudal agrarian system in its neighbourhood, in Darjeeling hills, the neighbours were, the plantation workers themselves. Therefore relations were different and there was economic interdependence between the two. It was only in Kalimpong the third sub division of Darjeeling hills (other two being Darjeeling and Kurseong) that agriculture was its major occupation.

Keeping the conceptualisation of plantation system in mind, the following sections present a review of various studies undertaken on plantations, both historical and contemporary in overseas and Indian plantations. Studies more specifically on health and conditions of labour are reviewed, which will enable us to arrive at a conceptualisation for the ongoing study.

Conditions in Indian and Overseas Plantations: A Historical Review

Historically since the 1650's labour migration was an important factor for the expansion of the world capitalist economy. Plantations worldwide were an advent of capitalism where cash crops like coffee, tea, rubber, sugar, banana and others started flourishing extensively. With the abolition of slavery in 1834, labour migration heightened from India to Africa, Mauritius, S.E. Asia, the Pacific and West Indies. Lal states that a million Indians were transported across seas (Africa, Mauritius, S.E. Asia, the Pacific and West Indies) from North Western Provinces, Oudh, Bihar, Central Provinces, Punjab, Rajasthan and other places in India (Lal 1984: 126).

His accounts exposed the harsh conditions of labour in the sugar plantations of Fiji Islands. Life of the *girmitiyas*⁴ was *narak*⁵. The main problem faced by the workers was 'overtasking'. Incompletion of the task⁶ led

4 Girmit is the Fiji Indian variant of Agreement under which the indentured labourers emigrated from India and Girmitiyas were those under the girmit.

5 Hell.

6 The amount of work allotted for a day.

to high rate of conviction. Suicides were higher among males, because their work was heavier and more demanding and failure to perform the allotted tasks involved a loss of self-respect. But murders, suicides, accidents contributed a small part to mortality (ibid: 149). Diseases like diarrhoea and dysentery were the main causes of mortality, which was very high in 1880's. "In 1884 it was 5%, 5½ % in 1886 with an average of 3%. Though adult mortality declined infant mortality remained high especially in 1890's with 20% in 1896, in 1897-21% and in 1898-17%. Causes for infant mortality were bronchitis, broncho-pneumonia and malnutrition" (ibid). But officials attributed it to the deliberate neglect of children by workers in order to obtain time off work. Some argued that pressure of work on the mother was unrelated to infant mortality but the cause was due to insufficient supply of milk.

Breman's (1970) pioneering study exposes the harsh conditions of the labourers in the tobacco plantations of Sumatra islands under the Dutch colonial rule. He shows that the workers were subjected to regimented life both at workplace and their living quarters. He provides a detailed account of the setting up of estates, labour hierarchy, conditions and the disciplining of coolies⁷ and their means of escaping punishments and so on. Labour was mobilised for work in the tobacco plantations from China mostly through middlemen and a recruiting agency was even established for this purpose. Slowly, the immigrant labour included Javanese, Indians, and Thai workers. He strongly stated the negligence of the reports on the conditions in plantations by the Dutch bureaucrats and politicians around the 20th century.

Like the Fiji Plantations, in the entire East Coast of Sumatra, in 1901 the mortality rate among the Chinese coolies was 5% and among the Javanese coolies 3.3%. Also more than 7 and 11% of the contracted coolies

⁷ Jan Breman gives the colonial definition of the term coolie that was applied to a particular race for work in plantations. (Breman, Jan and Valentine Daniel, E.: 1992: 269-295) To quote: 'Coolie identity is as much the product of self-perception as it is the construction of a category by those who did not belong to it.' According to Jan Breman, the English word coolie has two different sources: one Tamil, the other Gujarati. In Tamil kuli was, and still is the term for a type of payment for menial work, being a menial alone did not qualify a person to be called a coolie s/ he had to be a menial who did not have any customary rights (ibid: 269). While its ancestry on the Gujarati side can be traced to the name Kuli, which refers to a person, to one who belongs to the Kuli tribe. Its members were described as 'thieves, robbers and plunderers as degenerate and inferior' in short as a villainous race. The English word coolie combines the personhood of a Kuli with many of its connotations, and the payment of kuli with all of its connotations, to create an essentially new entity: a coolie (ibid).

died on two transports from China around the turn of the century, either during the journey or shortly after arrival. (Breman 1970: 118) The coolies were transported like *atap*⁸, piled on top of one another. In 1896, instead of 40 people, 102 were boarded on a ship of which 51 had died due to cholera and overcrowding. Dysentery, malaria and tropical ulcers were some of the causes of high mortality in the plantations. Also, many coolies were physically and mentally unable to cope with the harsh life on plantations. Even the dead bodies received no ceremonies or rituals. The coolies also continued to work because of the poor conditions in the plantations infirmary. An increase in the hospital attendance from 39% of all workers in 1897 to over 76% in 1906 did not signify an increase in the rate of illness but an improvement in medical care (ibid: 119).

A study on mortality and Indian labour in Malaya in 1877-1933 (Shlomowitz and Brennan 1992) provided the first systematic quantification of mortality suffered by indentured and 'free' (i.e. non-indentured) immigrant workers of southern India in the Straits Settlements and The Federated Malay States. It identified malaria as the new disease to which Indian indentured workers became susceptible. Recruitment was an important factor in determining mortality especially in the inland and the overseas plantations. For the case of the overseas plantations like Fiji and Surinam death rates were less as compared to Assam and Malaya because of the 'more exacting recruitment standards' used for emigration.

Shlomowitz (1997) study on fertility of the Fiji Indian migrants showed that fertility rates were lower due to abortions and still-births. Calculations based on birth rates show that abortions and still-births were higher among Act workers than non-Act workers.⁹ There was also a decline in the infant mortality rate with a decline in the birth rate. The proportions of married couples, the sex ratio, and the extent of privacy in the plantations' housing arrangements, promiscuity, and spread of venereal diseases were important indicators for the assessment of fertility rates.

Like the overseas areas, in India too a chronology of events took place in the evolution of plantations and its labour history. Diseases, deaths and arduous working conditions were part of life in plantations. Apart from land,

⁸ Dried leaves.

⁹ Refer chapter II for the difference between act and non-act workers.

a large and cheap labour force was required to work in the plantations. Earlier, in the Assam plantations Chinese labour was employed. As Chinese labour became very costly and with the refusal of the local inhabitants¹⁰ to work (due to low wages and arduous conditions in plantations and their own occupation in rice cultivators etc), labour had to be sought from far-flung areas of India like the United and Central Provinces, Chota Nagpur Region etc (Refer Maps in Chapter III).

Such areas were called the labour-catchment areas (LCAs) and were characterised by abject poverty, seasonal unemployment, indebtedness and recurrent famines. Thus a large number of people from these places became victims and came to work in plantations, mines, mills and so on. Advance payment and the promise of better conditions, forced the helpless populace to get into contracts or agreements. This led to the so-called 'indentured system', which was followed by other types of recruitment into plantations.

Das Gupta's (1986) study on the structure of the labour market in colonial India in Assam tea industry states that indentured recruitment started from 1859 and continued till 1926. The planters later preferred the *sardari* system where the labourers were not under contract and were less expensive. This was the type of recruitment that existed mostly in North Bengal. A Tea Districts Labour Supply Association (TDLISA) was formed by most of the leading tea companies in Calcutta in 1877 and from 1917 it was called Tea Districts Labour Association (TDLA). While the sardar acted as the direct recruiter these larger bodies functioned as the principal recruiting organisation. The *chowkidars* strict vigilance, and the "agreement among the employers not to entice each other's labourer or to employ a labourer coming from other garden effectively restrained the freedom of movement" (Das Gupta 1986: 1787).

10 See Chatterjee Suranjan and Das Gupta Ratan: EPW Vol 16, pp 1861-1868 on recruitment policies and conditions in the Assam plantations between 1840-1880. The local population i.e. the Assamese peasantry was largely absorbed in rice cultivation. Fertile soil, low density of population, absence of wage-labourers was some factors, which dissuaded them from joining as plantation labour. While necessity forced the tribal population i.e. the Cacharis and the Mkirs to work in tea plantation labour. Their tribal economy was eroded due to the interests of the colonial state in promoting tea cultivation. These were not wastelands but were in many instances covered with valuable timber; land suitable for ordinary village cultivation. The Cacharis were suitable for doing hard work of wood-cutting, jungle-clearing which was required for tea cultivation. In 1901 of eh 307,000 tea plantation workers only 20,000 i.e. 6.5% were local labourers (Chatterjee S. and Das Gupta R.: 1862).

Mahapatra (1985), Chowdhury (1992) and Dasgupta, (1986) have dealt with historical studies on migration in the Indian context. These studies can be categorized in the area of labour history. They have broadly located the labour-catchment areas and the factors and conditions that caused movements of labour from such areas. For instance Mahapatra's study draws out the push and pull factors for large-scale immigration from the Chotanagpur region between 1880-1920 to the tea plantations of Assam and to the Jharia coalfields of Manbhum. He questions "the coincidence of the short-term conjunction of famines' between 1896 and 1899 with high immigration. Roughly 10, 00,000 people had left Chotanagpur during this period" (Mahapatra 1985: 298).

Other labour-catchment areas according to Chowdhury (1992) were the eastern parts of United Provinces from where the labourers were taken to parts of Bengal, Assam, Bombay, Burma and even to the sugar plantations of West Indies. His study gives the causes of large-scale labour migration from these areas. The author attributes the emigration to institutional factors like decline of handicrafts and commerce, lack of investment by colonial state and the exhaustion of extensive margin in agriculture. Eastern Uttar Pradesh during 1750 to 1850 was a prosperous area and it was because of these specific factors during the later period that a considerable number of people came to be 'precariously placed on a bare minimum level of existence'. They constituted the bulk of migrants who went in search of employment and subsistence (Chowdhury 1992: 41). He states that as a colonial recruit had to undergo a very strict medical test to determine his 'ability to perform hard agricultural labour for a number of years', it was clearly against the interest of the recruiter to recruit a coolie who was in poor health. Thus, "the poorest of the rural poor, comprising the semi-starved, penniless and unworthy of credit, could only have been rare among the emigrants to the colonies and the inland destinations" (ibid: 27).

Allotment of land had remained an important tool for retaining the labour force. Das Gupta (1986) examines the semi-proletarianised nature of the plantation workers in Assam during the colonial period in between 1850-1940. Small plots of garden land were given to the labourers to settle and work in the plantations. Moreover, the time expired workers were settled in the government *khas* lands and were even employed during labour shortage.

As mentioned by DasGupta¹¹ these were the features of colonial capitalism viz. workers twin-dependency on the capitalist and pre-capitalist economy and the externalisation of the costs of the reproduction of labour power. The familial wages were so low that it was not sufficient for a steady reproduction of labour power (Das Gupta 1986: PE-4- PE-5). Planters rationalised low wages on the basis that if the workers got higher wages then they would do less work. And wages were at an appallingly low level so that the whole family had to work. Labour was essentially semi-proletarianised and development of class-consciousness was negligible.

In Assam the wasteland rules were very favourable as land was to be held almost free of revenue by the planters for the first twenty years and assessments were to be made only after the lapse of that period. Requirement of large capital investment prohibited investments by the local inhabitants. The colonial policies were therefore in favour of the planters. Hegemony prevailed in most tea plantations of Assam, which resulted in a hierarchy of, the plantations, the colonial and the metropolitan states.

The legislative measures of the government worked to the advantage of the planters, for example by increasing the land revenues the peasants were thrown out of their own lands. But in 1901, of the total tea plantation labour of 307,000 in Assam proper, only 20,000 (6.6 per cent) were local labourers (Chatterjee and Das Gupta 1981:1862). Chatterjee and Das Gupta (1981) examined the methods adopted by the planters to secure labour in the tea plantations of Assam. They argued that it was not just the objective conditions (breakdown of tribal economy, increase in labour dues, rents, usurpation of productive lands, indebtedness, lack of access to even two 'square meals' a day and so on) that forced them to migrate, but it was the system of recruitment, which was forced and not free. There were various layers of intermediaries like *arkatis*, licensed and unlicensed garden *sardars* and labour recruiting companies functioning within the broader framework of the recruiting business led by the Companies (ibid: 1863).

Unsatisfactory working and living conditions in the tea gardens of Assam during the early period of the industry were the main reasons for workers leaving the industry as is evident from Phukan's (1984) study on the ex-tea garden labour of Assam. Other reasons given were family recruitment

¹¹ See page 13

procedure, love for freedom and other similar sociological factors. He argues that people sought comparatively independent life in rural areas and expected that they would improve their social position by such reversion. The well-knit prosperous social existence of the neighbouring Assamese villages might have been another cause of attraction for settlement in village life (Phukan 1984: 123). His study shows that the socio-economic conditions of the ex-tea garden labour population were not satisfactory. Their social status was lower as compared with the indigenous population. They could not earn much from their farm operations and had to do wage work too.

Likewise in South India too, the colonial state worked in favour of the planters. For example Ramachandran and Maya (1997) examine the setting up of plantations, both tea and coffee in the Annamalai Hills in the Madras presidency during the late 19th century. The coercive measures used by the planters with the help of the colonial state were astounding. The Criminal Tribes Act introduced in the Madras Presidency during 1911 was used by the colonial state to suppress the marginalized groups. The government could identify any tribe or group, as 'criminals' irrespective of whether individual members were criminal or not. This Act came to the rescue of the planters who were facing labour shortage and was implemented on tribes like Dongas, Dasaris¹². Life for these tribals was hard in the plantations. The climate was cold and wet, backbreaking job of either plucking, clearing etc. they were not well fed, clothed and their wages were not paid on time. All these led to desertions and there was a strike in 1916. Thus there was a huge exodus of these coolies. The strikers reported the inhuman conditions of the life of a worker in the plantation. The Government replied that the coolie had left the estates because they were affected by home-sickness and exceptional inclemency of weather.

The Assam planters preferred the aboriginal race from Bengal and Chota Nagpur divisions because they 'could adjust with the work conditions and labour-process' in the tea estates while the colonies recruited skilled labour from Bihar, North Western Provinces and Oudh. In 1890 for instance almost 97% of the colonial recruits came from Bihar, North Western Provinces and Oudh, of which 81% came from the last two regions. The

12 A tribe of gypsies who frequented the districts of Kurnool, Guntur, Nellore, Krishna, Godavari and Hyderabad.

emigrants from Chota Nagpur were mainly Dhangars, Moochee, Kurmi, Baori, Bhumij, Sonthal, Munda and Gwallas (ibid: 1865).

With regard to the conditions in Assam plantations during the colonial period, Chatterjee and Das Gupta (1981) cite from an official document:

"...The Protector's reports abound with instances in which coolies' lives have been in a most unsatisfactory conditions; the roofs leaky, the sides falling to pieces, the floors low and damp, and the raised bamboo framework or *machan*, on which the coolies should invariably sleep, altogether wanting..." The low swampy ground, impure water and want of proper drainage were fertile breeding grounds of diseases. The high rate of mortality was due to cholera and intestinal complaints. Medical facilities were neglected and doctors rarely visited the gardens..." (ibid: 1867).

Behal (1985) highlights the various forms of labour protests between 1900-1930 in the Assam Valley tea plantations. Desertions were frequent and were taken as a 'primitive form of protest' (ibid). The workers expressed it through desertions, forms of resistance like 'assaults', 'riots', and 'intimidation'. There was a 'hierarchy of exploiters', apart from the European planters other Indian staff like the garden *babus* or clerks; *zamindars*, *chowkidaars*, *kaya* or the *Marwari* shopkeepers subjected the labour force to varying degrees of physical coercion and economic exploitation. The workers however struggled with the constraining factors within the plantation set-up. There were restrictions on mobility, enforced isolation and social and physical control. Also the Assamese middle class nationalist leadership in Assam valley showed a lack of concern for the labouring populations (ibid: 24).

At the beginning, plantations were started as a so-called 'enclave' economy; i.e. complete isolation from the mainland. This helped the colonisers and the planters in maintaining the labour force and suppressing any form of organisation of labour. Work was mostly 'gang organised' in small groups with the *sardars*/recruiters working as supervisors of their respective caste/tribe labourers, there was strict vigilance by the *chowkidaars* (guards) on the labourers. This became one of the important reasons for the non-penetration of national freedom movement in these areas. Such studies reflect a uniform picture of cheap migratory family



labour through various legal and extra legal coercive measures, low wages, arduous working conditions, all characterising an 'enclave' economy.

Work and Social Hierarchy in Plantations

One of the salient features of the plantation system of production is the levels of hierarchy which is as follows:

- a) The agents or the absentee capitalists on the top, with the management consisting of a resident 'white' planter and his assistants.
- b) The supervisory staff having the same affinity as
- c) The labouring class who represent the bottom of the hierarchy.

Here the important distinction lies in terms of caste, which was mainly used as a powerful tool to control the labour. Das Gupta says, "Different labour markets exhibited particularistic features and orientation. One aspect of this was clustering of particular social groups-castes/sub-castes, linguistic- cultural groups, community etc in particular industries. Another aspect was the formation and persistence of links between particular social groups and certain jobs and occupations" (Das Gupta 1986: 1783).

Levels of hierarchy in a plantation set-up led to various forms of exploitation especially of the lowest rung of workers. Keeping this hierarchical ranking within plantations in mind, certain sociological studies are reviewed, which although unidisciplinary, have probed into the stratified nature of the working class. This provides a framework for understanding variations in the nature of work and wages within an industrial setting. It also shows the relationship between work hierarchy and social hierarchy, as witnessed through studies in other industries.

Jain's (1970) empirical study on the rubber plantation labour of Malaya focuses on the Tamil migrant plantation workers and the system of social organisation. He distinguishes the plantation as a total institution where the industrial sub-system influences the 'community sub-system'. He uses the concept 'community sub-system' to designate the social relationship of the Indian workforce and the industrial sub-system as the on-work social relationship within the plantations' formal economic

organisation. An important observation from his study is the absence of Brahmins in plantations, which did not lead to the rigidity of the notion of 'purity and pollution', in the plantations. He maintains that the occupational stratification on the estates provided a framework for the social classes.

His study shows that there is no vertical mobility within the estate from the position of a labourer to that of a staff member, *kirani*¹³. It is not possible to explain this fully in terms of the labourer's non-attainment of the requisite educational qualifications. The staff members' children or other relatives usually fill the staff positions. The author 'implies and not asserts' that in appointing members of estate staff the management has considered not only the achieved qualifications of the candidate but also their ascribed ones.

Jayaraman's (1975) study examines factors related to the pattern of emigration to the plantations of Ceylon that contributed to the persistence of caste restrictions and other practices. According to him, caste is seen as 'an organising principle of plantation life'. It was linked to the survival of family and kinship ties and Hinduism among the plantation, which got perpetuated due to the *kangani*¹⁴ system of recruitment in the plantations of Ceylon. Kar's (1981) study on the estates of Mancotta shows the process of assimilation and influence of the tea industry on the life of the tribals. His study is yet another contribution to the social-anthropological studies on plantations.

Bhowmik's (1981) study probes into the different aspects of class formation among the *adivasi*¹⁵ tea garden workers of Jalpaiguri district in North Bengal. The author probes into the larger social system, which creates a heterogeneous social life affecting the 'class formation'. Differences along caste, tribe, and class have led to complexities in class formation. He states that for class formation to take place there is a need for unity not only on the economic front but also in the social context especially with workers having different ethnic background. The study shows the social processes that are involved in bringing about such changes and he therefore argues that change within the plantations system has to be seen in the wider social system.

13 An Asian member of the estate staff.

14 Kangani are recruiters in the South India.

15 Tribal.

Within the plantation structure women are placed in a more marginalized position as some studies in the subsequent section show. An important aspect drawn from the earlier study (1998) is that gender and caste relations have an important bearing on women's position in society.

Gender and Work in Plantations

Durkheim's (1969) understanding of social solidarity through a sexual division of labour is reflected in the planters' policy of family-employment. Durkheim recognizes the role of specialisation and division of labour as bringing in social cohesion. Planters' argument for family employment and lower wages was thus justified. By having female workers it was possible to maintain the male population along with a steady 'reproduction of cheap labour' that otherwise involved high costs for recruitment. Moreover, women were found to be dexterous and patient in plucking the 'two leaves and a bud'. Such an ideology turned out to be favourable in the production system of the plantation economy where whole families including children were employed. This became an important element of a plantation system.

The following sections review studies highlighting the conditions for women workers in the plantations. Their economic role has resulted in some advantages affecting gender relations in the family as a whole. But they undoubtedly are the worst sufferers of triple burden of paid-work, household work and child rearing.

Curjel's (1923) study on the women workers in the industries of Bengal in 1923, for the section on tea plantations says that women's labour was more sought after because of the 'scarcity of male labour' and women were 'handier than men in certain processes' (Curjel 1923: 24). His study shows that conditions were better in the tea plantations as compared to the mills and the coal mining areas. In tea plantations, although a woman earns less than a male worker, a skilled woman could increase her earnings by working overtime and plucking more. In the section on health among the tea plantation labour in Bengal, Curjel observes:

"The average woman worker looked healthy, but these women had real homes, and probably would not come out to work if unwell. Infants on the tea gardens were generally more healthy than in the mill-areas, though a number had sore eyes (conjunctivitis). Difficulty is experienced on a tea

garden in effectively treating an epidemic such as cholera; since the doctor in medical charge of the garden has no control over workers who live in neighbouring *bastis*. The doctors employed on tea estates rarely possess a registerable (sic) qualification, the salary offered being too low to attract better trained men" (ibid: 27).

The health of the child depended on the economic/ financial condition of the family. In tea plantations infant deaths were reasoned out to puerperal septicaemia.¹⁶ She argued that maternity benefits given in the form of money should be substituted with food and medical facilities as the woman usually hands over the money to the men with whom she is living.¹⁷

Engels (1996) through her study locates the position of women in the concept of family-unit in the coal-mines, jute mills and the tea plantations of Bengal in the early 20th century. According to the author, most women left their home villages, like men because of poverty. Men often migrated as a strategy of familial survival while women usually left, as there was no further hope of subsistence at home (Engels 1996: 205). Single women were made to settle as a 'family-unit' with single men to encourage procreation. The planters provided maternity benefits when labour was scarce.

Although the present conditions are better than that of the colonial period, women's role and their earnings are always seen as a contribution to the family budget and not as the income of a single person. Jain and Reddock (1998) have compiled studies of women workers in plantations internationally. It consists of eight case studies on women's socio-economic conditions in plantations of sugarcane in Fiji Islands, tea in India, Sri Lanka, and Cameroon to rubber and other crops in Sumatra, Indonesia. Women's position and their struggle for existence are some of the important elements in these studies.

Studies on South Asian plantations like, Kurian's (1982) work on the women workers of Sri Lankan plantations of rubber, tea, coffee provides a comprehensive analysis of the conditions of Sinhalese and Tamil women

16 Septicaemia- the persistence and multiplication of living bacteria in the blood stream, sepsis: the state of being infected with pus-producing organisms and puerperal means immediately after childbirth. Puerperal sepsis: infection of the genital tract occurring within 21 days of abortion or childbirth. (Nancy Roper: Pocket Medical Dictionary, Longman Group Ltd., Great Britain, 1974)

17 Earlier in Assam plantations, 'single men' and 'single women' were made to settle as 'family units'(Engels 1986).

plantation workers. Tracing their social background Kurian draws out similarities in kinship pattern and differences through women's economic position i.e. their economic independence, utilisation of services etc. Lack of access to their own wages reflects their marginalized position and low bargaining power. They suffer from sexual violence especially on the domestic front.

Apart from housing, education, health facilities, food intake etc. she has integrated factors like income, expenditure and indebtedness, which have tremendous effect on the women. They not only suffer from lower nutritional levels, but loss of jewellery and dowry to pay off the accumulated debts of their husbands and also suffer the violence when the husband objects to any form of protests. Due to the process of *sanskritisation* the male members exerted greater control over the women, as they were free from the upper caste dominance. This brought about a shift in the status as workers and members of the community at large. Kurian observes, "Welfare services are concerned with 'needs' as perceived by the management rather than the real 'wants' of the workers (Kurian 1982: 100).

Konings (1998) in her study of women workers in Cameroon plantations has shown that the 'illiterate' and 'unmarried' workers have succeeded in leading a relatively independent life. Jain (1988) shows from her study of a tea estate in Assam, that in the tea garden labouring community, equal wages helped the women workers to cope with and adjust to plantation authoritarianism. The significance of female labour and marginality of male labour in terms of task allocations on a tea garden reflect the relative loss of male domination in the family. She shows from her study that women workers enjoyed certain inheritance rights to land, being in a tribal society and coupled with equal wages accorded them certain authority in the plantation.

Against this, Chatterjee (1995) argues, that the study negates the fact that women remain marginalized within the plantation's sexual division of labour. Her doctoral thesis with the help of narratives of female workers of a North Bengal plantation shows their struggle and how this struggle remains relegated to the margins of political discourse within the plantation. They may get equal wages but are unable to articulate and thus not participate in the trade unions. She has traced the neo-colonial present and linkages to its

colonial past through the perpetuation of the *maai-baap*¹⁸ tradition in a plantation of North Bengal.

Another study in North Bengal of Bhadra (1992) explores women workers' commitment and attitude to work, their attitude towards the Company as an employer, attitude towards pay and other facilities, attitude towards management and lastly attitude towards their immediate supervisors through a case study of Chandmoni Tea Estate. She has taken absenteeism as an important indicator of commitment. Male workers are mainly absent due to their addiction to liquor, social functions and festivals and illness. In case of women workers, such absenteeism is mainly due to their engagement in household work and looking after the children. Her study shows that women have taken up employment out of economic considerations and not to fulfil their individual needs and are more committed to work. She has classified plantation work according to sex.¹⁹ Women workers are found employed more in the garden than in factory operations except sorting.

She has touched upon the issues of wages, housing, crèche facilities, health, sanitation and educational facilities in her study. For instance she shows that the women workers did not prefer to leave their children in the crèche as the atmosphere was bad and the management did not supply milk, food and water properly. With regard to the health services, scarcity of medicines was common in the garden dispensary.

A study that throws some light on the health of the female plantation workers is the Report of the Task Force on Health on self-employed women (1988). It provides a list of occupational related problems like inhalation of dust, exhaustion due to heavy work-loads and high environmental temperatures and humidity; lack of health and medical services, and working barefoot leads to problems of lung infections, bronchial problems,

18 *Maai-baap* literally refers to both parents. "Managers obviously claimed that they were in loco parentis to the workers. The worker was a 'child' and was thought incapable of 'rational', 'adult' behaviour. He could easily be led astray; strikes, for instance, were always seen as the handiwork of 'ringleaders' or 'outsiders'. He was unreasoning and unpredictable; managers often expressed surprise at the suddenness of working class protest. The worker was therefore childlike. A typically parental statement, which Sir Alexander Murray introduced into the body of the report of the Committee on Industrial Unrest (1921), ran as follows. Note the key words: 'Labour, in its ignorance, is certain to make unreasonable demands which could not be granted without destroying industry, but firmness in refusing such demands needs to be mingled with much patience and consideration'" (Chakraborty, 1989: 163).

19 For the table, sex-wise classification of plantation work, see Bhadra, M. 1992: 90.

physical stress, malnutrition, helminthic infestations,²⁰ dysenteries, contact dermatitis,²¹ and other contact diseases. Heat strokes, high incidence of maternal and child mortality are some of the other outcomes.

For the tea pickers working with unsafe chemicals, unsafe work terrain results in problems like insect and snake bites, allergies, occupational asthma, irritation of bronchi, pesticide hazards, accidents and falls due to steep slopes, pain in back due to carrying heavy loads etc. Recommendations for its eradication were also made in this report like regulation of hours of work, provision of personal protective equipments, health and medical facilities, warning and training about the use of chemicals etc. Occupational health is an important aspect that requires further probing and primary importance should be given for the implementation of such recommendations.

There have been no specific studies on occupational health of tea plantation workers, but some generic and recent studies highlight on the workers socio-economic and health conditions. In India, with the implementation of the Plantation Labour Act, 1951 and other legislations, the post independence period witnessed certain changes or improvements in the conditions of labour but field realities present a different picture.

Empirical studies on tea plantations in India

Sarkar (1986) articulates that although income has increased, the standard of living too has simultaneously gone up, making the workers unable to save.²² Bhowmik et al. (1996) study shows a marked contrast between the tea plantations of South India and that of the North East India (West Bengal and Assam) based on the parameters of wages, housing and other welfare amenities. This study has been undertaken keeping the Plantation Labour Act in mind. Such difference according to Bhowmik is because of the attitude of the management with regard to better provisioning to the workers in the tea plantations of South India.²³ The health services were inadequate and workers were mostly dependent on the part-time

20 The condition resulting from infestation with worms.

21 Inflammation on the skin.

22 Sarkar's paper on 'Some Sociological Theories of Poverty: A case of Plantation Labour in Hill Areas, in [R. L. Sarkar and M.P. Lama (Ed.): The Eastern Himalayas: Environment and Economy, Atma Ram and Sons, Delhi, 1986] on the basis of empirical evidence concludes that although there is a rise in income of the workers the cost of living has simultaneously increased and low or no savings on the part of the workers.

23 Discussion with Dr. Bhowmik, Delhi.

doctors. These provisions were not in compliance with the rules of the Plantation Labour Act.

A path-breaking report is of the Fact-Finding Team of Centre for Education and Communication (CEC, 1999) on the conditions of tea plantation labour. This report exposes the deplorable conditions under which the tea plantation workers of Assam and Bengal are living. Based on few tea gardens, it illustrates how various welfare provisioning has been neglected by the management. The manner in wage fixation, lack of proper housing and sanitation, collapse of the company's health system, prevalence of diseases-malaria, hookworm, gastro-enteritis, and even cholera. Apart from such conditions, increasing canalisation of labour, thus reducing permanent workforce, increasing fragmentation of unions along ethnic lines. This report cites the need for a larger study on the socio-economic conditions of the plantation workers. It enumerates a list of recommendations for the further betterment of the tea industry.²⁴ In its study of Singtam Tea Estate in Darjeeling the report states 'shabby conditions of the dispensary', 'the toilets provided by the management, which were covered with weeds, loose soil and few pieces of bricks and rotten wood littered here and there' (CEC 1999: 22).

With a case study of a tea estate in Darjeeling, Rai (1995) compares the existing field realities with the facilities provided under the Plantation Labour Act. His study, based on calculations of costs of benefits provided by the management show that a worker enjoys some benefits over and above the daily wage. For example a plucker got Rupees 7.75/Rupees 7.8 as benefits more than the wages per day. But when it came to family benefits none of the benefits were provided except housing facility, which covers 67% of the total requirements. Likewise since medical benefits, subsidised food, firewood and tea are not provided a family instead loses a benefit of Rupees 11.84 per day (Rai 1995: 15).

Das and Banerjee's (1982) study based on four tea gardens of West Bengal shows that 65% of tribals earn their major livelihood by working in the tea gardens and 20% by working in the factory as unskilled labourers. Their study points out that, though educational facilities are provided for the workers' children by the management, the workers do not care to purchase

²⁴ For details see CEC (1999), pp 61-63.

books, slates, pencils, etc. for their children. Also the younger generation shows eagerness to work in plantations because of cash wages etc. This can be attributed to lack of alternative employment in the tea plantations. The authors also cite that there is a lack of social mobility among the tribals through education. Such similarity is seen in Jain's (1970) study on the Malaya rubber plantations.

An important sociological aspect from Das and Banerjee's study is the breakdown of the traditional joint family into a nuclear family, along with the break down of traditional interpersonal relationships among close relatives. Divorces and remarriages are a common occurrence. On the question of prevalence of specific diseases like gastro-intestinal troubles, venereal diseases, tuberculosis etc prevalent in the plantation, the authors blame "moral laxity and heavy addiction to intoxicants" as reasons (Das and Banerjee 1982: 81). There is a need to look into the larger context for the prevalence of such diseases in plantations instead of simply attributing to such reasons. Studies specific to health aspects have been undertaken by some scholars, on the tea estates of West Bengal and Assam.

Workers' Health and Health Services in Plantations

A study by the International Labour Organisation (1987) provides detailed description of the situation in plantations worldwide with regard to the legal provisions stipulated for the plantation labour. An important aspect, which this study reveals, is the 'relationship between housing and the health status of the workers' (ILO 1987: 162). The cause of high incidence of respiratory diseases was with regard to working and living conditions. Plantations located at high altitude, with damp dwellings and poor ventilation provide an environment conducive for diseases such as bronchitis, respiratory infections, asthma and pneumonia. The study associates to several factors like number of rooms, size, number of occupants, type of cooking facilities, and water-heating and space systems. With firewood or other biomass as the main form of household fuel, and if its use is mainly in open fires in badly ventilated rooms, the emissions contained in the smoke can contribute to a high incidence of respiratory diseases.

Sivaram (1996) in his study of a Sri Lankan plantation has observed that two categories of illness viz. respiratory and water borne account for 60-

70% of the diseases prevalent among tea workers in the sub-continent. He observes that these diseases are also major contributors to absenteeism, sickness benefit costs and expenditure on drugs in estates. From his study, anaemia showed a reported incidence among plantation workers of between 30-50% (taking 11 grams per cent for women and 12 for men as the standard haemoglobin count) (Sivaram 1996: 25). His study identified anaemia as the major factor of ill health, maternal death and poor productivity. He cites a study of Indonesian rubber tappers, which showed that 'the productivity of non-anaemic workers was 20% higher than their anaemic counterparts' (ibid).

A Report on the Conditions of Tea Plantation Labour (1999) in Assam and North Bengal reiterates that the governments of West Bengal and Assam have not determined and fixed the minimum wages for the tea plantation workers (Sarma et al. 1999: 58). Regarding housing, one of the broad findings was that the managements in both the states had stopped construction of houses. There is also a high level of casualisation of workers creating a steady labour surplus. Regarding health, tuberculosis in endemic proportions was reported. Sanitation, basic water supply was lacking. These factors resulted in an increase in water-borne diseases. This study has highlighted the deplorable conditions in the tea plantations.

An important aspect pointed out by Sarkar (1986: 82-91) on 'The Criteria of Wage Fixation for Tea Garden Workers' with regard to health is that none of the wage-setting institutions, for example the Tea Board or the Planters' Association has taken any initiative to calculate the net intake of calories as recommended by Aykroyd²⁵ for an average adult worker in tea gardens. Sarkar says that non-vegetarian diet is generally more expensive than vegetarian diet of the same calorific value. Tea growing workers in the hill areas are generally in the habit of taking non-vegetarian diet. Considering the cold climate of the Himalayan regions, the consumption of eggs, fish, meat, milk, tea and sugar is an important dietary need. Fixation of minimum wage must be revaluated considering their dietary needs, he says.

25 Dr. Aykroyd has given an adequate diet for the coal mine workers at the 15th Indian Labour Conference, for details. See Lama and Sarkar (1986) p 89.

Health services are an important component of the welfare amenities provided by the management. Recent sociological studies on the health status of the plantations workers in India provide a gloomy picture. Though studies on health per se are extremely limited, empirical studies of Bhadra et al. (1997) and Sharma (1997) gives an overview of the disease and the health service utilization patterns especially by the tea garden workers of West Bengal and Assam.

Two systems of medical treatments exist in the plantations, the traditional and the modern health care. Sharma (1997) in his study of cinchona plantation workers show that despite the availability of modern health services the people tend to visit traditional healers.²⁶ His study on the cinchona plantation workers in Darjeeling gives the utilisation pattern of health services according to the caste composition of the workers. His study shows that the Bahuns²⁷ first option was to refer a doctor while the rest of the castes visited their respective traditional healers. While certain groups like the Chhetri, Newars, Mangars, Lepchas visited the doctor as a second option after the respective (caste) traditional healers. Economic aspect or the availability and accessibility of the health services for the workers could be the reasons for such utilisation.

Bhadra and Chakraborty's (in Bhadra and Bhadra 1997) study on the health culture and the change in the medical behaviour of the tribal plantation workers of the Terai region of West Bengal shows that 70% of the tribal population consult modern medical practitioner. They attribute it to the introduction of western medicine by the British planters. Their study highlights the poor living conditions in the plantations where rooms were not enough to accommodate a family of four members. Domesticated animals are also kept under a separate shed near the living room or on the *verandah*²⁸ for fear of cattle lifting. This according to them poses threat of contagious diseases. Also sanitary latrines are non-existent and the workers defecate in the fields. Wearing shoes was common among adults but not so common among children. Effective drainage system was also non-existent.

²⁶ In a Nepali society, the traditional healers are called dhami, jhakri. Details are dealt in the later chapters.

²⁷ Brahmins. For a detailed background of the Nepali caste system refer to Chapter II, p 12

²⁸ An open space in front-within the house

The *nullahs*²⁹, which surround the houses, are mostly choked during the rains. Water accumulated in these *nullas* serves as breeding ground for mosquitoes and germs and to a host of diseases. The authors argue that if the modern medical services were efficient then the workers would not resort to their traditional healing practices.

Likewise Kar's (ibid) study based on a decade of fieldwork in some tea plantations of Assam highlights the link in disease pattern and poor sanitation. He shows the relation between poor sanitation and the type of diseases. Absence of proper drainage arrangements has converted many labour lines in to pigsty with accumulation of filth and muck resulting in a number of diseases. During monsoons the situation worsens and the *kuccha* quarters with thatched roof are in a dilapidated condition. Due to water logging in the labour lines houses become damp leading to a number of ailments. Gastro-enteritis, respiratory trouble, rheumatism, skin diseases, anaemia, diarrhoea, dysentery and gastric ulcers etc were some of the common complaints of the workers. He gives reason to "the unsanitary conditions and habits; frequent use of cheaper variety of synthetic garments is also a major cause of skin disease among them" (ibid: 294). His study shows that despite Family Planning Programme, hospitalisation was the last resort by the workers to go for delivery. The reasons were the reluctance to go to hospitals for delivery and that they were bound by traditional beliefs and practices.

Chakraborty (ibid) although observes a positive attitude among the tea plantation workers in respect to adoption of modern concepts and methods of family welfare. His study examines the Knowledge Attitude and Practice among the eligible (married women of 15-45 years of age) tea garden workers in respect of family welfare. His study shows that literacy influences the adaptation of the type of family planning methods. A rise in literacy levels shows a corresponding rise in acceptance of spacing or temporary methods where 79.6% of the respondents preferred a spacing of birth for three years.

Roy's (1991) study on the health status of the labourers belonging to the Oraon tribe in north-west Bengal was based on the parameters of subjective well being, reported ailment symptoms and objective measures

29 Drains usually temporary in nature running alongside the coolie lines.

through Infant Mortality Rate. He draws out two important points; "firstly, though the individual feels ill (sometimes they do not feel ill despite having the illness), the society does not permit them to become sick. This may be due to economic hardship and overburden of children. Secondly, the endurance or the tolerance limit of these people is so high that these afflictions do not bother them" (Roy 1991: 373). He observed that poor child-rearing practices, unhygienic habits and the mother's health had a great influence on the infant mortality.

Raman's (1994) study on child labour in tea plantation of northeast India is important as it shows the preponderance of child labour (91.7%) especially during the peak season as casual labour. This was a clinical study. 450 working and non-working children were tested for haemoglobin and parasites and other signs of ill health in their stool. Their height, weight, arm circumference and in some gardens only head circumference were measured. Her study shows that 73.3% of children were anaemic, 5.8% were suffering from life threatening anaemia, and 40% were malnourished on the basis of index of malnourishment. Their haemoglobin levels were also low. They were carriers of ascaris (roundworm), hookworm, threadworm, whipworm and amoebic infections. Tapeworm was common. Her study shows the relationship between low wages and lack of alternative employment making the children's income as a supplement. She adds a note of caution that the non-working children fared consistently worse than the working children.

Krishnamurty's (1995) on the Health and Medical Care in Plantation Sector states that there is no recent data on the pattern of mortality in the tea growing districts of West Bengal and Assam. According to the report, health and educational services are lacking in these regions. He cites a report which states that poor educational levels among the workforce, increasing problems of drug abuse and alcoholism, unhygienic living and working conditions has led to a high incidence of communicable diseases, parasitic infections and malnutrition in these regions (Krishnamurty 1995: 22). While in South India, health services in plantations of members of United Planters Association of South India (UPASI) show standards, which are above the legal requirement in terms of hospital beds, medical officers and paramedical staff. Also, "...infant mortality rate in plantations applying

the Comprehensive Labour Welfare Schemes (1971) is less than half of All India level of 96 per 1000" (ibid). He further warns that in the case of smaller plantations in south, which are not members of well-organized Planters Association, there is a yawning gap between the statutory provisions and field realities.

From the literature reviewed in the context of plantations it is evident that there are different set of studies. a) Focussing on the conditions i.e. the recruitment processes, working conditions, mortality among the immigrant labour both in India and overseas, b) empirical studies on aspects on the present conditions of the workers in respect to the provisions under the Plantation Labour Act (PLA), c) sociological and gender-dimension studies on aspects of social composition, women's position in plantation work, their conditions of vulnerability and gender-relations within the family and so on, d) studies on the health status of the workers in plantations, the morbidity patterns, utilisation of health services both formal and informal. Most of these studies have discussed indirectly the interlinkages between the socio-economic, working and living conditions and health.

These above studies prove that there is a paucity of data particularly on the health status of the plantation workers of Darjeeling hills. Studies concentrate mostly on the economic aspect of the tea industry. Although this is of primary importance as the health of the workers is also dependent on the health of the tea industry. Economic boom of Darjeeling tea industry in 1986 (Sharma 2000)³⁰ did not reflect on the welfare of its workers.

Selective studies of tea gardens have mainly highlighted the type of diseases and the health service utilisation pattern among the workers. These studies have shown associations between housing and health, sanitation and health and work and health. Such conditions are reproduced in the type of ailments like respiratory problems, asthma, bronchitis, diarrhoea, dysentery, anaemia and so on. Empirical studies in plantations of Assam and West Bengal have shown that despite welfare measures, the workers live in houses which have not undergone repairing for a long period, poor

³⁰ Sharma argues that even during the economic boom in 1988 the workers were unaware of the increase in profits else their demand increases. See Sharma, 2000. according to an official of the Labour Department, Siliguri, (Interview, February, 2001) the tea production in 1998, was solely due to the climatic factor. There was even distribution of rainfall unlike the years 1994-'96 which experienced dry season.

sanitation etc. Inadequate health services results in the workers dependence on the traditional healers. These are strongly associated with the conditions in which they work and live.

Thus each set of studies seeks to reveal a specific dimension of the conditions of the working class, which are directly linked to the understanding of health vis-à-vis wages, working, living conditions and other factors. Another important aspect of this inequality is social hierarchy, which further increases the vulnerability of a population in terms of access to basic amenities etc. Studies reviewed in the Indian context of plantations and other industries show that labour was mostly migrant belonging to the artisan, service caste (scheduled caste) and tribal population. Occupational mobility was restricted for plantation labour.

Conceptualisation and Methodology of the Study

The ongoing study attempts to understand health from a holistic perspective as a socially produced phenomenon in a plantation set-up. The “focus of disease shifts from the host or the individual to social classes defined in relation to production and to the way production is organised. To say illness is socially produced is to say that the social relations of production and the forces of production determine disease patterns and health services” (Turshen 1989: 17). Every kind of production system entails a definite set of social relationships existing between individuals involved in the productive process.³¹ “Health is contextualised within the power relations of race, caste, gender and class” (ibid: 19). Turshen reiterates, “.... the vulnerability of a particular group of people is a socially determined historical phenomenon” (ibid). The economic and the social relations of production are important for our conceptual understanding of a plantation structure. The emphasis is therefore on recognising the relevance of the entirety of social and economic life in determining patterns of health and illness.

A plantation society is characterised by a hierarchy comprising the office staff, supervisory and technical and the largest bulk of the daily-rated

31 To quote Marx, “In production men not only act on nature but also on one another. They produce only by cooperating in a certain way and mutually exchanging their activities. In order to produce, they enter into definite connections and relations with one another and only within these social connections and relations does their action on nature, does production, take place” (Quoted in Giddens Anthony: Op. cit: 35).

male and female workers at the base. In this study we attempt at delineating the differences across different levels of hierarchy keeping the factors like wages, occupation, caste, education, household income, living conditions like housing, sanitation, water supply, diseases complaints, utilisation of health services etc. Income (as an independent variable) is one of the determining factors for health, as mediated by access to food security, housing, access to welfare services, social opportunities etc. Wages along with the total household income determine the living standards of the workers.

Historically, occupation has been the principal indicator for statistical measurement and analysis. Occupation refers not only to the designation attached but also to the type of work. Different occupations entail different health hazards. Each activity has a set of hazards associated with it. A factory worker for example can develop respiratory problems due to dust, lack of proper ventilation etc. "Health problems can be both occupational and non-occupational and their interrelationships have to be recognised" (Sivaram 1996: 11). The nature of work at different levels of the hierarchy and its implications for the health of the workers are examined.

Location of the Study

North Bengal geographically is divided into the Terai and the Hill regions. There is a climatic difference between these two regions, which is reflected in the epidemiological patterns. The former is physically characterised by plains, where malarial fevers are common, while respiratory problems are more common in the hills. It is important to mention the geographical difference between these two regions as they differ in altitude, climate and therefore the epidemiology and health hazards are completely different. Studies on health of plantation workers are mostly limited to the Terai region of North Bengal although a study has specifically looked into the prevalence of tuberculosis in Darjeeling hills.³² Therefore it is not the malarious tract of the Terai region, which is the focus of this study, but a region with a different set of illnesses like tuberculosis, respiratory problems, rheumatism and other associated illnesses.

32 Chatterjee B. P., Majumdar P. K. and Ganguly P. K.: A Study of Pulmonary function in tea workers in Darjeeling (West Bengal) with special reference to their Occupation, Indian Journal of Occupational Health, Vol. 35, No. 1, January- March 1992: 1-13.

Rationale of the Study

The present study builds on the earlier study that had explored the association between socio-economic conditions of the women workers and their health in a tea gardens of Darjeeling hills. An important aspect of this study is the social composition of the workforce. A conscious effort was made to choose a garden that had a 100% Nepali population. Therefore workers residing in the tea garden were Nepali-speaking, unlike the mixed population of tribal and other ethnic groups including Nepalis in the plantations of Terai and Dooars³³ region in North Bengal. Phuguri Tea Estate is one of the oldest tea gardens established in circa 1870s. This helped in strengthening the historical essence of the study. Accessibility, location etc were some of the important factors considered in choosing the area. Therefore keeping the plantation work and social hierarchy in mind, this study through a historical perspective seeks to understand health of tea garden workers in Darjeeling hills.

Objective of the Study

To examine the inter linkages between working, living and health conditions of tea plantation workers.

The Specific Objectives are as follows:

1. To examine historically the socio-economic and political factors that reinforced the plantation labour in Darjeeling.
2. To examine historically the working, living and health conditions of the tea plantation labour in Darjeeling.
3. To examine the welfare interventions after independence for the plantation workers specifically in Darjeeling.
4. To explore through a case study the present conditions of work, living and health among the tea plantation labour force.
5. To gain insights into the workers coping mechanisms during crisis and the role of the trade unions.
6. To explore the workers' perceptions of health in relation to work, wages, food security and the utilisation of health services both formal and informal.

³³ The researcher has used the spelling Doars. Differences in spelling in the later chapters is because it is used as spelt in the respective reports or studies wherever referred.

Research Design

In this study the objective is to highlight the conditions of the workers in a tea garden. It shows the processes involved in the formation of tea plantation in Darjeeling vis-à-vis socio-political history, push-pull factors, labour recruitment methods, socio-demographic profile etc. Due to differences in the geo-political and social histories from that of Bengal (plains) and Assam, the area-Darjeeling is introduced using primary and secondary sources. Parallels are drawn from Assam, the Doars and Terai areas of Bengal, to differentiate working, living, health and welfare conditions of the plantation workers during the colonial period.

Keeping this historical background in mind, Phuguri Tea Estate in Darjeeling is used as a case study to investigate the interlinkages between the above-mentioned factors. Such a study will act as a window to understand various factors that interplay in understanding health among the tea plantation workers.

Further, an intensive study on the implications of work on the health of the workers who are directly involved in tea production viz. the female pluckers and the factory workers, the daily-rated male workers, which include the sprayers, and factory workers is carried out through an exploration of workers' perceptions, regarding:

- i. Relationship between nature of work, wages and health
- ii. Relationship between food intake, illness-complaints with their working conditions.

The workers perceptions of their lives and their aspirations living in a tea estate are captured through interviews, group discussions and observation during fieldwork further dealt in the methods used for data collection. Oral narratives have captured the perceptions of the earlier generation on the conditions of labour, health, access to food, nutrition, and health services.

In order to get some idea of the causes of death we have used available data of a period of two decades from the local dispensary. This data was then used to corroborate the self-reported illnesses and causes of death as given by the workers. The causes of death are itself indicative of the socio-economic conditions. Income, nature of work, food security etc are some of the important indicators that were explored to explain the differences in

morbidity across the levels of hierarchy. This relies primarily on lay or subjective reporting of both mortality and morbidity. We have not undertaken any clinical assessment to verify the subjective reporting.

Time Frame for the Study

To conduct the study, keeping the above objectives in mind the time period was divided into two phases; two months of pilot study and six months of fieldwork. In the former, gaining familiarity of the area, rapport-building, pre-testing of the interview schedule was conducted after selecting the universe of the study. In the second phase, the main fieldwork was conducted with the workers using the interview schedule.³⁴ In the interview schedule some of the aspects covered were income, education, family size and caste, and, basic amenities like housing, sanitation, health conditions, health services and social support systems. Group-discussions were conducted with different categories of workers for example the factory male and female workers, the pluckers, the sprayers and so on. Interview with key informants was conducted to gain further insights in to the study. The interview with the management was accomplished after the completion of the entire fieldwork to avoid any limitation to this study.

Area of Study

This study is conducted in Phuguri Tea Estate of Darjeeling district of West Bengal. This area is divided into two divisions-*Paschim* and *Poorva* Phuguri. The area of study falls in *Paschim* Phuguri, which comes under the Mirik Block and Kurseong as its sub-division. The following tables give the population break-up of Phuguri and Mirik. In Mirik the demographic profile is divided into the Block and the Municipality area.

Table No: 1.1

Population of Mirik

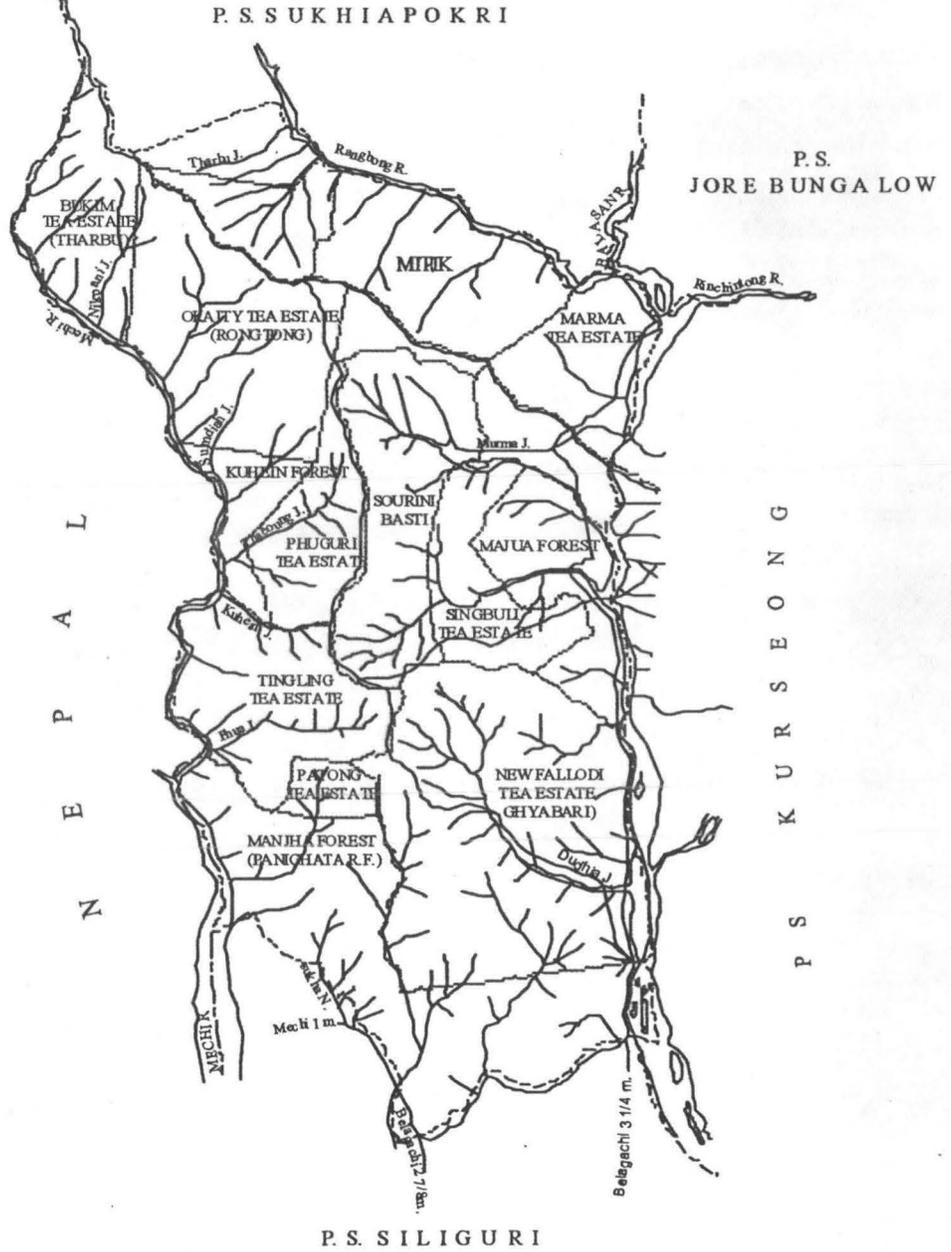
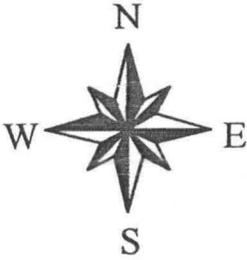
	Population		Total Population
	<i>Male</i>	<i>Female</i>	
Block	21,095	21,135	42, 230
Municipality	4, 582	4, 520	9, 102
Total	25,677	25,655	51,350

Source: Calculated from the Census, Mirik Block Office, Mirik, 2002

³⁴ See appendix no. V.

TEA ESTATES

MIRIK BLOCK (DISTRICT DARJEELING)



Not to Scale

Table No: 1.2
Population of Different Areas in Mirik

Place	Male	Female	Total
Okayti T.E.	1481	1535	3016
Bukim T.E. (Thurbo)	2213	2119	4332
Phuguri Forest	30	39	69
<i>Paschim</i> Phuguri	1085	1136	2221
<i>Soureni Basti</i>	2035	1967	4062
<i>Mirik Khas mahal</i>	2013	1929	3942
Murmah T.E.	1402	1412	2814
Manju Forest (Singbulli)	76	65	141
<i>Porva</i> Phuguri	519	528	1047
Tingling T. E.	753	742	1495
New Follodi T.E. (Gayabaree)	2072	2115	4187
Pootong Tea Estate	1070	1068	2138
Panighatta (Barakothi)	99	98	197
Manja Forest	13	16	29
Lohagar T.E.	951	969	1920
Lohagar Forest	12	2	14
Rangamohan	252	264	516
<i>Bara Chenga</i>	785	776	1561
Panighatta	2264	2365	4629
Panthabari	407	426	833
Singbulli T.E.	1563	1564	3127
Total			42230

Source: Census of Mirik Block-2001

The map of Mirik (1929) overleaf shows the different areas including the tea estates.

Table No: 1.3**Population of Phuguri, 1991 and 2001**

	<i>Male</i>		<i>Female</i>		<i>Total (male and female for each year)</i>	
	1991	2001	1991	2001	1991	2001
<i>Paschim Phuguri</i>	903	1085	913	1136	1816	2221
<i>Poorva Phuguri</i>	467	519	507	528	974	1047
Total Population					2790	3268

Source: *Census Report of Mirik Block Office, Mirik, 1991 and 2001*

Phuguri Tea Estate comprises of 427.41 hectares, including the Mechi division³⁵. The area under plantation in Phuguri is 71.83 hectares and in Mechi division it is 155.85 hectares. During the course of fieldwork, the land man ratio in Phuguri was 1:3.5 i.e. three and half persons for one hectare of land. The actual labour strength in terms of land man ratio should be 228 in Phuguri division but total strength is more, as some workers came in from Chandura.³⁶

Phuguri Tea Estate was established in and around 1870's. It is quite evident that the bushes are old. Only 15% of the tea bushes have been replanted.³⁷ As such the quality is deteriorating and total production is declining.³⁸ Tea produced here is of orthodox Chinese variety. The bulk of the tea produced in Phuguri goes directly to Calcutta for auction where the prices are determined by the buyers' taste.

Universe of the Study

The permanent workforce of Phuguri Tea Estate comprises of the office, field and factory supervisory staff, other monthly-rated employees (O.M.R.E.) and the main bulk of daily-rated workers. This is the main

35A larger division of Phuguri Tea Estate (which has not been covered for the study)

36 Adjoining area of Phuguri. Bimal Pradhan, an office staff of Phuguri T.E, gave this information.

37 As informed by the Garden babu, Phuguri T.E., 2000.

38 See table in appendix no.1 on production and rainfall in Phuguri T.E. Data gathered from Phuguri office, per kind favour of Khagendra Khati, factory babu.

universe of this study. As the entire workforce has been selected for our case study, no sampling method is employed. This encompasses all levels within the plantation hierarchy in order to achieve the objectives mentioned earlier. The unit of the study is the worker both male and female. The following table depicts the distribution of workers.

Table No:1. 4
Total Workforce of Phuguri Tea Estate

Male workers	78
Female workers	118
Staff and sub-staff	40
Permanent Tea Workers ³⁹	5
Total Workforce	231

Source: Phuguri Tea Estate Office, 2000

Types of Data

For achieving the objective of this study both quantitative and qualitative approach are used. Data that could be quantified like wages, household income, education, caste composition, living conditions like housing, sanitation, water supply etc. are used to provide an overall background of the study. Qualitative data were gathered mainly from secondary literature and field work dealt in detail in the following sections.

Sources of Data

Primary Sources

Primary statistics were gathered from Census Books, District Census Handbooks, Gazetteers, annual reports of tea estates and other relevant government documents/ reports. Archival records and other relevant documents were referred to learn about recruitment system, social background, mortality, health services, welfare amenities etc. It was conducted in National Archives and Teen Murti Library in Delhi and at the Calcutta National Library. As archival reports were more specific to the plantations of Assam and less on Darjeeling, a lot of reliance is given to the

³⁹ These workers work only within the factory all the year round.

oral narratives of the older generation at Phuguri Tea Estate. The Secretary of the Darjeeling Planters' Association cited the reason of non-existence of documents of Darjeeling hills to a landslide that occurred a few decades back, which washed the entire office of the Darjeeling Planters' Association at Darjeeling Planters Club.

Secondary Sources

The secondary sources include a) reviewing relevant literature, both for the theoretical and conceptual understanding of the study. b) Various publications of the central, state governments with regard to the plantation industry, c) publications of international bodies like that of the International Labour Organisation d) reports and publications of various associations connected to the tea industry, like the Tea Board, Darjeeling Planters Association (DPA) and so on e) reports prepared by research scholars, universities etc.

Methods and Techniques Used

For the primary sources regarding official and other documents, the methods used were the analysis of the historical records, documents, reports of the Assam and the Darjeeling tea plantations by using the technique of content analysis of such documents. Reports highlighting on the workers wages, housing, health were referred to show the conditions existing during the colonial period. Accounts by official bureaucrats, planters are also used in this study.

For the primary data collection, the field work was done at two levels. First, a brief pilot study in Phuguri Tea Estate was conducted. This helped in assessing the nature and problem of the study. This stage involved at first seeking permission from the management, selecting the units for the study by drawing out the list or categories of the population (universe of the study) to be interviewed. Brief interviews were conducted in order to capture insights on issues of health etc with the resident-Auxiliary Nurse cum Midwife (ANM)/Multi Purpose Worker (MPW), traditional healers and the dispensary staff. For current organisational and workers' issues, interviews with the trade union leaders, management, village elders and so on were conducted. Rapport building with the workers and developing familiarity with the area was also a part of this initial survey.

The main fieldwork comprised of conducting a **survey** using an interview schedule covering various indices like wages, living conditions, occupation, household income, education, caste, specific occupational complaints, utilisation of health services and so on across the entire category of workers in the plantation hierarchy. In a plantation as mentioned earlier, there is a hierarchical work structure. Keeping this hierarchy in mind and the conceptualisation that work and social hierarchy reflect access to basic amenities and health status this study was carried out. Survey method helped in drawing a link between sociological and epidemiological methods. An important dimension was the question of availability and accessibility of health services offered in the plantation. Available means, when the worker knows the kind of services that are there but it is accessible to only when the worker can actually obtain (accessible) definite services from it when required. Thus interviews of the 231 workers with the help of an interview schedule were conducted for the quantitative dimension.⁴⁰

For the qualitative dimension, **indepth interviews** were conducted of the workers who were directly linked to tea production. The concerned issues are already discussed in the research design. Case study method was used to understand the interrelationships between such processes of work and health. **Interview with key informants** was undertaken at various levels. At the managerial level the manager, the assistant manager of the factory too were interviewed. During the course of fieldwork, there was no field manager (who supervises field work) employed. Trade union leaders both of the Himalayan Plantation Workers' Union and the Communist Party of India (Marxist), i.e. the CPI (M) were interviewed during fieldwork. As tea gardens were recently incorporated into the Panchayati Raj the ward members too were not left behind.

Few senior residents of Phuguri were contacted to grasp the local politics in the tea garden. Apart from such interviews in Phuguri selective interviews were taken of the state and the district level of the government functionaries' viz. officials of the Labour Department and Mirik Block Primary Health Centre and Sub-Centre.

⁴⁰ See appendix for the interview schedule.

Indepth interviews with the older generation of workers in the form of narratives threw insights into the history of the region, work conditions, family structure, food access, epidemics, amenities etc. This helped in substantiating the archival research.

Group Discussion was an important method used to capture the perceptions and experiences of workers, which provided further qualitative insights. Workers were divided into small groups, for example, factory women workers engaged in sorting, the daily-rated male workers involved in spraying, the tea makers working in the factory, pluckers etc. This helped in understanding the occupation related hazards and the workers' perception regarding these and their coping mechanisms. Sets of group discussion also provided valuable insights into their income and expenditure patterns, the issues on work conditions as the workers viewed on health, causes of ill-health, their understanding of the linkages of these factors. Questions of access to health and welfare services and their perceptions regarding these were evocatively captured. This method helped in observing the interactions between the respondents. This qualitative information provided depth to the quantitative survey as well as acted as a cross check.

Non-participant direct observation was another method used for strengthening the qualitative data. The technique of observing unstructured, and making field notes, helped in gaining insights into the process of work for example the operations at the factory, field which involved plucking, pruning, spraying, hoeing and so on. Also the areas like the dispensary, crèche, sub-centre, the Integrated Child Development Services (ICDS) centre, and the faith healers were some interesting observations made during the course of fieldwork. During house visits certain behavioural and social-relationships were observed.

Data Analysis

Keeping the conceptualisation and the research question in mind, the data collected with the help of an interview schedule was separated into quantitative and qualitative data. Certain qualitative data that could be quantified are also taken as variables for the analysis. Occupation was used as a base to draw out trends with regard to occupational related-complaints, health service utilisation patterns, living conditions etc. The quantitative data was coded and tabulated to draw out certain statistical inferences and

to establish correlations between variables such as income, occupation, housing and health status.

Qualitative data was collected based on the perceptions of workers. This was possible through the interviews along with the continuous interaction with the workers during work. Interviews with the key informants like the compounder, the midwife, the traditional healer (*jhānkri*) and others are incorporated to provide a background of the health conditions of the workers. Interviews with the shopkeepers and local inhabitants reflected the relationship between the income and the expenditure of the workers.

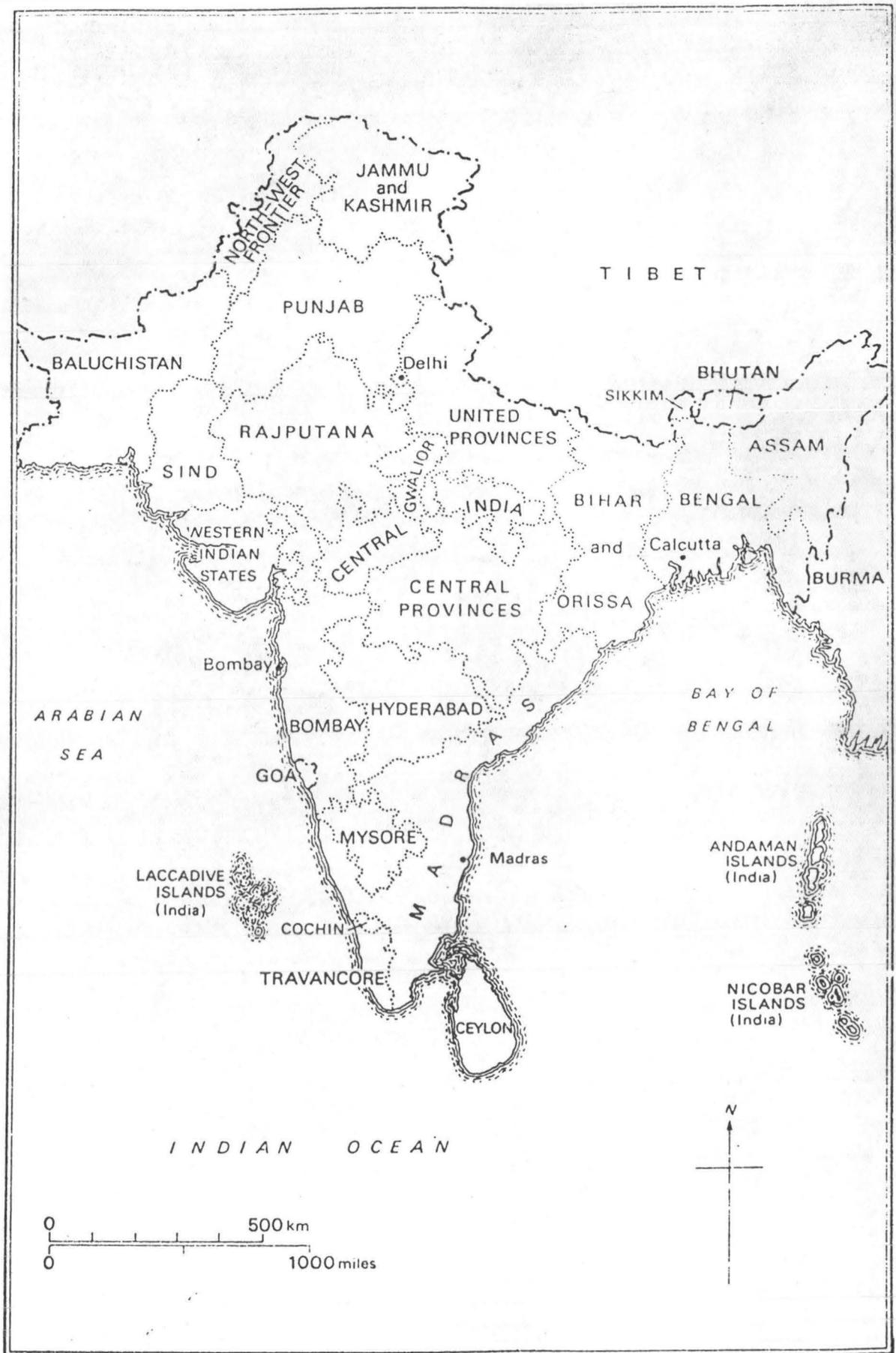
An important indicator of the population, regarding the health status is the mortality and morbidity data, which is described in the subsequent chapters. Data on mortality and self-reported morbidity of the respondents was used to draw out the epidemiological profile of the area. Certain trends are illustrated from the mortality data gathered from the death record book of the dispensary at Phuguri Tea Estate. Reported infant and child deaths collected from the respondents, reflect the cause of such deaths. Thus the historical data and the present field data are used to corroborate and provide insights into the epidemiological differences within the tea-growing areas.

Limitations of the Study

The study is an indepth study of a tea garden; therefore generalisations about the tea industry as a whole have been avoided. This case is a microcosm and cannot be generalised for the whole tea industry of Darjeeling hills. Time, seasonal limitations and climatic conditions did pose limitations to the study. As access to data was limited reliance had to be made on whatever sporadic data was available. Problems arose during the course of the study especially while extracting the historical information. People were not willing to part with their empirical experiences. Despite all odds, this thesis attempts to put across to the concerned scholars, activists, and people in general, the problems faced by the workers who produce the famous Darjeeling tea, which is now in a period of severe crisis within the industry.

CHAPTER II

***Emergence Of Tea Plantation Labour Force In
Darjeeling : A Historical Overview***



British India in the first half of the twentieth century

SOURCE : HARRISON, MARK ; 1994 : facing page no. 1.
 NOTE : THIS MAP SHOWS THE VARIOUS PROVINCES
 IN BRITISH INDIA

**EMERGENCE OF TEA PLANTATION LABOUR FORCE IN DARJEELING:
A HISTORICAL OVERVIEW**

Mechi pari Mughlan maa
Chiya ko bot maa paisa phalcha are
Beyond the Mechi River in *Mughlan* (India)
Money grows on the tea bushes

Sukbir Khawas, Chandhura¹

Such a perception existed in the minds of the thousands who migrated to the tea districts of India from Nepal. Colonial state provided an ideal set-up for an economy that was profit making, involving low costs of labour and resources like land. Plantations spread at a tremendous pace in areas like the West Indies, Australia, Fiji Islands, India, South America, Mauritius, Sri Lanka and others. In India, plantations of tea, rubber, coffee sugar, indigo and others became by-products of British colonialism by the end of the 19th century. This chapter focuses on one of these areas i.e. tea. It thus elucidates the historical background of the Darjeeling tea industry and the social history of its labour force. By examining the socio-economic and political history of the region, the empirical study is contextualised in this background. Conditions of Assam, Bengal and other tea plantations are incorporated to show similarities and contrasts with the Darjeeling tea plantations.

Origin of Tea

The tea camellia has been known to man for a very long time. The Chinese people cultivated '*Camellia sinensis*', the commercially important Chinese tea plant for more than 2000 years. It was grown not on large plantations but on small plots of land. They certainly knew of the tea plant and its value long before the discovery that the infusion of its leaves, if carefully processed, produced a very palatable drink.

The original home of tea "...is in the area South East of the Tibetan plateau, which includes Sze-chuan, Yu-nan, Burma, Siam, while the Assam variety is found in the north east of India. The tea *Camellia Sinensis* and its many cousins, is indigenous throughout the forest of South East Asia where,

¹ Interview with Sukbir Khawas, a resident of Chandhura and an ex-tea garden worker of Phuguri T. E. 10th November, 2000, Chandhura.

in its natural state, it grows into a tree between 30 and 40 feet tall” (Wilson and Clifford (Ed.) 1992: 16). It was found that, the Chinese were drinking tea even in the fifth century A.D. And by the end of the sixth century, they began to regard tea more as a ‘refreshing beverage’ rather than a ‘medicinal drink’. The first authentic account of tea was the book ‘*Cha Ching*’ (Tea Book) written by Lo- Ya, in the year 780 A.D. The book describes the preparation and manufacture of the leaf (ibid).

It is said that, during the Sung dynasty 960-1127 A.D., the Chinese government “permitted a regular trade in tea across its borders into Mongolia. At about the same time the first tea was exported to Tibet” (ibid). It was the Turkish traders who first carried it westwards and reached Europe. The Dutch as eastern traders brought the first consignment of tea to Holland in the early part of the seventeenth century. Great Britain was earlier importing tea directly from China but from 1689 onwards the English East India Company² commenced importing tea directly from China. By the mid 1750s teahouses and tea gardens were appearing in and around London. The East India Company ships had monopolized the Chinese tea trade until 1833, but when the Crown put an end to this monopoly, the East India Company with the discovery of tea plants in Northeast India began to replace the trade.

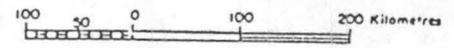
Discovery of the tea plants in North East India

In 1822, the *Singpho* chiefs³ informed Major Robert Bruce, who was then residing in the Province of Assam, of the existence of tea plants. Also, Lieutenant Charlton of the Assam Light Infantry of Sadiya found in 1832 similar wild tea plants growing in the jungle. Both Bruce and he had sent the plant samples to the Botanical Gardens at Calcutta. The area was at a place

²In 1599 an English association or company was formed to trade with the East by a group of merchants known as the Merchant Adventurers. Queen Elizabeth granted the company on 31st December 1600 permission to trade with the East and was called the East India Company and was linked with the monarchy. In India, Surat was the centre of trade for the East India Company from 1608 to 1687. In Eastern India, it opened its first factory (trading centre) in Orissa in 1633. In 1651 it was given permission to trade at Hugli in Bengal. It soon opened factories at Patna, Balasore, Dacca and other places in Bengal and Bihar. The Company was a monopoly where non-members were not allowed to trade with the East or to share in its high profits. With the growth of the East India Company it gradually also grew in power and tended to acquire the status of a sovereign state in India. By the end of 1818 the entire Indian sub-continent except the Punjab and Sindh was under British control. Part of it was ruled directly by the British and rest by a host of Indian rulers whom the British exercised paramount power. From 1818-1857, they completed the task of conquering the whole of India. It was the consequence of the expansionist motive of the East India Company through trade through colonial rule of the British Empire that the market forces of capitalism with the help of the colonial powers and laws penetrated into the traditional economy of India.

³ Local inhabitants of the Assam province.

NEPAL AND NEIGHBOURING REGIONS



- - - - - 1800 Limits of conquest.
 ————— 1814 Borders imposed by the Treaty of Sugauli.
 1860 Area returned to Nepal.

SOURCE : SEVER, ADRIAN : 1993 : 36
 NOTE : THE MAP SHOWS THE POLITICAL BOUNDARIES OF NEPAL, BOTH BEFORE AND AFTER THE TREATY.

near Sadiya in northeast Assam, (adjacent to Burma). But this discovery went largely unrecognised.

In January 1834 Lord William Bentinck, the Governor General, "proposed to the Council of the East India Company to set up a 'Tea Committee' to investigate and make recommendations as to the most suitable areas in which to grow tea. The East India Company undertook the formation of experimental plantation in Upper Assam and the districts of Kumaon and Garhwal; in 1839 the Assam Tea Company was formed" (ibid).

In circa 1835, certain developments were taking place in a distant region, called Darjeeling, also called, the 'no-man's land'. This was a territory passed from one hand to the other in the wars that broke out between the East India Company, Sikkim and Nepal. The following sections analyses the geo-political situation that led to the formation of Darjeeling and the tea industry by the mid 19th century.

Socio-Political Factors Influencing the Formation of Darjeeling

Political Unification of Nepal

The growth of the Shah power had started in a small kingdom called Gorkha. (Das Gupta 1999: 23) Prithivi Narayan Shah in 1743 ascended to the throne of Gorkha at the age of 20. By 1772, he had conquered the valley of Kathmandu and had unified Nepal. In 1775 when he died, the kingdom of Nepal included

The whole of the eastern Terai, (Morang, Sunsari, Jhapa, Saptari, Siraha, Sarlahi, Mahottari, Dhanusha, Bara, Parsa and Rautahat), the eastern and central inner Tarai (Sindhuli, Udayapur, Chisapani, and Makwanpur), the whole of Kathmandu valley, the eastern hill region up to the Tista River bordering Sikkim, and a small part of the western hill region (Nuwakot, Dhading, Gorkha and Jajarkot). By 1789, the Chaubisi and Baisi principalities in the western region had all been annexed, and the frontier extended to the Mahakali River in the west. Kumaon was conquered in 1790. By 1808, the Gorkhali army had reached Kangra across the Jamuna River.⁴ The frontiers of Nepal had thus extended to a distance of approximately 1300 miles from the Tista River in the east to the Sutlej River in the west (Regmi 1971: 78).

⁴ 'Gurkha': marital hillmen from the region of Gorkha who under the leadership of Prithivi Narayan Shah conquered the Newar kings and established the kingdom of Nepal (Sanwal 1965: 67).

Nepal and the East India Company

Such an extension hampered trade for the East India Company. In November 1814 the Company launched an aggressive war against Nepal. The Anglo-Nepalese War broke between the East India Company and Nepalese in 1814-1816.⁵ The British captured the strategic town of Makwanpur, 50 kms south of the Kathmandu valley. This war led to "loss of considerable territory in the Tarai with the exception of Morrang. However in December 1816 the East India Company returned part of this Tarai territory comprising the districts of Saptari, Siraha, Salahi, Dhanusha, Mahottari, Bara, Parsa, Rautahat, Kapilavastu, Rupandehi and Nawal-Parsi, thus leaving a 25-35 miles wide strip of *Tarai* territory under *Gorkhali* occupation" (ibid: 6). By 1816 with the *Treaty of Segauli* the British gained direct control over Kumaon and Garhwal region (Sen 1989: 11). The areas were, in the west, Kumaon and Garhwal region, large tracts of Tarai lowlands in the south and the Darjeeling district in the East. The kingdom of Nepal had been stripped of 1/3rd of its territory.

Sikkim and the East India Company

During the war, the British had sought assistance from Sikkim because of its strategic location. After the Anglo-Nepalese War, the East India Company ceded the same territory to Sikkim, which Nepal had earlier wrested from the Raja of Sikkim. This area, "between the rivers Mechi and the Tista was given to the Raja of Sikkim whose sovereignty was guaranteed by the Company. The boundary between Sikkim and Nepal was laid along the Mahanadi and the Mechi rivers and the Singalila range. This did not confer to the Sikkimese wishes and left large tracts of land still in the hands of Nepal. The Sikkim territories around Titalia, was not restored, which the British acquired from the Gurkhas but kept to themselves" (ibid: 9).

Acquisition of Darjeeling by the East India Company

Ten years after the Treaty of Segauli, boundary disputes arose between Sikkim and Nepal. This matter was referred to the Governor General and in 1828 Capt. Lloyd and J.W. Grant were deputed to settle the dispute. Captain

⁵ War with the East India Company leading to the Treaty of Segauli was under the *Mukhtiyar* (Prime Ministership) of Bhim Sen Thapa. With the support of the Regent Queen Tripura Sundari he was the virtual dictator of Nepal from 1806-1837.

Lloyd had to inquire on "certain incursions used by Lepchas malcontents on the tract ceded in 1817. From a report dated 18th June 1829 in which he claims to have been the only European who ever visited the place, we learn that Lloyd visited 'the old *Goorkha* station called Darjeeling for six days in February 1829' (ibid: 12).

Two important reasons given by Lloyd for the cession of Darjeeling were firstly, the advantage as a centre of trade and secondly, as a position of great strategic importance commanding the entrance into Nepal and Bhutan. In addition, Mr. Grant gave the numerous advantages for establishing a sanatorium at Darjeeling and strongly advocated its occupation for military purposes as the key of a pass into the Nepal territory (O' Malley 1907).⁶

Lord Bentinck directed Captain Lloyd to start negotiating with the Raja of Sikkim for cession of Darjeeling hill. Using this occasion, Captain Lloyd raised the subject for cession of Darjeeling offering to the Raja either payment in money or land in exchange. The latter made his own demands, which for legal reasons could not be obliged. But in February 1835, "the Raja already handed over the Deed of Grant several months before the government decided to give up the Darjeeling plan. General Lloyd informed the Raja of this decision but the Raja suggested that Darjeeling be given as a free gift" (Dash 1947: 37-38). "The Raja had imagined that a few bungalows would be made in Darjeeling, instead he found a sovereign state within his own state" (Pinn 1986: 2). When General Lloyd and Dr. Chapman visited Darjeeling in 1836, all they found was "some huts recently erected by the Raja of Sikkim in which they spent a night shivering with cold, without food or bedding" (ibid.: 21).

Need for New Settlers in the New Territory

Darjeeling, formerly occupied by a large village and the residence of one of the principal *Kazis* was deserted and the country around it was sparsely inhabited. The Sikkim Raja had prohibited his subjects from going to Darjeeling and helping in establishing the new settlement, and various expedients were proposed to repopulate the country, for example, by inviting the *Lepcha* refugees to return, importing labourers from the indigo belt of

⁶His book on the Darjeeling District Gazetteer gives a detailed account of the area.

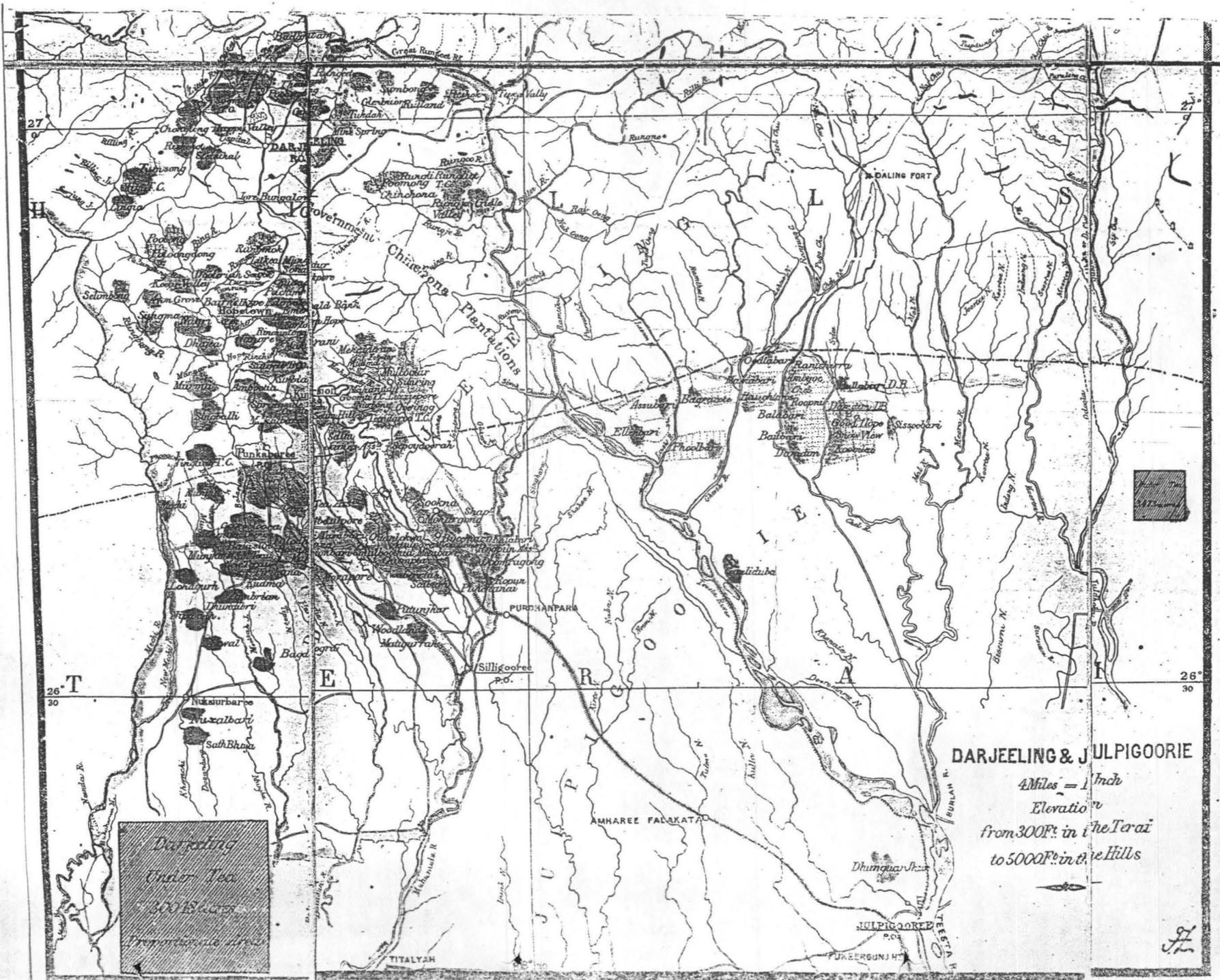
Rangpur and Ramgarh (i.e. Gaya and Hazaribagh) and by procuring settlers from Nepal and Bhutan (ibid: 22).

It was then developed into sanatoria to serve as convalescent home for the lower income group employees of the East India Company. Dr. Campbell in 1839 of the Indian Medical Service was transferred from Kathmandu to Darjeeling as the Superintendent of the new territory. Land was easily available at concessional rates and with the efforts of Dr. Campbell, the population increased from 100 in 1839 to 10,000 in 1849.

Ritche in the Census of Darjeeling 1891 said, "...when the old hill territory was first annexed, it was almost entirely with forest and I have seen it stated that there were not 20 resident families" (Ritche 1891: 18). From 1857, residents started pouring from Calcutta. "In 1850, the *Terai* (at present the Siliguri *Thana*) was annexed from Sikkim and the hill territory was extended to the present Nepal frontier on the west and to the Tista River on the east. In 1866 the Kalimpong sub-division was annexed from Bhutan" (ibid: 20). It is during this period that with the success of experimental sites of tea plants, tea cultivation and production gathered momentum in Darjeeling.

Development of Tea industry in Darjeeling

Dr. Campbell started the experimental growth of tea plants. The major experimental sites being a) the garden of the Superintendent, b) in a lower valley called Lebong c) lower sites of Pankhabari and Kurseong. In 1848, Dr. Hooker (botanist and naturalist) wrote regarding Lebong, which is 1000 feet below Darjeeling (7000 feet) that 'the tea plant succeeds here admirably and might be cultivated at a great profit and be of advantage in furthering a trade with Tibet' (Griffiths op. cit.: 21). According to O'Malley (1907), in 1856, the Kurseong and the Darjeeling Tea Company opened the Alubari tea garden, and the other on the Lebong spur by the Darjeeling Land Mortgage Bank. In 1859 Dr. Brougham started the Dhutaria garden and between 1860 and 1864 the Darjeeling Tea Company established four gardens at Ging, Ambutia, Takdah and Phubsering and the Lebong Tea Company established tea gardens at Takvar and Badamtam. The following gives a picture of the rapid growth of tea industry in Darjeeling especially from 1866 to 1885.



DARJEELING & JULPIGOORIE

4 Miles = 1 Inch
 Elevation
 from 300 Ft. in the Terai
 to 5000 Ft. in the Hills

*Darjeeling
 Under Tea
 3000 Feet*

J.F.

Table No. 2.1

Development of Darjeeling Tea Industry 1866-1905

Year	Number of Gardens	Area under Cultivation (acres)	Outturn of tea (in pounds)
1866	39	10,000	4,33,000
1870	56	11,000	1,7,00,000
1874	113	18,888	3,928,000
1885	175	38,499	9,090,298
1895	186	43,692	11,714,551
1905	148	50,618	12,447,471

Sources: Sir Percival Griffiths: *History of the Indian Tea Industry*, 1967, p 88 and L.S.S.S O'Malley: *Darjeeling District Gazetteer*, 1907, p 74

The above table shows a tremendous growth of the tea industry by the beginning of the twentieth century in Darjeeling. Production from 1866 to 1874 had increased by 89%, from 1874-1885 to 56.8%, from 1885 to 1895 by 22.4% and from 1895-1905, there was an increase of 5.9% only. This increase was possible with the increase in the area of tea cultivation that doubled from 1866 to 1874 in a period of two decades and increased by 34.8 % from 1874 to 1895.⁷

Within this background, the tract of 138 square miles of land of Darjeeling became part of the expansionist policies of the East India Company. Darjeeling, earlier named "*Dorje-ling*, the place of the *dorje* or the mystic thunderbolt of the Lamaist religion, comprised of land south of the Great Rungeet River east of the Balasun, Kahali and Little Rungeet rivers and west of the Rangno and the Mahanadi rivers"(O' Malley op. cit.: 21). Even though this was a gifted territory it became a part of the larger area of the colonial power.

With the rapid increase in tea cultivation and production, the population of the area simultaneously increased. An increasing percentage of the population began to comprise mostly of Nepalis, unlike the Assam plantations. The labourers in Assam were mostly tribals from the provinces of

⁷ See map facing page. The source of the map is unknown. It could roughly be of the late 19th century Bengal. It was found in the library of the Asiatic Society of Bengal, Kolkata in February, 2001. Only the part showing Darjeeling and its adjoining areas has been taken.

United Provinces, Central Provinces, Bengal, Chotanagpur Plateau. They belonged to the tribal communities of like Oraon, Munda, Ghasi, Kisan, Nagesia, Santhal, Baraik and lower caste groups like the Gandas, weavers from Sambalpur etc (Bhadra 1996: 301).

The planters with the help of the colonial administrators accordingly imposed policies and measures to recruit them. Missionaries too played an important role in recruitment as they greatly influenced the people. At the beginning, labour from the Bengal plains was brought to work in Darjeeling. But it increasingly became difficult and expensive for the planters since the workers from the plains found difficult to acclimatise to the mountain terrain and conditions. Nepal was found to be suitable in matching the requirements of the East India Company and for developing the territory. Thus the socio-demographic profile completely changed overtime.

Administrative set-up of Darjeeling

The district of Darjeeling was a non-regulation district i.e. some of the general Regulations and Acts in force in other parts of Bengal have not been extended to it. It was formerly part of the Rajshahi Division, but, in consequence of the territorial redistribution, which is popularly known as the Partition of Bengal, it was transferred in October 1905 to the Bhagalpur Division. For administrative purposes it is divided into two subdivisions, the headquarters subdivision, covering the northern portion of the district, which extends to the frontier of Sikkim and Bhutan and includes all the country east of the Tista, and the Kurseong subdivision, which comprises the lower hills, and the Tarai (O' Malley: 1907:156).

From 1870-1874 the territory of Darjeeling was classified into a non-regulated area for the preservation of the indigenous systems of simple natives. This was the responsibility of the Governor General. From 1874-1919, it was a scheduled district, according to which the areas were kept outside the purview of general laws, operating throughout the country. It was considered as a backward tract from 1919-1935, under which 'the Governor of a province under the direction of Governor General in Council, shall have the sole responsibility of administering the backward tracts and the Governor was to determine, whether any law of the provincial legislature would be given effect in such areas.' From 1935 till the end of the British rule 1947, Darjeeling remained a 'partially excluded area' for which the Governor was to consult the Council of Ministers (Chakraborty 1993: 7-9).

Demographic Profile of Darjeeling

Prior to 1872, no attempt was ever made towards an enumeration of the population of the entire district of Darjeeling. The area or the territory ceded by the Raja of Sikkim to the British government as a sanatorium in 1835 consisted of only a hundred souls. To quote from a document of 1868, on the Indigenous Labour in Darjeeling and other districts:

In Darjeeling and the remaining tea districts the labour has been free, but the reports do not contain sufficient information to enable me to give my detailed account of it. In the Darjeeling hills and to some extent in Terai, labour employed is chiefly obtained from Nepal, which, possibly owing to the impetus given to an increase of population by the security enjoyed under Sir Jung Bahadoor's administration, has for some years back been throwing off swarms of its inhabitants into the neighbouring districts. Major Morton writes in January last that the labour question had not become a serious one in the district and that Nepal ought to be able to supply enough for the hills (Report of the Commissioner, 1868: 20).

According to Hunter (1984), this area in 1869 census corresponded to the Darjeeling municipality. It had a total population of 22,607 persons. There were 11,643 male adults, 3123 male children, 5200 female adults and 2641 female children. The area was 88,320 acres. In 1869 it contained 2223 houses showing an average of 10 to 17 persons to each house or 3.90 per acre.

The first regular census was taken only in 1872. The total population was 94,712 with total male population of 53,057 and total female population of 41,655. The number of persons per square miles was "77 with 15 houses per square miles and 5.0 persons per house" (Ritche op. cit.: 19).⁸ The following are the main figures.

Table No: 2.2
General Statement of the result of the Census of Bengal Arranged With Reference to Age and Sex Cooch Behar Division: Darjeeling

Area in sq miles	Inhabited houses	Men	Women	Total Adults	Male Children under 12 years	Female children under 12 years	Total children	Total of all classes
1234	18,864	36,585	27,873	64,458	16,472	13,782	30,254	94,712

Source: *Census of India, Bengal-1872- By H. Beverly, Bengal Secretariat Press, Calcutta, 1873, pp 6-7.*

⁸ Only Darjeeling area has been deduced from calculations based from a larger table. Calculations are based from a larger table of the Census of India- Bengal, 1872, Op. cit.

The table below shows the results of the percentage increase in population from the census of 1872 to 1891.

Table No: 2.3

Demographic Profile of Darjeeling: 1872 to 1891

Year	Total population of both sexes	Males	Females	Percentage of increase in 1891 on results of 1881		
				Both sexes (1891)	Males (1891)	Females (1891)
1872	94,712	53,057	41,655	-	-	-
1881	155,645	89,351	66,294	39.5*	40.6*	37.2*
1891	223,314	123,046	100,268	43.4	37.7	51.2

Source: *Census Report of the District of Darjeeling, 1891, Pp 3⁹*

* Calculations are based on the original table.

In the above table, after calculations the following inferences are added for 1881: percentage increase of both sexes is 39.5%, male population is 40.6% and female is 37.2%. In 1891 the total population increase is greater by 3.9% as compared to 1881 and female population has increased 14% since 1881. Along with an increase in production of tea and the area under tea cultivation as seen from the previous tables, the population and production simultaneously increased during this period.

The 1891 census gives further details on the population size as seen below in table 2.4. It shows the population in tea estates was higher than that in the *khas mahal*¹⁰ areas although area under tea was less than that in the *khas mahal*.

⁹ District Census Report No. 1512 G., dated Darjeeling, the 15th March 1892 From- J. G. Ritchie, Esq. Deputy Com. of Darjeeling To- The Officiating Secretary to the Government of Bengal, Financial Department..

¹⁰ *Khas mahals* are agricultural lands both privately and government-owned.

Table No: 2.4**Demographic Profile of Darjeeling District under different heads**

<i>Different Heads</i>	<i>Area in sq miles</i>	<i>Occupied Houses</i>	<i>Population</i>			<i>Number of persons per sq mile</i>	<i>Number of houses per sq mile</i>	<i>Number of persons/occupied houses</i>
			<i>Male</i>	<i>Female</i>	<i>Total</i>			
Forests	439	752	3,805	1,586	5,391	12.2	1.7	7.1
Tea Estates	242	20,256	47,135	42,449	89,584	370.1	83.7	4.4
<i>Khas Mahal</i>	333	17,496	48,500	41,033	89,533	268.8	52.5	5.1
Chebu Lama's Grant	49	1,517	4,241	3,938	14,145	166.9	30.9	5.3
Darjeeling Municipality and Cantonment	5	2,946	8,923	5,222	14,145	2829.0	589.2	4.8
Kurseong Municipality	2	1,268	2,147	1,375	3,522	1761.0	634.0	2.7

Source: Ibid

The Royal Commission of Labour Inquiry (RCLI) provides data on the numbers of emigrants from Nepal to Darjeeling, Sikkim and Jalpaiguri, from 1891 to 1921. The table below shows that emigration was highest in Darjeeling, followed by Jalpaiguri and then Sikkim. The former two regions are tea-growing areas.

Table No: 2.5
Number of Emigrants from Nepal

<i>Found in</i>	<i>1891</i>	<i>1901</i>	<i>1911</i>	<i>1921</i>
Darjeeling	88,021	76,301	70,021	58,026
Sikkim	Not available	22,720	25,610	20,876
Jalpaiguri	20,578	18,649	34,015	23,681

Source: Royal Commission of Labour Inquiry, 1930, p. 7

Note: The table has been modified chronologically from 1891 to 1921.

With time the demographic profile changed in Darjeeling as is illustrated in the table below. It illustrates the decadal increase in population from 1872 to 1941. Consequently a high rate of increase in population was experienced by the end of nineteenth century.

Table No: 2.6

Demographic Profile –1872-1941

Year	Population	Percentage Increase
1872	94,712	----
1881	1,55,179	64
1891	2,23,314	44
1901	2,49,117	12
1911	2,65,550	7
1921	2,82,748	6
1931	3,19,635	13
1941	3,76,369	18

Source: Dash, Arthur Jules (C. IE Superintendent): *Bengal District Gazetteers Darjiling, Bengal Government Press, Alipore, 1947, p 49*

A perusal of Table No 2.1 and Table No 2.6 shows that an increase in the area under tea and an increase in production of tea were simultaneously accompanied by an increase in population. Data specifically to Darjeeling plantation labour force is limited. According to the Census Enumerators the native population was considered 'ignorant' and they fled overnight on hearing about them. In 1874, labour force in the tea plantations of Darjeeling amounted to 19,000. According to the 1901 Census, the labour force accounted for 64,000 coolies. The West Bengal Census of 1951 provides the size of the tea garden labour force both permanent and temporary in the tea gardens of Darjeeling between 1901-1951 as under.

Table No: 2.7**Statistics of Tea in Darjeeling, 1861-1951**

Year	Number of Labourers Employed		
	Permanent	Temporary	Total
1861	-----	-----	2,534
1881	-----	-----	-----
1891	-----	-----	-----
1901	24,257	16,194	40,451
1911	26,510	13,051	39,561
1921	45,977	2,733	48,710
1931	61,572	2,093	63,665
1941	67,838	1,861	69,690
1951	-----	-----	69 590

Source: *West Bengal Census 1951- District Handbook, 1952-54, p xxxi*

From the above table, we observe that between 1911 and 1921 there was a sharp increase in the number of permanent workers along with a decline in the temporary workers. The percentage decline in temporary workers was 79% while the increase in permanent workers was 42.3%. According to Das (1931) there were 28,552 influenza deaths in the plantations in 1918-19 (Das: 1931). Disease and pestilence could have contributed to the decline in temporary employment along with opportunities of alternative employment in the growing hotel industry in Darjeeling, as it was also a tourist attraction.

An interplay of certain exogenous and endogenous factors led to such a large influx of population in Darjeeling hills. These can be broadly termed as the 'push' and 'pull' factors. In our review of the literature we have seen that a set of factors led to the migration to the tea plantations of Assam. The labour catchment areas were mainly from Chotanagpur Plateau, the United and Central Provinces, to work in the tea plantations of Assam. The following section seeks to examine in the same pattern the forces that led to such an increase in population to Darjeeling. An important aspect within the

demographic profile is the social composition of this population. Caste has played central role in the plantations. Therefore we are elucidating the Nepali caste system to understand the social composition of the labour force. This is shown from the earlier tables. Growth of plantations in Darjeeling was an important reason for such mobility. But there were other internal processes that were involved in expanding the economy.

The movement of population has been and remains an essential component of economic development, social change and political organization. Here it is important to ask why do people move?" (Jackson 1969: 65). One attempts to cover such movements under a general heading of the 'push-pull hypothesis'. It suggests, "migration is due to socio-economic imbalances between regions, certain factors 'pushing' persons away from the area of origin, and other 'pulling' them to the area of destination" (ibid). Jackson used this concept for 'international migration' where he considered "geographical movements of the population in two ways: a) moves caused by necessity or obligation; b) moves caused by needs (mostly economic) of receiving countries.

Characteristics of the first type generally have political or religious or national groups who are mostly not suited to conditions in their place of destination. In the second type, pressure from the place of origin (push) is accompanied by a need (pull) in the place of destination" (ibid: 66). Here Darjeeling is seen as an important case in point where certain 'push' factors from Nepal and certain 'pull' factors within Darjeeling resulted in a large influx of population.

Factors Affecting Movement of Labour from Nepal to the Tea Gardens of Darjeeling: The 'Push Factors'

1. Land Policies

(i) Land Tenure System

In the eighteenth century, prior to the establishment of the Shah kingdom, Nepal comprised of small principalities. The ethnic groups like the Kiratis¹¹, Mangars, Gurungs had land under a 'customary form of tenure'. This system was known as *Kipat* land tenure system predominant among the

¹¹ Kiratis comprises the Rais, Limbus, Subbas mostly of eastern Nepal.

Kiratis of eastern Nepal. In 1768, the reigning Shah King took advantage of internecine war among the Newar rulers of the Kathmandu Valley and in the process expanded his kingdom of Gorkha. The primary concern was to expand the kingdom by bringing into one fold the small ethnic principalities of Nepal through the transfer of land from 'the original inhabitants' to the new upper caste migrants¹² (Das Gupta op. cit: 30). This new system of land tenure was called the *Raikar*. "As the rate of fragmentation increased the *kipat* owners were unable to get their livelihood from the land" (ibid: 26). Das Gupta maintains that the *Kiratis* were the first migrants to Darjeeling (ibid: 28).

Along with a shift from the *kipat* system to the *raikar* system there was a change from the *adiya* to the *kut* system of land tenure. In the *adiya* system, the cultivator paid half of the paddy crop to his landlord. Under this system the tenants were required to harvest the crop and thresh it in the presence of the landlord and the local revenue functionaries. Rents were often fixed in advance approximately half of the average produce. The landlords needed income in cash as they were away from Kathmandu for long periods of time for military or administrative duties. This need for cash resulted in the *Kut* system where the cultivator had to pay a stipulated sum either in cash, food grains or other commodities to the landlord irrespective of the actual form or quantity of the produce. This led to increasing indebtedness among the cultivators. They had to borrow money from the money lenders who charged exorbitant rates of interest. Thus *kut* rents were able to finance new military recruitment (Regmi op. cit.:28).

In 1812, the *Adhiya* system was replaced in favour of the *Kut* system in Kathmandu valley and large parts of the hill regions. Agricultural lands were graded into four categories so that assessments and rates were fixed on the basis of the highest yield during the previous three-year period. Those who refused to pay were evicted. In 1816, regulations such as land allotment on the basis of those who were able to pay the *Kut* rents were made (ibid: 28).

¹² Around this period upper caste Hindus had fled from Muslim invasion in North India to Nepal. The ruling kings intermingled with the upper caste Hindus. Sanskritised Nepali written in Devnagiri became the official language of the Kathmandu government. The other ethnic groups had to rely on them for transactions etc. as they had their own dialect and language. The ethnic composition of the ruling class and nobility of Gorkha belonged to the same community as the ruling classes and nobles of the western hill region-Chhetri, Thakuri and Brahman. It was therefore possible for members of these communities from the western hills to identify their interests and aspirations with those of the now political authority in a manner, which was beyond the capacity of the Limbus of the eastern hills or the Rajputs and Tharus of the Tarai.

Richer peasants, landlords and moneylenders exploited the lower class peasants by buying their produce on favourable terms. Hoarding was common among them. Such hardships coupled with other factors forced them to look for other alternatives.

(ii) Land Allotment Policy

During this period, land allotment policy varied in different geographical regions. In the hill areas and Kathmandu Valley, the general rule was that lands were to be allotted only to local residents, while in areas situated near the borders in both the south and the north, people from India or Tibet were allowed to settle and non-resident cultivators they were exempted from tax assessment, tenurial privileges etc (ibid).

2. Financial Implications

(i) High Military Expenditure

The Gorkha kingdom was forced to increase taxes to meet the expenditure to be incurred for military and administrative purposes due to the wars with China and the East India Company. War with China resulted in decline of trade with Tibet leading to a loss of revenue. In order to mobilise funds the rulers took steps for reducing non-military expenditure. Between 1834-1838 the salaries of non-military employees were retrenched by 25% and various perquisites customarily enjoyed by them were withdrawn (ibid: 171). Measures were also taken to increase the area of land under *Raikar* tenure, from which the government appropriated revenue. Taxes were therefore increased which directly affected the ordinary cultivators.

(ii) High Interest Rates

Peasants had to find money even before the crop was harvested, especially if the land was assigned to a military personnel deputed to the front. If they were unable to pay, they were likely to be evicted. Peasants were thus forced to borrow from the moneylenders. The rates of interest were exorbitant because of shortage of money and lack of security. "In the western hills interest rates generally amounted to 25% in cash and 30% in kind and sometimes even 50% per annum. High rates of interest for example in Morang district rates between 12-40% although the statutory was 10%. In Gorkha district the rate was even 300 %" (ibid: 191). Such *pratha* or system became an important cause for large-scale movement of population towards the

recruiting depots of the British army and as workers in the newly discovered area of 138 square miles of land of Darjeeling by the East India Company (ibid).

3. Economic and Social Hardships

(i) *System of Compulsory Labour*

Along with such land tenure systems there was a system of compulsory *Jhara* labour¹³ the demand of which reduced after the end of the Nepal-British war. After 1837 these *Jhara* obligations were converted into payments in the form of cash or commodities in the far eastern, western and other hill areas. People were willing to join *hulak* services, as land was provided and certain amount of taxes were either exempted or were less. This was another form of unpaid labour where the earlier *Jhara* porters were employed.¹⁴ Such a system of unpaid and compulsory labour made it possible for the government to meet its need for portage and other services without spending money. This according to Regmi was the reason why 'slavery although a recognized institution during this period was not utilized at the government level'.

(ii) *Slavery*

Slave labour was thus limited to domestic needs. Indebtedness appears to have been one of the most important causes of slavery. According to an English official who visited Garhwal in 1808:

At the foot of the pass leading to Har-Ka- Pairi is a *Gorkhali* post to which slaves are brought down from the hills and exposed for sale. Many hundreds of these poor wretches, of both sexes, from 3-30 years of age, are annually disposed of in the way of traffic. These slaves are brought down from all parts of the interior of the hills and sold at Hardwar at 10-150 rupees (Regmi 1971: 120).

¹³ In the *Jhara* system, which entailed working for the military purposes (repair of ferries and irrigation channels), people were assured of a minimum means of subsistence and therefore tended to look upon *Jhara* obligations as a counterpart to the security they enjoyed in respect to land. *Jhara* labour also included the obligation to serve in the army extracted by the Gorkhali government. The Gorkhali rulers constructed and repaired forts at strategic places through *Jhara* labour. They were expected to bring foodstuffs required for their own consumption for a period of five to six months. It was likely to be impossible to carry food along with the portage of timber etc (Regmi op.cit.:103).

¹⁴ This *hulak* system was mainly used for transportation of arms, saltpeter and other military supplies. Metals, herbs and drugs for the royal palace and cottonseeds for feeding the royal bulls were supplied in this manner. This system was first introduced in 1809 between Kathmandu and western front for transportation of mail (ibid).

In around the late nineteenth century, there were 15,719 slave owners and 51,419 slaves, which roughly was only one per cent of the population (Morris and Brook Northey 1974: 109). Mr. Hooker, a botanist remarked in 1884 that “most of the Nepalese who ran away from Nepal were staying in Darjeeling as British citizens to save themselves from being caught and tortured by the landlords of Nepal” (Pradhan: 1982 :21). Often indebtedness led not to slavery but to bondage. A debtor was compelled to work for the moneylender under this system in fulfilment of his debt obligations in the capacity of a bondsman. The Nepali term for a bondsman is *Bandha*, which literally means a person taken up on mortgage. The difference between slavery and bondage is that the latter had the right to free themselves on re-payment of the loans (ibid: 117-118). Often debtors sold themselves or their children into slavery in settlement of loans.

Among the ethnic groups, “Ghartis and other lower castes or ethnic groups were used as slaves. But members of the occupational caste were not used as slaves because they would not be able to perform works within the household because they were considered untouchables. Mangars and Tamangs were commonly used as slaves” (Adhikari and Bhole 1999: 42).

(iii) Bondage

The Mangar community of the western hills areas was hopelessly under the grip of moneylenders who enslaved their boys and girls on bondage in lieu of interest on the money lent to their parents. This practice was banned for a brief period in 1846, and revived soon, a few weeks after the beginning of Rana rule. B. Frazer has reported that during the Gorkha rule a total of 20,000 people had been enslaved (Regmi 1971). According to Pradhan (1991), ‘caste oppression, heavy burden of debts’, were the main reasons for fleeing from Nepal.’ Slavery was ultimately abolished in Nepal only in 1923 by the then Prime Minister, Chandra Shamsheer Jung Bahadur Rana (Regmi: 1958: vi).

(iv) Caste Oppressions

Under the process of ‘Hinduisation’ by Prithivi Narayan Shah, Nepal was unified and was brought under a single hierarchical Hindu order. Jung Bahadur Kunwar in 1846 seized power and established the hereditary Rana rule till 1951. Eight years after he seized power, “he promulgated the *Mulki*

Ain, a national civil code, a set of law that were to be valid throughout the country” (Dixit op. cit.: 8). Subjects like land tenure, inheritance and even sexual relations were strictly observed. But most important, the inter-community relations were a strict taboo. Such caste rigidity along with the disintegration of land imposed on certain ethnic groups led to a large-scale exodus towards the neighbouring lands. Such migration was high even among the low occupational caste groups of Kami, Damai and Sarki caste. Therefore migrating population comprised of the middle castes like Limbus, Rais, Mangars and the lower castes as will be demonstrated in the following section on socio-demographic characteristics. The upper castes like the Brahmins, Chhetris and the Newars migrated much later for better economic opportunities rather than due to economic hardships.

4. Natural Calamities

(i) *Famines*

Recurrent famines caused a lot of hardship and food shortages. According to Sever (1993), during 1863-64 famines ravaged the Kathmandu valley and some of the hill districts. In order to combat the effects of the disaster the government prohibited the export of grain and deployed troops along the borders to prevent the smuggling of rice into India. By the winter of 1865-66 the famine had spread to the eastern *Tarai* and the “government ordered the distribution of rations to children below 16 and ‘old people above 55 years of age’ who had no means of ‘supporting themselves. In December 1866, by which time thousands had died of starvation, the government took over all trading in food grains in the devastated areas” (Severs: 137).

Sever further states that, “the famine of 1860’s was not the first to strike Nepal, nor was it the last” (ibid: 138). Fortunately, subsistence crisis and periods of food shortage in Nepal were small scale along with natural calamities like droughts or floods, earthquakes and major landslides, epidemics that destroyed plough animals, winds or rain that damaged grain during harvest time, plagues of mice or birds that ravaged the crops. According to Sever, food shortage was usually confined to one or two families in the village whose land was either ‘too high and dry or too low and wet’ or who had a large family to feed with a small patch of land. Even if there were good harvest the moneylenders, the landowners, the state by charging high taxation left the families in a precarious position.

The peasant families' survived by tightening their belts by eating only one meal a day or substituting with inferior food. However this was not possible for a longer period of time. Support systems like kinship ties, friends, even the village and though rarely, the state helped the families over a difficult period of illness or crop failure. This was not enough to meet such recurrent crisis in Nepal. These were some of the major conditions that induced large-scale migration from Nepal in search of employment, security and foremost survival. Such factors coupled with the growth of tea plantations were reasons for large movements of population beyond the Mechi River.

Growth of Plantations and Opportunities for Movement of Labour: The 'Pull Factors'

(i) Land Reclamation Policies

Policies like the Land Reclamation and Wasteland Rules for Darjeeling favoured the settlements and growth of Darjeeling. In 1864, the Government for thirty years introduced farming leases known as the Old Waste Land Rules. The lands granted under these rules were given free of rent for the first five years, and were then subjected to an annual rate of rent amounting to six *annas* per acre on the whole area.

In 1882 another set of rules were issued for the lease of wasteland for tea cultivation. "The land being rent-free for the first year and then paying a rental of three *annas* an acre for the second year and an additional three *annas* for each successive year until it amounted to 12 *annas* an acre. After that, the lease was renewable at a rate of Re.1 per acre, if the conditions of the preliminary lease had been fulfilled" (O'Malley op. cit.: 152).

According to the Waste Lands Rules of 1898, lease was given on the condition that the applicant had bona fide sufficient capital to open the grant. Each grant had to be compact, with a size of not more than 1,500 acres, though larger grants could be made on special grounds. A preliminary lease was granted for five years, the land was rent-free for the first year with a progressive rent thereafter (*ibid*). Such measures were taken by the colonial rulers to promote settlements in Darjeeling.

The British also introduced a 'progressive' land tenure system, which was not adopted in other parts of India. There were no landlords, no *zamindari* no intermediaries between the government and the *ryots*. The laws

regarding transfer of land were made stringent. Apart from moving into Darjeeling, British army was another destination for many in Nepal.

(ii) Recruitment in the Army

There was large-scale recruitment of *Gorkhali* soldiers in the armies of the East India Company and the native Punjab government. "The Gorkhas who formed the ruling clan, make soldiers second to none all the world over, and the British Goorkhas regiments are one of the great elements of strength in our native army...."(Thacker 1899: 22) "In the absence of a formal arrangement with the government of Nepal, the East India Company faced considerable difficulty in finding suitable recruits. This led to the founding of a number of *Gorkhali* settlements near regimental stations in north- western India, which created an additional inducement to emigration from Nepal"(Regmi 1971: 194).

By 1857, Darjeeling became the recruiting centre for the Company. "Between 1886 and 1904 the Darjeeling Recruiting Centre recruited 27,428 Gurkha soldiers. The Recruiting Officer for the Gurkhas established an office in Darjeeling around 1890" (Chatterjee 2000: 16). The purpose of recruitment was for military transport in Burma and Chittagong, for building work of the Gurkha regiment in Assam, for Lakhimpur Battalion, for military service to Burma rifles and the frontier hills and so on. These recruits were mostly from eastern Nepal.

Subba says, "Nepalis were sought people not only as agriculturists but also as soldiers. They were considered according to Hodgson (1874) to be the best soldiers in Asia but due to the unwillingness of the Nepalese Government to allow the British Government to recruit them, the latter adopted severe clandestine measures including the act of encouraging the Nepalis to settle in the hill areas of Darjeeling, Shillong, and Dehradun." Subba's field interviews are a testimony to the fact that the British had sent people from Darjeeling and Sikkim to bring labourers from Nepal. British Government rewarded them with revenue-free land and those who excelled were honoured with a title of *Raisaheb* (Subba 1983: 33).

According to Dewan, "life beyond the Mechi River was much more independent than what it was in their homeland (Nepal). Army recruitment was going on simultaneously. There were two recruiting depots, one at

Kunnaghat (Gorakhpur-Uttar Pradesh) and the other at Katapahar (Ghoom-Darjeeling). The former was to cater to recruitment of people from western Nepal and the latter for eastern Nepal. According to the strength of the soldiers from these two offices the Nepal government got Royalty per capita from the British India Government. It is questionable whether the Nepal government in turn got Royalty for the supply of coolies in return.”¹⁵

According to Lt. Col. (Retd.) P.K.S. Gahatraj,¹⁶ “an important aspect with regard to the army recruits was that till around India’s Independence, lower caste people were not recruited as fighting soldiers in the regiments, for example 11 Gorkha Regiment (11 GR), 3 Gorkha Regiment (3 GR) and so on. However they were taken as ‘*laskars*’ as part of the service group for the regiment. There were thus various regiments of the Gorkha soldiers, which strictly consisted of particular (one or two) castes. For example, the Kirantis (Rais and Limbus) were recruited in one or two regiments; Khas and Chhetri were grouped under one regiment and Mangars, Gurungs and Tamangs under one. By doing so, the British Government were able to keep the ethnic groups separate politically, avoided hassles as far as their social custom were concerned and command and control as per the military hierarchy became convenient and easy. Medical standard in the army was very strict viz. height corresponding to the weight, eyesight, hearing, infection (mainly tuberculosis) or other ‘terminal diseases’, whether limbs are in perfect shape (e.g. knock knee, flat-foot etc). Those who did not clear the medical tests were sent to work in the tea gardens.”¹⁷

Two observations can be made from the above interview: a) the lower caste-groups were compelled to work in the tea gardens as they were debarred from joining the army. b) They were unfit to join as soldiers on physical grounds as well.

(iii) Other Factors

Apart from certain internal factors (excessive taxation, pressure of moneylenders system of bondage, slavery) operating in Nepal the increase in population was due to a host of other factors. For example, a) the station was the headquarters of the Bengal government during the hot and rainy seasons

¹⁵ Interview with L.B. Dewan, Tea Planter Emeritus, Mirik, 12th December 2000.

¹⁶ Interview with Lt. Co. (Retd.) P.K.S. Gahatraj, 6th Assam Regiment, Sukna, 2nd February 2001.

¹⁷ Ibid.

of the year, b) influx of holidaymakers especially towards the end of September, (Newman 1913) c) the British offered land for cultivation, *khas mahal* or settlements and opportunities in the British Army, d) employment was offered in Gorkha Regiment, Cinchona Plantations, Darjeeling Himalayan Railways, construction and maintenance of roads (Das Gupta 1999).

Pressure of population on land led to increased migration towards Darjeeling and other places in the Himalayan belt, the northeast India etc. This was made possible due to the free entry of people towards the tract, which was acquired by the East India Company. *Bairagi Kaila* says "mobility was restricted for people coming to the hill tracts. In fact walls were constructed and strict vigilance was maintained in the border areas of Nepal and British India."¹⁸

We now give a brief account of the caste system in Nepal since it had an important bearing on the composition of the labour force in the Darjeeling plantations. The Nepali caste structure is provided in detail as a reference point for later discussions. As Das Gupta (1986) maintained different labour markets had particular feature of which one was clustering of particular castes/sub-castes, linguistic cultural group, community in particular industry and also the formation and persistence of link between particular social groups, certain jobs and occupations.

The Nepali Caste System

There are a few specific studies on the Nepali caste system, like Haimendorf (1978), Fisher (1978), Nepali (1965), Bista (1976) and others. Prior to the twelfth century, according to Hitchcock (1978), there were two ethnic groups in western Nepal; one, moving from south of the Himalayas into Nepal from the west and the other from the plains of India and Nepal from a southern direction. The former were the Tibeto-Burman speakers mainly the Mangars who entered Nepal probably prior to seventeenth century. The latter were the Brahmans and the Rajputs who fled from the Muslim invasion in northern India and entered Nepal in the twelfth century.

Hitchcock argues that the origin of the Nepali caste system includes a third factor, a *Pahari*-speaking eastward moving Khas, an intrusive population who entered western Nepal in ninth century. This group had their

¹⁸ Interview with Til Bikram Nerubang (Bairagi Kaila), a social worker and an activist in Mirik, 3rd December, 2000, Mirik.

own language called the *khas kura*¹⁹ which later developed into the modern Nepali language having its origin in Sanskrit. By the twelfth century the Khas established the Malla Kingdom, which included much of western Nepal and Tibet after defeating the Mangars, Gurungs, Limbus etc.

These were the Kirantis (the Indo-Mongoloids) and the Mongols (Mongoloids). The Kirantis are divided into various ethnic groups like the Khambu (Rai), Limbu (Subba), Yakha (Dewan), Thami, Dhimal etc. Each group is divided into clans and each clan has a *kura*.²⁰ Kirantis are believed to be the earliest inhabitants of the sub-Himalayan tract who even settled prior to the Mangars and the Gurungs in the sixth and the seventh centuries A.D. The Mongols, includes the Mangars, Gurungs, Newar (Pradhan), Murmi (Tamang) who like the Kirantis have a clan with their own language.²¹

The Malla kingdom's power was based on rice-growing and trade between Tibet and Indian plains. Along with marriage alliances, with the Mangar inhabitants of the eastern plains, due to their 'looseness of endogamy', it further helped in expanding their kingdom. In the twelfth century; there developed an interface between the Brahmans and the Rajputs of northern India, which Hitchcock calls the 'Nepali Khas configuration' (Hitchcock 1978: 118). This configuration was powerful, derived from marital alliances ruled by elite, which had become sanskritised after the interface with the 'Brahmans imported from Kannauj'.

According to Hitchcock the upper caste Brahman and Rajputs had to assimilate²² more with the Khas (Mallas). But Subba (1985) contends, "these

¹⁹ Language

²⁰ Sinha, Samar (forthcoming): 'Nepali Speech Community and its Internal Dynamics', *Language Problems and Language Planning*. John Benjamin. Amsterdam. Philadelphia.

²¹ Ibid

²² Such similarities of assimilation can be gathered from Breman's (1963) study of the caste society of the *Pahari*- speaking people in the Uttar Pradesh hills (near Dehradun). The term *pahari* (of the mountains) is referred to people of the sub-Himalayan hills from western Kashmir to eastern Nepal. According to the author two major ancestral stocks are believed to have contributed to the formation of this population- a) an early indigenous group now appears as the Dom or low castes. They are divided into several endogamous groups ranked relative to one another and associated with occupational specialities. B) The Indo-Aryan speaking group, more recent and are of Central Asian origin. The descendents are called *Khasa* or *Khasiya* in the village studied. They are divided into Brahmin and Rajput groups.

The author speculates that at one time they were two relatively different homogeneous ethnic groups. One the dominant agricultural *Khasa* and the other the dependent artisans or service groups known as Doms. He attributes the name and other status characteristics of the Brahmans and Rajputs to the a) internal differentiation; b) subsequent interaction with the plains people 'immigrants' to the hills. While the *Doms* had as a result of the high-caste expectation subdivided according to occupation-speciality and adapted with the plainsmen. According to the author the origins and affinities of contemporary *Pahari*-castes and occupational castes are largely unknown.

emigrants from India brought the local tribes of Nepal into the caste-fold converting them into Hindus” (Subba 1985: 23). For instance, “King Jayasthiti Malla brought the Newars into the legal code of caste during the fourteenth century. He with the help of some Brahmins organised the society into four *varnas* and sixty-four castes”(ibid: 24). With the unification of Nepal under the Gorkhali rulers the Newari caste structure having their own occupational-based hierarchy was subsumed within the larger Hindu Nepali caste structure by 1769. Thus the process of ‘Hinduisation’ was a strong element of the unification and consolidation of numerous principalities of Mangars, Limbus, Gurungs and so on. This was the main difference between the Indian and the Nepali caste system. As Bista says, “the former evolved “as a process of socio-cultural and economic specialisation, whereas in Nepal it was introduced as part of the political process of ‘Nepalisation’ aimed at an integration of different communities into an organized single structure” (Bista 1982: 4).

The *Mulki Ain* promulgated by Jung Bahadur Kunuwar in 1854, integrated all the different linguistic and ethnic groups, as well as existing castes into one overarching hierarchy. In the mid-nineteenth century caste system in Nepal according to the *Mulki Ain* comprised of: -

1. “Wearers of the holy thread (*tagadhari*): Bahun, Rajput, Chhetri, various Newar castes, etc.
2. Non-enslavable alcohol-drinkers (*namasinya matwali*): Mangar, Gurung, and some Newar castes, etc.
3. Enslavable alcohol-drinkers (*masinya matwali*): Limbu, Kirat (Rai), Tharu and the general category of Bhote, including Sherpas, the group now known as Tamang and other groups with close Tibetan cultural affiliation etc.
4. Impure but touchable castes: Newars service castes-butchers, washermen, tanners-Europeans and Muslims.
5. Impure and untouchable castes: *Parbatiya* (blacksmiths, tanners, tailors) and Newar (fishermen and scavengers) service castes” (Pradhan 2002: 8).

The Nepali caste system has been classified by some authors like Haimendorf (1978), Hitchcock (1978) etc. Haimendorf (1978) classified the caste system in the Nepali society into three groups: the *Tagadhari* (those who

wear the sacred thread), *Matwali* (wine eaters) and Untouchable. According to Hitchcock, the Nepali caste system like the Indian caste system are “both systems functionally elaborated and hierarchical; both are ritualised in terms of the same theme of ‘pollution and purity’. Both involve marriage alliances between the same *jati* and involve virgin brides” (Hitchcock: op. cit.: 115). He divided it into three categories:

1. The thread wearers consisting of immigrant ‘plains’ Rajputs and Brahmans as well as Khas Rajputs and Brahmans.
2. The ‘liquor-drinkers’, consisting of the Tibeto-Burman-speaking groups.
3. ‘Those forbidden to touch water’ (*pani muni jat*) or the untouchable artisan groups.

Given this hierarchy, it is important to locate the larger population of the labour force that came to work in the tea plantations of Darjeeling. The following sections will provide the size of population according to the social composition. According to the 1891 census, the number of people belonging to the principal castes was as follows:

Table No: 2.8
Number of People in Different Castes

Castes	1881	1891
Brahmans	----	----
Kshatriyas	----	----
Newars	----	4,953
Gurung	----	9,232
Mangar	----	11,412
Jimdar or Khambu	----	29,950
Sunwar	----	5,156
Limbu	----	12,812
Kami	----	7,048
Darji or Damai	----	3,460
Kurmi	----	525
Sarki	----	1,547
Yokha	----	1,250

Source: Census of 1891, p 13

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Source: *Census of 1891, p 13*

The following table provides the ethnic composition of the population from 1901 to 1941 in Darjeeling hills.

Table No: 2.9

Ethnic Composition of Population in Darjeeling Hill Areas (in percentage)

<i>Ethnic Group</i>	1901	1911	1921	1931	1941
Kiratis (Rais, Subbas, Limbus)	2.50	34.70	32.41	33.87	32.47
Tamangs	18.68	17.70	17.80	20.34	21.61
Gurungs and Mangars	5.84	6.05	5.67	5.85	6.67
Newars	3.86	4.34	5.11	5.40	5.28
Kamis, Damais, Sarkis	10.96	10.90	11.46	10.13	11.15
Upper Caste Brahmins	4.33	3.88	4.78	4.61	3.88
Other Nepali Groups	10.93	10.23	10.89	10.67	9.58
Lepchas	6.67	6.08	5.65	6.34	5.38
Bhutias	6.23	6.75	6.23	2.79	3.28

Source: *Das Gupta, Manas: Labour In Tea Gardens, 1999, p 27.*

From the above tables the most striking factor is the low representation of the upper caste Brahmins as compared to the Kiratis, Tamangs and even the service castes. Thus it was mostly the middle and the lower castes that dominated in this region.

Mitchell Thacker (1899) in his guidebook of Darjeeling stated that:

Within recent years Nepaulese have come into Darjeeling in great number, their services being eagerly sought for on the tea plantation and they now form nearly 70% of the total population. They are a pushing, thriving race, and very prolific and great colonizers. The Nepaulese are excellent agriculturists, as well as carpenters, blacksmiths, tailors and c.; they accordingly find ready and well-paid employment, being also engaged as domestic servants, syces, leaf-cutters & c. Those who enter Darjeeling usually settle down in the district, some of there being fugitives from Nepaul on account of minor crimes, for which no extradition treaty exists, or because of their having been head-over-ears in debt. Moreover, on returning to their country they are mulcted in considerable sums, a payment which they are naturally reluctant to incur. The Nepaulese will live in the same village with the Lepchas, but they occupy a separate quarter to themselves. They are divided into almost innumerable tribes or clans erroneously called castes. In physique they are wiry, light, and agile, short and slim, wonderfully active and hardy and warlike and brave to degree (Thacker 1899: 22).

According to a Darjeeling Planters Association (DPA)²³ Report of 1918, “planters were told to abstain from recruiting subjects other than members of Damai, Sarki, Kami and Gaini castes by the Maharaja Jung Bahadur Rana of Nepal” (Chatterjee 1986: 51).

Such representation is interestingly well illustrated by a planter who categorised the various castes in relation to their work as plantation labour. According to a planter (1888) there are ‘innumerable *jats*’ of the Nepalese community as described below.

1. Bowan, Thugre – High caste, chiefly beggars, no good on gardens.
2. Chetres – Men very seldom work, keep large herds of cattle.
3. Gurung, Mungar, Bhotia Mourma – Nearly equal in caste. All good coolies and work on most gardens.
4. Newar, Jarma, Hin, Cumbu, Measur, Lurungs, Limbo, Sunuwar – The Newars are generally shopkeepers or traders. Cumbu or Jemdars are very fair coolies; a few gardens work almost entirely with these people. Lurungs are good workers but very clannish and quarrelsome, and often leave a place in a gang for a fancied grievance. Limbos intimacy with Lepchas in many cases, very clumsy pickers but hoe well. Sunwars, jewellers; fair coolies, there are plenty in Kurseong.
5. Carmie, Dhirzee, Sarkie, Girtie – All low castes. Carmie jewellers or blacksmiths, Dhirzee – dressmakers. Sarkie, boot-makers, workers in leather. Girties or Guellances, the slave caste of Nepal, not any of these coolies can eat or drink with the higher castes. Bhutias very seldom work on gardens, but sometimes carry boxes or load.
6. Lepchas are good people for clearing land, but do not work well in the rains. This race is dying out fast through disease and intermarriage. Very few are to be found on garden and in Sikkim there are only a few on the lower ridges.

Caplan’s study in western Nepal shows higher percentage of lower caste migration, as the higher castes mostly appropriated the land (Caplan 1972). According to Das Gupta, the Kiratis (of eastern Nepal) were the first migrants to Darjeeling on the basis of existing records of labourers in the tea-garden (Das Gupta 1999). However the Limbus of the Kiranti group considered themselves as indigenous in Limbuwan Pradesh which is part of

²³ In 1873 the Darjeeling Planters Association was formed. In 1910 it got affiliated to the Indian Tea Association (DBITA) and got merged with it in 1951. In 1962 the Darjeeling Branch of the Tea Association of India (TAI) was established and in 1984 the DPA was re-launched and in 1986 the Darjeeling logo was launched. (Source: DPA, Darjeeling, 2000). Old reports or documents were not accessible at the DPA office in Darjeeling and in Calcutta.

present Darjeeling, which includes Phuguri, Mirik, Soureni etc.²⁴ Subba states, “the higher castes had strong economic foundation in Nepal, and for obvious reasons, very few migrated to India in the initial period (early 19th century)” (Subba 1985: 26). Das Gupta (1999) cites from a document²⁵ that the bulk of Nepali migrants belonged to diverse ethnic groups and very small number belonged to the upper castes like Brahmins.

Those castes were preferred in the organisation of production with greater capacity to work. The planters usually avoided entering into the nitty-gritty of the caste system. It was this social hierarchy, which followed into the plantation social structure. The planters’ major concern was to ensure a steady supply of labour. Their concern with the workers was limited to tea production. In fact documents like the Handbook of Castes and Tribes in India, Risley’s (1891) Castes and Tribes in Bengal were made available order to familiarize the planters with the socio-cultural habits of the workers.

The inference that can be drawn from these documents and from the earlier review of literature is that the labour was mostly composed of the Kiratis, (Rais, Limbus, Subbas) the middle (Mangars, Sunuwars) and the lower caste (Kami, Damai) groups. Therefore social and work hierarchies may not correlate with one another, but there is a need to recognize the dominance of certain caste groups in the plantation industry.

So far we have essentially looked into the formation of Darjeeling and the tea industry. Within which we have drawn out the factors that led to such large-scale increase in population and its social composition. Now by using the field interviews with the ex-tea garden workers of Phuguri Tea Estate who faced certain hardships both in Nepal and in the tea gardens are incorporated in this study.

Recollections of the Past by Workers of Phuguri Tea Estate

The above historical background is further enriched with narratives of the ex-tea garden workers of Phuguri T.E. in Darjeeling. According to Jackson, “the ‘composite memory of things past’ is a significant variable in any analysis of immigrant experience, yet it has often been ignored or treated

²⁴ Interview with the local people, fieldwork, Phuguri T.E., 2000.

²⁵ Quoted from H.C.V. Philpot: Final Report on the Survey and Settlement of Kalimpong Government Estate Calcutta, 1925, p 21.

as of scant significance. There are two main reasons for this, (i) the remarkable perpetuation of the *tabula rasa* (the mind in its hypothetical primary blank or empty state before receiving outside impression) myth, which implies that the immigrant has wiped out the old and is easy to be fully socialized and assimilated to the new and (ii) reason for the failure to take full account of the past may be described simply as the 'progressive idea' or the assumption that the significant experience is always the present one" (Jackson 1969: 2). These narratives are of relevance, as it will substantiate the historical background with their life experiences.

Recollections of Padma Tamang, aged 100 years, who lives in Phuguri Tea Estate, helps us to visualise the conditions that existed in Nepal which forced her to leave.

In Nepal crops like *kodo* (millet), *makai* (maize), *dhan* (paddy), and other food grains were destroyed by *phatengra* (cricket). A number of animals had died of a *deshan* (epidemic). Out of frustration many of my family members left from that area. We crossed the Mechi and Dhaban rivers. I was 20-22 years of age. I was already married then but I refused to stay with my in-laws. My husband would go to work with his uncle in the fields. Although we had some land but my paternal uncle's son sold it then. Of course some land had been usurped by the *Bahun*s (Brahmins). We were two families that moved out of Nepal. It included my parents, grandparents and other relatives. My grandfather moved towards Assam and later he even took his wife there. We came to Phuguri when Ficking *sahab* (signifies the manager or the planter of Phuguri) was here.²⁶

To add from Sukbir Khawas's interview:

Those days the area across the Mechi River was called *Mughlan* (India). We had heard that money grows on the tea bushes. We were foolish to believe so. Who knew what was in store for us here. Conditions in Nepal were bad those days. There was *zamindari* system across all caste groups-the Rais, the Limbus, the Lepchas. The Limbu *zamindars* were called '*subbaji*', the Rais were called *Rai-Pagari*, the Chettris were called *Mukhias*, and the Lepchas were called the *Lepcha Kazi*. There was a strong dominance of them in the Aitabare area near Fichal, Karpuk. All these areas are in eastern Nepal. According to the Vikram, in the year 2007 there was a *kranti* (revolution). The autocratic Samvat (Nepali calendar) rule of the Ranas was dangerous. They would order for beautiful daughters and wives. People feared a lot.

²⁶ Interview with Padma Tamang, 10th November, 2000, Phuguri T.E.

My grandfather was from Dholakha in Nepal. He had stayed there for almost 60 years at Achalal *basti* (village)). It is near Pashupati (a place where the temple of Lord Pashupati is revered). He would talk about *anikaal* (famine). People would go looking for food. There have been stories that parents would leave stones to be cooked on the fire and would tell their children to wait for it to be cooked while they would go on search for tuberous roots, yam etc. But then once they would return they would find their children dead. During those days it was said that whosoever ate *tarul*²⁷ (wild edible yam) dies but those who ate *sisnu*²⁸ (nettle) flower and *jara* (root) remained alive. I remember a Gurung pregnant woman who had *sisnu* for two days became 'fat' (healthy). *Sisnu* is considered to be good for patients suffering from high pressure. In Nepal around 1951-1952 I witnessed *mai-khatara* (infectious disease) where there was rampant destruction of animals and crops by insects and pests. It destroyed a lot of harvest. My father came from the *basti* to work as a *marad* (male worker) at Thurbu Tea Estate. He then moved to Phuguri to work in the *tawa* (withering section in the factory). I was three year old then. The year was 1928.²⁹

In the process of movements of labour, the Sardar or the recruiting agent played an important role. In Assam, they were called the *akrati*, in the south the *kangani* or *maistri* and so on. A recruiter in Darjeeling for tea plantations and the army was called *Sardar* or *Gallawalla*. Histories and therefore colonial policies have been different for plantations in Assam and the South India as compared to that of North Bengal. Labour was drawn mostly from United and the Central Provinces, Chotanagpur region for Assam and from the Madras Presidency for the South. From these labour-catchment areas, they were also sent to the overseas plantations. Payment of advances was one of the common ways of entrapping people for work. By clearing up their debts through paying advances the workers entered into contracts or agreements to work in the plantations. Our earlier chapter covered on the conditions of recruitment through secondary literature.³⁰ Recruitment system differed in different areas.

Types of Recruitment

Initially, recruitment for the overseas plantations and the plantations of South India and Assam was done through the 'indentured system', also called the *kangany* system in South India. In this system the agents supplied labour

²⁷ The botanical name is *Dioscorea* sps.

²⁸ The botanical name is *Urtica dioica*.

²⁹ Interview with Sukbir Khawas, op. cit.

³⁰ See Chapter I, pp 10-15.

to the areas of production in return for a certain commission. Apart from this, assisted labour where the workers were granted permission to work on the basis of sponsorship as well as non-assisted labour was prevalent both for Assam and the overseas plantations. The planters established an organisation called the Tea Districts Labour Association (TDLA), where 77% of the tea industry in north-east India recruited labourers through this Association (Bhadra 1992: 85). The Christian Missionaries had their own Labour Bureau, Catholic Labour Bureau at Ranchi to help the Tea Districts Labour Association who also took a share as recruiting fees from their funds (ibid: 86).

According to Griffiths (1969), in the Assam tea plantations, five types of recruitment system were in force during the early twentieth century. They were as follows:

- i. Recruitment through free and unlicensed contractors in areas where unlicensed recruiting had not been prohibited;
- ii. Recruitment through licensed recruiters or garden *sardars* in the licensed recruiting districts where the labour was placed under contract before being dispatched to the tea district;
- iii. Recruitment at Dhubri, or on the tea garden, of 'free labour'- i.e.; labour which, whether brought up by contractors or not, had executed no contract previous to arrival in Dhubri or the tea districts, and could in theory change its mind after seeing the country and the garden;
- iv. Recruitment of time-expired emigrant labourers under contracts covered by the ordinary law- i.e. Act XIII of 1859, reinforced by Section 492 of the Indian Penal Code;
- v. Recruitment of indigenous labour (Griffiths op. cit.: 283).

The Act VIII of 1915 abolished the contractor and the *arkatii*. The garden *sardars* were made the sole recruiting agents. Through this Act the Assam Board was set up under which the local agents worked. These local agents supervised the garden *sardars* while the Board and the district officers supervised them (in the capacity of Superintendent of Emigration). Griffiths (1969) provides an interesting description of *sardar*. He states:

It must be premised that the *sardar* is only known by that name during the time he is employed in the recruiting districts; he is in fact nothing more than a garden coolie, he is ignorant and illiterate, and on his return to his garden reverts to his work as a coolie, and beyond being paid a commission on the person he recruits he has no further interest in them. A judicious selection of the people who are to be sent recruiting has to be made by the

garden manager. The newly imported coolie is as a rule the most successful person, for having recently left his village he is in close touch with his relatives and friends who are living there. On the other hand, the employment of such people is not unattended with risk, as some of them may not return, and as they leave no security on the garden, advances made to them for recruiting purposes are lost. Sometimes old coolies who have been many years on a garden and who have lost touch with their country are sent down. The manager knows that they may not be very successful and he merely lets them go as a matter of policy in order to give them a holiday and let them revisit their country. Most *sardars* leave security of some sort on the garden; it may be cash or cattle, or a man leaves his family behind when he goes to recruit...He now receives from the Local Agent a first advance, generally amounting to Rupees 10. As a rule no account is given of how this is expended, as it is considered necessary though in some districts, particularly in the Central Provinces, coolies are brought in on the first advance. Generally speaking the *sardar* returns to headquarters in ten or fifteen days and reports having arranged for coolies... On returning to the garden with his coolies, the *sardar* receives a bonus, which may vary from Rupees 5 to Rupees 40 according to the custom of the garden, and the class of coolie recruited...The average length of time spent in the recruiting districts is about four months. A certain percentage of *sardars* do not return. Warrants for the arrest of absconders are taken out under Section 170 of the Act, but very few are recovered, and in many cases Local Agents have practically abandoned trying to recover absconders. The defaulters are as a rule single men without property or connections on the garden. Sometimes the attractions of their old homes prove too much for them; sometimes they fall under the temptation of the *arkati* and sell their coolies, and cases have been known in which the *sardar* has sold himself to a recruiter, and on arrival in Assam has absconded and returned to his own garden with a plausible story of having been drugged by the *arkati*... But it is safe to say that the gardens, which are most successful in *sardari* recruitment, are those, which treat their labour best (ibid: 281).

From a Report of the South of India Planters' Enquiry Committee (1896), '*coolly gangs*' were sometimes collected from one village and sometimes from several villages in the same locality. This was dependent on the influence and resources of the *maistry*. The '*coollys*' were sometimes formed of one caste or of several castes. Such composition depended greatly on the caste of the *maistry*. Only *coollys* of the same caste or district brought their families with them. Chakraborty (1989) opines that *sardari* system was an instance of a 'precolonial, precapitalist institution being adapted to the needs of industrialization in a colony'. Besides the *sardar's* mode of operation had certain precapitalist elements vis-à-vis recruitment on the basis of the often-overlapping networks of community, village and kin" (Chakraborty 1989: 112).

The Government of Bengal pictured the sardars thus:

The immediate employer of a worker is his *sirdar*. The *sirdar* gives him his job and it is by his will that the worker retains it... The *sirdars* are the real masters of men. They employ them and dismiss them, and in many cases, they house them and can unhouse them. They may own or control the shops, which supply the men with food. The operative too pays his lump or recurring sum to the *sirdar* to retain his job. His life, indeed, at every turn is coloured by *sirdarism* (ibid: 96).

Doars and Darjeeling were the only two areas where labourers were always free i.e. they were not placed under any kind of contract and could leave whenever they wished. Both these areas were not under the purview of the various laws that were applicable to the tea growing districts of Assam as the areas were outside the administration of Bengal (Sharma 2000: 7). Griffiths maintains, "the reasons for the difference are nowhere explicitly stated, but it was perhaps mainly due to the fact that the Dooars was much nearer than Assam to its principal recruiting ground. The coolie who went from Central India to Assam was indeed going to foreign parts and might well feel himself to be a homesick exile, only too anxious to run back home if he could. A second factor may have been –though this is pure guesswork- the experience of the disadvantages of the penal contract, which had been gained by planters in Assam by the time that tea cultivation in the Dooars developed on any considerable scale" (Griffiths op. cit: 284-285).

Work Organisation under the *Sardars*

Measures taken for recruitment were disheartening. Single women and single men were made to settle as family units. 'Depot-marriages' were conducted where couples were sent as families. Recruitment was engulfed with deceit and treachery. According to the Detailed Report of the Indian Tea Association (ITA), 1889 in Assam:

Boys and girls are cajoled or intimidated into leaving their homes and are carried off to Assam under false names. Married women are persuaded to desert their husbands and children, and are decoyed away under circumstances that make it practically impossible to trace them (ITA 1889: 157).

In Darjeeling, the labouring population was entirely at the mercy of the *Sardars* or the recruiting agents who received a certain amount of commission for each coolie recruited to work in the plantations. In fact families received

Sardari commission till the year 1986 @ one *paisa* per coolie every week as in Phuguri T.E. in Darjeeling as our narratives illustrate. Sharma (2000) maintains that, "each *sardar* having a caste background could easily attract the fellow kins. In this way *sardars* used to bring plantation workers from Nepal and Sikkim in Darjeeling hills. They were assisted by the *gallawala* who were deputed at the various places in Nepal and Sikkim from October to February every year for recruiting, enticing and even indenturing labourers. A sort of competition ensued among the *Sardars* in respect of commission known as Recruiting Bonus from the management" (Sharma 2000: 7). As the planters preferred married couples, the *sardars* "used to even intoxicate the people and forced them to marry on the way before reaching gardens from Nepal and Sikkim. In this process, they even asked kins to marry there in Nepal and for such act they were escalated from the villages resulting which they were forced to migrate to *Muglann* (India). Such people were known as *Pataki / Chutaki* (untouchables) in Nepal" (ibid: 7-8).

O' Malley describes:

The coolies employed in the hills are almost entirely Nepalese, and in the *Terai* they are drawn from both from Nepal and Chota Nagpur. The labour is free, i.e. it is not controlled by any special legislative enactment, as in Assam. There are no agreements, labourers being free to come and go, as they like. They are employed directly by *sardars*, who take advances from the estates on account of the coolies debts, which are many and heavy: some estates occasionally suffer heavy losses on this account owing to the managers having no proper hold upon the debtors. A *cooly* earning Rupees 6 a month usually spends about Rupees 50 upon his wedding, and occasionally a similar amount upon funeral, all borrowed money. The *cooly* looks to the *Sardar* for an advance, and the *Sardar* to the manager. The latter lends without interest; and if he will not, the *cooly* and *sardar* turn to the *Marwari*, the Shylock of the hills, who commonly charge 75% interest (O' Malley 1907: 84).

There existed some form of familial ties between the *sardars* and the workers. The *sardar* mostly belonged to the same caste or tribe as the labourer and was even a village headman. The entire responsibility of the workers fell in the hands of the *Sardars*. Planters were never directly involved in the lives of the workers. Initially labour was scarce and 'coolie stealing' was high between *Sardars* who lured the coolies by promising higher wages. *Sardars* or recruiters were directly responsible for the supply of 'coolies' although they too were part of the wage-labour. These 'jobbers' were in charge

of the 'coolie gangs' and were responsible for the continued labour movements into the plantations. Caste and familial relationship played an important part in the supply of labour to the plantations.

As mentioned earlier, payment of advances was an important means of attaining labour. The *sardars* usually took advances from the managers and gave money as loans to the already subjugated natives of the recruiting areas for clearing their enormous debts. The natives were enticed by assuring them of good wages, housing etc. for work in plantations. The *sardars* were responsible not only for providing food, shelter and the wages to the workers but were also responsible for the expenses incurred for marriages and death ceremonies.

The planters quite plausibly used the term 'family-employment' where the husband, wife and children were employed in the plantations. A concept of family-based recruitment prevailed; whole families were recruited to work as *marad*, *aurat*, *lokra* and *chokra* i.e. as male, female, children and adolescent workers. Since work in plantation was agricultural, women could easily adapt themselves to plucking, hoeing, transplanting etc. while the children apart from plucking tea leaves were engaged in catching insects, caterpillars on the leaves, killing mosquitoes, cleaning the bushes etc. Family employment was also responsible for maintaining the stability of the male labour force. The North Bengal Mounted Rifles; a volunteer force composed of European planters of Darjeeling and Jalpaiguri districts was organized in 1881 with the aim of "maintaining law and order in the plantation areas and disciplining the plantation labourer" (Dash 1947).

The *chowkidar* or the guard who was slightly higher than the *Dafadar* in the supervisory level was required to maintain peace in the gardens, handle problems of theft and desertion and therefore control the coolies. A system called '*Hatta-Bahira*'³¹ (eviction) was practiced in Darjeeling where any worker, if found guilty of any crime would be thrown out of the garden along with his belongings. Flogging was rare. The planters found the system of *sardari* recruitment safe. Coolie stealing was also high in those days. Therefore, *chowkidars* were employed to check the coolies in the night. *Sardars* themselves were involved in coolie stealing and labour was also

³¹ According to Sharma, with the increase in population the planters started implementing the Contract Clause of Bengal of Act III of 1915 which allowed labour retrenchment. (Sharma 2000: 8).

shifted from one garden to the other depending on the requirements of the gardens. The following narratives highlight certain features of plantation life during the earlier period in Phuguri T. E.

Birmaya Singar, aged 68 years, an ex-tea garden worker of Phuguri Tea Estate reflects on the ways the coolies were recruited, settlements of particular caste groups in localized areas. She says:

Kaman Singh *Sardar* brought us here. He had set up 30-35 houses. The Kamis were already here. They mostly came to work as fitters colloquially termed as '*kal-walas*'. They lived in Godamdhura (longhouse near the *godown*). There were also a large number of Tamangs here in Phuguri.³²

The *Sardars* acted as intermediaries between the planters and the workers. In fact in Darjeeling tea gardens, each cluster of houses was named after their respective *sardar*. The settlements were wattle-huts, which were temporary. As contract system was not applicable, the workers could be evicted anytime through the system of *hatta bahira*. According to Sukhbir Khawas, resident of Chandura, Phuguri Tea Estate:

There were a number of *Sardars*. Kaman Singh *Sardar* was a Tamang. He worked as a Munshi in Phuguri. Other *Sardars* in Phuguri were Krishna Lal Bharati, Rangalal Bharati. The Toklang area had fourteen *Sardars*. Till 1990 the *Sardar* families received commission of one *paisa* per coolie from the Company for supplying labour. Coolie stealing was very high. Competition was rife between them. For instance the Mechi *sardar* would entice labourers by offering them with better wages. These *sardars* worked in the tea garden itself mostly as *munshis* or *chaprasis*.³³

Late B. B. Lama, a trade union activist, and resident of Soureni Tea recalls,

Coolie stealing was very high particularly during the night. In those days eviction was extremely common. The coolies used to be evicted with the help of the *chowkidars*. All his belongings would be thrown out of his hut and he would be asked to leave the garden. The Company would give the title of a *Sardar* to a person who brought five coolies with him. The *Sardars* had to spend on the marriage and death ceremonies of their coolies. They got a commission of one *paisa* per day for each labourer. Till the year 1986, this *Sardari* Commission existed and families of the *Sardars* were getting this Commission. In Phuguri there were a number of *sardars*. Jaman Singh *Sardar* was asked by the British manager to get coolies. He crossed the Palasun River

³² Interview with Birmaya Singar, 11th November, 2000, Phuguri T.E.

³³ Interview with Sukbir Khawas, op. cit.

and got coolies for Phuguri and later for Mechi Tea Estate. This was around 1907. Panta *Sardar* who was a fitter at Phuguri Tea Estate, Sukhbir *Sardar* (grandfather of C. B. Sinchewry³⁴), Kaman Singh *Sardar*, Norbu *Sardar* in Mechi Tea Estate are examples of a few. There was also a female *sardarni* named Bajri Maya *Sardarni*, who took over the job after her husband's death in 1945-46. Both her sons- Manbir and Ambar Singh were also *Sardars*. Sukbir *Sardar* was the son of Gophale *Sardar*. I do not remember the proper names of other *Sardars*. They were called, Guye *Sardar*, Chibe *Sardar*.³⁵

From our literature review and the preceding account we observe that due to the socio-political history of Darjeeling, the growth of tea plantations in Darjeeling is different from Assam. Labour was therefore not indigenous but settled. Free recruitment coupled with various other factors led to the growth of Darjeeling tea plantations. In plantation parlance, *sardars* were the *maai-baap* of the workers. As mentioned before kinship and familial ties played an important role in recruitment. Such bonding, coupled with the family-employment policy and hardships, forced families to migrate. This inevitably led to large settlements in plantations.

Predominance of certain caste/ethnic groups like the Tamang, Kirati, and the service castes like Kami, Damai could not just be attributed to the economic condition in Nepal but were also denied employment in the British army. Lack of alternative opportunities and above all abject poverty forced them to enter into plantation work. Empirical studies like Sharma (2000) have shown the dominance of the same caste-groups as that of the *sardars*.

However, health conditions regarding workers for Darjeeling tea plantations were not highlighted as explicitly as Assam tea plantations. As we will see in the following chapter, investments in welfare and health were negligible on the part of the management. Further, with *sardars* being solely responsible for their respective 'gangs', the workers were left to fend for themselves. This worsened the health conditions of the workers. Conditions of work, housing, sanitation and health during the colonial period in India are some of the areas of articulation in the next chapter.

³⁴ C. B. Sinchewry works as a clerk in the office.

³⁵ Interview with B.B. Lama, 11th December, 2000, Soureni. He unfortunately is no more.

CHAPTER III

***Conditions Of Work And Health In Tea
Plantations: A Historical Overview***

**CONDITIONS OF WORK AND HEALTH IN TEA PLANTATIONS: A
HISTORICAL OVERVIEW**

*Dhoteri ko tokeri,
Chungthung ko thaapli,
Miling ko bariyo
Daulatai thiyo khanu ra launu
Paolonai mariyo*

*Jat bhane sanu,
Nam nai thulo,
Salam chha kuire lai
Tap tap chiapatti tipnu
Jogaunu suero lai*

Basket of Dhotray,
Headband of Chungthung
And the rope of Miling
Opulent was food and clothing
But died in debt

A man of low caste
Only the name high
I salute the Britisher
Gently nip the leaves
Saving the buds with care

Sukbir Khawas, Chandura¹

This chapter draws a historical profile of the working, living and health conditions in tea plantations of Assam and Bengal. There are certain physical, climatic and health differences but despite these there are similarities example the organisation of production, that includes plantation hierarchy, migration, production and same agricultural crop cycle, intensity of work and production, the structure of discipline etc. are some of the similarities between Darjeeling and Assam.

The intention is to show the relationship between socio-economic conditions and ill health among the plantation labour. Nature of work, living conditions, and type of food intake are a clear reflection on the morbidity patterns and mortality data. Reports and survey data that provide an insight

¹ Interview with Sukbir Khawas, op. cit.

into this relationship are used along with narratives expressed by the ex-tea garden workers of Phuguri Tea Estate. These narratives reflect the attitudes and policies of the planters and the precariousness of workers' survival in the plantations. Our previous chapter highlighted the conditions that led to the emergence of a plantation labour force in Darjeeling. The relevance of the historical chapter as a linkage to the ongoing chapter is to understand the health implications of the conditions in which they were brought and made to work and live. By looking at the health conditions of overseas plantations and Assam we draw out some for Darjeeling. This chapter broadly explores the link between the conditions of work, living and health in the tea plantations of Darjeeling and Assam.

Conditions of Work

Conditions of work entails wage structure, type or nature of work etc. The review of literature has highlighted these variables in the context of Assam and overseas plantations which were more strongly reflected through the mortality data of the late 19th and early 20th century. In this section corroborating with the situation of the Assam and Bengal (Terai) plantations we specifically attempt at highlighting the conditions for Darjeeling tea plantations.

We have shown earlier that the *sardars* used all possible means of enticement to work in the tea plantations. The worst was the 'indentured system', which was the dominant practise in most plantations except Darjeeling.² Workers were cajoled and even coerced to work in plantations. All forms of deceit and trickery were used to coerce them. By promising better wages and paying advances to clear their debts, the recruiters compelled them to enter into work contracts. The jobber, *sardar*, took advantage of their poor economic situation and lured them to work in plantations. The journeys to the plantations were often long and exhausting. Many on the way to Assam succumbed to a range of communicable diseases like cholera, malaria, diarrhoea and dysentery.

Labour in Darjeeling plantations, was shifted from one garden to another according to the requirements of the planters for their respective

² See Chapter II on Types of Recruitment, p 28.

gardens. From an account of a tea planter³ in Darjeeling during the late 19th century it was found that some labour was resident for example in the gardens of Lingia and Tumsong, but additional labour was employed from outside i.e. the *bustees* (villages) and *khas mahals*. These casual or outside labourers were very independent, and could leave the job whenever they pleased. As labour employed on field work then received contract rates and they naturally preferred work, which entailed minimum effort for the rates paid.

There is further evidence from a report of the Indian Tea Association (ITA) of 1900, that the planters and managers in Darjeeling had the right to transfer the *sirdars* along with their gangs from one place to another when required (ITA 1900: 392-395). There was nothing called permanent employment. This meant that the coolies brought by a *sardar* lived in the same area. It is said that the areas or localities were named after the respective *sardars*. There also existed a system called *hatta-bahira*, as discussed earlier in the plantations of Darjeeling. In Assam, 'armed policemen were deployed, while in the Dooars and Darjeeling region, planters organised the North Bengal Mounted Rifles' (Dash op. cit.: 146) to control labour. A family-recruitment system in the tea plantations prevailed with the realisation of 'low-cost of reproduction of labour'. Thus women and children were drawn into employment. The earlier reviewed studies have shown the conditions under which women workers worked in plantations. The following paragraphs briefly address these aspects of women and child labour in plantations.

Women and Child Labour

*agari tokro, pechhari kokro*⁴

Kaumati Khati, an ex-tea garden worker of Phuguri T.E. narrated that women earlier carried a basket in the front and a cradle on their back. In the initial years of setting up of plantations, the number of women employed in tea plantations was less as compared to men. As plantation work was similar to agricultural work, women were easily employed. Containment of the male workers, a steady reproduction of labour, female workers showed dexterity in plucking were some of the main reasons for the use of family employment. As

³ Lt. Col. ED. L. Hannaqan (F.R.H.S.): Darjeeling Planting-Then and Now, an account of the tea gardens in Darjeeling and the work of Andrew Wernicke (n. p.)

⁴ As said by Kaumati Khati about the earlier conditions of women workers. Interviewed on 21st December, 2000.

entire families were hired, wages too were constantly low. As Engels (1995) study demonstrates, women were even made to settle as 'family units'. Depot-marriages were common where single men and women were sent as families to the tea districts of Assam.

From the following narratives, it can be observed that more than age the height of the child was used as the main indicator for employment. This could be reasoned to the height of the tea bushes as expressed by Padma Tamang, aged 100 years, an ex-tea garden worker of Phuguri Tea Estate. She said while recollecting the conditions as: -

They would pick us according to our height and stature. My *maili* (second daughter) was shorter than her third younger sister (*saili*). Although she was younger, *saili* got the job instead of her elder sister! Earlier the conditions were different. It was very tough. Tea bushes during our times were big and were very high. Nowadays the bushes are small. We literally had to climb the tea bushes. Working conditions were horrible. If we reached late for counting (attendance) in the morning then they (overseers) would ask us to return home. This whole area was mostly jungle. (She says pointing towards the area around her house). Then houses as such never existed as we have today. They were mostly *kuccha* houses. Now the workers have all the facilities they want. We came to Phuguri when Finlay *sahab* was here. He was married to a *chhokri*⁵. I think I was 30 years of age then. (She is talking about the year 1930). My husband followed later. Kaman Singh *Sardar* brought us here. He had set up thirty to thirty-five houses. The *Kamis* were already here. They mostly came to work as *kal-walas* (fitters). *Kamis* mostly lived in Godamdhura (long house near the *godown*). There were also a large number of Tamangs here in Phuguri.⁶

I had been working since the age of 12 years. Those days work was only for five days. Saturday and Sunday were holidays. A *chhokra* got two *annas* as *hazira*. An *aurat* got three *annas*, *marad* four *annas*. *Tirpal* was not provided during those days. Women would ask the men to hold their *kokro*⁷ while climbing uphill. Crèche was established only during the late British rule^{8,9}

⁵ Derogatory term given by the locals in the garden to a local girl married to a Britisher.

⁶ Interview with Padma Tamang, an ex-tea garden worker of Phuguri T.E., op. cit.

⁷ A small basket made of bamboo in which women carried their children while plucking the tea leaves.

⁸ It is not surprising to notice how far they were alienated that despite India's freedom from the British rule dominance in the tea plantations still continued as British companies still remained in the tea plantations. Phuguri is an important case, as James Finlay and Company owned the tea garden till 1955 when it was sold over to Daga and Company. The workers' perception was that the British still ruled them, as crèche was established only after 1954 with the implementation of the Plantation Labour Act of 1951.

⁹ Interview with Bir Maya Zimba, (76 years of age) an ex-tea garden worker of Phuguri T.E., 5th December, 2000.

In Darjeeling, child labour was used "to pick leaves and in case of small children to catch caterpillars from the plants Rupees 2-14-5¹⁰ was given in 1929" (Engels in Robb: 1996: 233). Around circa 1900, a Darjeeling planter mentions the use of child labour as

There is not doubt that mosquito is spreading in the hills. All sorts of remedies have been proposed: lighted torches carried through affected parts at night, children catching mosquito & c. but nothing will stop this plague when it once starts... beetle a small reddish yellow insect seems to attack heavy pruning or young tea more than any other pieces. It bites or rots away. When thee little pests appear, put some children to pick them off, and give 1 *anna* a 100 of the beetles are plentiful... (Notes on Tea in Darjeeling by a Planter: 51)

According to the Report of the Royal Commission of Labour Inquiry (RCLI), 1931 one manager in Assam admitted that "children started work at 4, 5 or 6 years of age, and another said that children started on light tasks 'as soon as they could walk.' Some stated that their children did not become workers 'before 9, 10 or even 11 years of age. The rationale behind the planters' employment of children was the 'workers being agriculturists were accustomed to allow their children to start work at a very early age' (RCLI 1931: 415). As the work of plucking involved use of 'nimble' fingers, planters thus, justified hiring children. The concept of family-employment was the reason given for such low wages.

Wages

In the 1850's the wages on Assam plantations were Rs. 2½ per month. In 1860-64 it increased to Rs. 4 or 5 as cash wages and was supplemented by grants of land and some concessional rations as per contracts with labour. Piece-rate payment was also prevalent. A good worker could earn as much as Rs. 8 per month on piece rate. In 1866 labour rules along with maximum bonus was adopted by Indian Tea Association. In Assam "bonus was paid mainly as inducement to renew agreements for fresh engagements" (ILO 1989:22)

According to a letter of the manager of Soom Tea Estate in Darjeeling in 1871, wages were reduced to cut down costs (Soom Tea Estate Report 1871:4). As there were more women employed their wages were reduced from

¹⁰ The value of one rupee was 16 *annas* and therefore the increment was of 14 *annas* each i.e. less than a rupee.

Rs. 5 to Rs. 4-8 a month, thus increasing savings (ibid). The wages for men remained unchanged of Rs. 5-8 a month. In 1873, the wages of a labourer in Darjeeling district 'for a full month of twenty-six working days for a child was Rupees 3, woman- Rupees 4-8, man or strong woman got Rupees 5-8, with a "pice a day for each coolly as *sirdari*" (Morton 1873: 17-18).

Women labourers in Bengal tea plantations during the early 1920's, earned between Rs. 4-9 for eighteen days (average number of working days in a month) while the cost of living was estimated at Rs. 6 per month (Engels in Peter Robb 1996: 233). It is said that in Darjeeling the wages were higher, as number of working days were more. It was natural that with more working days in a month, total monthly wages would invariably increase. Free quarters and rent-free land were provided for workers and their families. According to Engels (1996), this was not enough to live on but necessary for the families' survival (ibid). Low wages were always linked to land as a form of extra income.

According to the RCLI, 1931 in Darjeeling wages were fixed on piece-work basis and workers were paid weekly. The minimum earnings of workers were about 7 *annas* 6 *pice*¹¹ a day for men, 6 *annas* for women and 2 *annas* 9 *pice* for children (RCLI 1931: 399). Provision of garden land was cited as the reason for low wages.

Sukbir Khawas, 76, and Kaumati Khati, 65, both ex-tea garden workers in Phuguri Tea Estate narrate the conditions of work in plantations. Sukbir Khawas says:

I started working at the age of eight, (year 1932) as a *lokra*. By the time I turned thirteen years of age I became a *chhokra*. We had to begin work with 3 *annas* as weekly wages. It then increased to 4 *annas* along with the *aurat*. After this we reached the category of a *marad* with 5 *annas* per week. According to our heights and stature we would be categorized. The *kamdaris* would check our heights. Whatever it is we had to first work with the women. Other workers like tea maker, *dafadar*, *rotiwala*, *chowkidar* earned Rupees 9 per month. The *dakwala* earned Rupees 14 per month as his work entailed a lot of travel. Sunday was a holiday for him. Wages were paid on a weekly basis. A *lokra* got 6 *paise*; a *chhokra* got 8 *paise* or 2 *annas*. An *aurat* got 16 *paise* or 4 *annas* and a *marad* got 20 *paise* or 5 *annas*. I do not remember how much the super (senior) staff workers earned then. Sunday would be a holiday but at times when the flush

¹¹ One *pice* is equivalent to 1/16th of an *anna*

would be high they (the manager) would ask us to work. Till date this is practiced. In Phuguri there were sixty-seventy labourers including the *chhokras*. The nature of work for the *chhokras* was of clearing the overgrowth of grass and weeds around the tea bushes. Plucking too was an important task for them. Those days tea bushes were high and big. We would work mostly barefoot. We would get blisters in our feet during the rains.¹²

Kaumati Khati worked as a plucker in Phuguri T.E. since the age of ten in the year 1945. She says,

There were no schools then. My father was a *chia wala* (tea-maker) and my mother a plucker. Those days there labour was scanty, so they would call us to work from our houses. The wages were structured on the basis of age and gender. A *lokra* got 1 *anna*, *chhokra* got 2-3 *annas*, an *aurat* got 4 *annas*, a *marad* 5 *annas*. The weekly payment amounted to 1½ *rupaiyah*. Earlier during winters labourers would collect cow dung from their own houses and store it in the *maalgodam* (godown). These would be used as manure for the tea bushes. Work in tea garden otherwise involved plucking and clearing. There was no ventilation in the factory. The workers looked pale and worn out as if they suffered from jaundice. In winter they gave us light work for around six months like road making, clearing etc.¹³

The above descriptions reflect the working conditions of the tea plantation labour in Assam and Bengal. Apart from these the living conditions of the workers were equally difficult. Living conditions include housing, sanitation and water supply, food etc. the following sections covers on these aspects.

Conditions of Living

Housing

Low wages were always justified with family employment and providing basic amenities like housing etc. Housing conditions was usually overlooked and was never of immediate concern to the planters. Housing and sanitation hardly received any attention as long as labour was made available by the *sardari* system. The Report of the Soom tea estate, Darjeeling, 1873 states, "although the coolie lines were better constructed with ventilation, but problems of sanitation and hygiene were acute in these coolie lines" (Report-Soom Tea Estate 1873: 11-12). From the table below, we observe the level of

¹² Interview with Sukbir Khawas, op. cit.

¹³ Interview with Kaumati Khati, op. cit.

importance given to construction for housing, repairing coolie houses from their estimate of expenditure of Soom Tea Estate:

Table No.: 3.1

Annual Estimate of Expenditure of Soom Tea Estate for the year 1873

Items of Expenditure	Rupees	Annas
European Establishment (including Superintendent on leave I acting Manager 2 Assistants and an acting Secretary.)	8,662	8
Native Do ----	1,622	8
Coolies including <i>Sirdarree</i>	19,000	
Charcoal 2500 mds. Including carriage @ 11 ans. per md.	1,718	12
Planking for 2500 boxes	1,182	
Making Do. -----	525	
French nails	80	
Clouts	25	
Dowals	52	
Solder	220	
Iron hoping	105	
Tea Lead	1,355	
Carriage of Stores from Calcutta	235	
Baskets, Mats, Trays, and c., for Factory	350	
Repairs of Coolie lines	400	
Contingent charges ----	1,000	
Office Do. -----	475	
Transit of Tea including fare to Calcutta	4,120	
Commission and shipping charges @ 1 per chest -- --	1,050	
Doctors and Auditor's fees ----	300	
Manager's commission of 5 percent on the nett profits of 1872 -----	1,025	
Rupees -----	43,502	12

Source: Report of the Soom tea Estate, 1873, p 10.¹⁴

Note: (area of cultivation 400 acres, surface measurement) calculated for 1200 maunds of Tea.

¹⁴ Likewise, there are a number of tables in the Report that can similarly be used to assess the indirect expenditure on labour.

The above table shows that investments in housing (repair of coolie lines) and medical facilities (doctors) were lower than the commission earned by the manager. Importance was given to the productivity of tea rather than the productivity viz. the labour. Engels (1996) says earlier "...the Nepalis and Santhals built better houses maybe because they were forced to develop the necessary skills in the hills" (Engels op. cit.: 237). In one plantation in Darjeeling, a standard house was experimented - a mud floor, 13 feet by 20 feet, 7 feet high bamboo walls, a corrugated iron roof which was 10 feet high at the ridge. It also had a verandah. The houses were spaced 50 square feet per person. While in Duars, around the 1920's, labour houses were made with iron frames and corrugated iron or asbestos roofs and walls were made of *ekra*, with mud plastering. Bricks or wood were also used for protection against the rains and with the short supply of the traditional raw materials, as most of the wastelands in Duars had been cultivated (ibid). Engels (1996) argues that the traditional house walls could be destroyed and rebuilt unlike the iron framed or mud houses where germs and insects lived for longer periods. The labour preferred the former as the latter were badly ventilated (Engels op. cit.: 241). With regard to the type of housing, Curjel says that "hill folk prefer clay and bamboo huts, with an ordinary *verandah* and thatched roof. They also prefer their homes to be surrounded by a plot of land for cultivation, and their cattle and other domestic animals are kept near by" (Curjel 1923: 26).

In Assam, houses around 1930's were constructed on mud plaster with thatched roofs. According to the RCLI, 1931, the employers constructed 8-15 houses at one stretch. As far as repairing was concerned, the labourers did it themselves during the slack season, with thatch provided free of cost. Small families were allotted one room but when there were more members, both rooms were given over to one family (RCLI 1931: 408). Problems were that plinths were seldom provided, floor and cubic space were often inadequate, and question of light and ventilation were entirely ignored. The workers always preferred the thatched house, which was 'cooler in the hot weather and warmer in the cold season' (ibid). Workers were more comfortable with the traditional type of housing.

Das (1931) showed that 834,588 out of 1,053,944 workers i.e. 79.2% were resident labour on the plantations of tea, coffee and rubber in 1928-29

in India (Das 1931: 64). They were called resident labour. "Coolie lines were the main structure of housing for Assam and Bengal tea plantations. These lines were overcrowded, built very close to one another without a proper outlet for conservancy and ventilation. This resulted in poor sanitation and epidemics. Besides overcrowding, insufficiency of accommodation for all the members of the family was great. 'Decency', 'convenience' and 'comfort' lacked in most plantations.

A comparison of housing construction in Darjeeling shows that prior to the First World War, houses were constructed of wooden plank walls and corrugated iron sheet roofs. After 1939, houses were made of bamboo and mud walls with thatched roofs, as wooden planks and iron sheets became very scarce. Even after 1939 there was still a complete absence of drainage. "The incidence of phthisis was high in these gardens as a result of dark, dingy and ill ventilated quarters" (Labour Investigation Committee Report (LIC Report 1967: 313). The field interviews from Phuguri T.E. tell us a different story of this period. Sukbir Khawas, resident of Phuguri Tea Estate, Darjeeling says,

There was no permanent house for the workers. Wherever they would get jobs they would go. Houses were built of thatched roofs fenced with *titepati*. We then had no feelings for the houses in which we lived. It was made of hay and was barbed with *titepati*. We were sent from one area to another to live. All we had was sacks to cover ourselves while we slept. No one felt bad when one had to leave one's house. Flogging was rare. But if anyone created any problems then they would order the *chowkidars* to throw them out of their houses. Such a system of eviction was called *hatta bahira*. The British would send such notices of eviction. The company provided us with nothing. We would sleep on sacks and even cover ourselves with sacks or our mother's sari and sleep.¹⁵

Padma Tamang, aged 100 years recollects and says,

We had nothing else to sleep on except *paral ko gundri*⁹ (straw mat). There were hardly any facilities given to us.¹⁶

What was officially documented and experienced by the workers themselves was quite different. Such temporary housing led to a number of problems especially during the rainy season. Incessant rains damaged the roofs and water leakage was a constant problem for the workers. It is said

¹⁵ Interview with Sukbir Khawas, op. cit.

¹⁶ Interview with Padma Tamang, op. cit.

that the workers were put to bed early to be able to rest enough for work the next day. The tea garden workers are accustomed to the sound of the alarm every morning. Breman's (1968) study shows how the workers were not even allowed to leave the estates for gambling as a recreation. The workers were coerced on the pretext of being disciplined. An important aspect of living conditions which have a direct relation to health is sanitation and water supply.

Sanitation and Water Supply

Prevalence of diseases like cholera, hookworm had a direct link to the lack of a sanitary system/conservancy, water supply. Accounts especially in the case of the Assam plantations are well documented in different official reports. In most gardens latrines were uncommon. In fact planters argued that the factories were seasonal and built in open spaces, therefore the workers had easy access to the jungles.

Unsanitary conditions, lack of proper drinking water and general water supply resulted in a large number of deaths on the journey to the Assam tea plantations. Cholera was one of the most fatal diseases, especially affecting the emigrants going to the tea districts of Assam. Between 1861 and 1863, overcrowding, insufficient and improper food supplied on the voyage and total neglect of the coolies both with regard to medical treatment and cleanliness caused high mortality. Overcrowding was so excessive that many were 'crushed' on board the steamers. There was not even standing space for them. 'Depots' with a space for 100 sometimes had 900 people cramped together. There was no supervision of such depots. The water supply was provided from wells but was mainly drawn from the tank, which according to a Detailed Report of the ITA (1889) was 'foul in the extreme'. The report further states, "The coolies defecate anywhere and everywhere, a yard from the depots, and on the margins of the tanks. There were terrible epidemics every year on at least half of the voyages made by steamers carrying coolies on the Brahmaputra in 1878" (Detailed Report of ITA 1889: 51).

'Insufficient coolie accommodation', 'undue delay in the preparation of meals', 'absence of toilet facilities on wet decks', prepared grounds for the outbreak of cholera and other diseases (Behal and Mahapatra 1992: 147). There were large-scale desertions. Between 1863 and 1866 out of 85,000 labourers imported into Assam, almost half of the population (41.12%) had

died or deserted (ibid). The cause of cholera outbreak according to the Detailed Report of the General Committee of the ITA 1897 was traced to two sources: - a) foul water supply in the Calcutta depots, through which the coolies were infected with cholera; and b) defects in the water supply on board the Brahmaputra steamers, by which the disease, once introduced, was quick to spread among the uninfected coolies (ITA 1889: 51). In the recruiting depots, trains and steamers, cholera was common among the coolies taken to work in the plantations (Detailed Report of the General Committee of the ITA 1897: 66).

On reaching the plantations, the labour became susceptible to hookworm (ankylostomiasis)¹⁷, as it was highly prevalent in the tea plantations of Assam. Curjel (1923) mentions that the notion was, that it was not customary to provide any sanitary conveniences in the tea estates. The reason given for such absence was the 'danger of upsetting the labour force' that was 'ignorant and resented interference with their habits', and that such provisions involved considerable expenditure (Curjel 1923: 26-27). The latter can be taken as a more vital reason for lack of sanitary measures. As regards the provision of toilets, it was never kept in mind while constructing the 'labour lines'. According to Curjel, the usual type of latrine was a deep pit dug in the ground covered by a wooden platform. Bamboo and matting walls were placed around and a thatched roof supported on bamboo poles protected the whole. Once the pit was, when required, filled up and covered over with sufficient earth, and the wooden platform, walls and roof would be moved to another site. As there were no the sweeper castes in the hills with the above arrangements such difficulty could be overcome.

According to Das (1931) it was due to lack of proper conservancy, which in turn caused anaemia, affecting efficiency and thus labour productivity in Assam plantations. He further stated, "contrary to the prevailing notion, the Assam Labour Enquiry Committee of 1921-1922 had found the worker willing to take advantage of latrine accommodation and had noted that whenever the latrines have been provided the result has been accompanied by appreciable fall in the incidence of anaemia" (Das 1931: 104).

¹⁷ A hookworm disease. An infestation of the human intestine with ankylostoma, giving rise to malnutrition and severe anaemia.

It was only when there was a rise in the incidence of hookworm that conservancy measures, although inadequate, were taken. Poor sanitation and drinking water supply were important reasons for the staggering mortality that was witnessed during the process of recruitment to the Assam tea plantations. Provisions of sanitary measures are discussed in the later sections on the prevention of diseases like hookworm in the tea plantations.

Provision of drinking water was very poor in the tea plantations. Impure drinking water from the wells and tanks were important cause for outbreaks of diarrhoea, dysentery and cholera. Though the RCLI stated in 1931, that supply of good drinking water was reasonably satisfactory, impure supply was possible from surface tanks or ponds-even when these are 'properly fenced-and from surface wells' (RCLI op. cit.: 407). In the Dooars and Terai regions of Bengal, *kutchra* and *pucca* wells formed the source of water supply. In the case of the hills, the RCLI in 1931 suggested that as water was mostly drawn from hill streams, 'protection could be possible by conducting the water through pipes to the house lines' (ibid). In Darjeeling workers depend on the small springs (locally called *dhara /jhora*) running through the gardens, which dry up in summer and cause hardships to the labourers (LIC 1967: 313). Proper or clean drinking water was one of the immediate requirements for the plantation workers.

Diet and Nutrition

Diet and nutrition are important indicators of the health of the population. In Assam tea gardens, Edgar (1868) notes, "The want of sufficient food was a great cause of sickness and mortality among the coolies" (Edgar: 1868: 26). Between 1862 and 1866, the number of imported labourers far exceeded the supply of food. Arnold (1994) maintains that initial surveys on food and diet hardly "inquired into what people actually ate, how much they ate and what good it might or might not do them. As long as revenue flowed from the land as long as Western medicine remained generally aloof from the lives of the people there was little incentive to be more inquisitive" (Arnold 1994: 5). Research on diet and nutrition shifted only in the inter war period (between two world wars) from jails to industries-plantation workers-women and children.

With the increasing incidence of famines since the late 18th century, there arose a need for famine foods, which helped to mitigate in times of

extreme dearth and hunger. Such foods, according to Arnold, especially after its importance was demonstrated during the famines of 1870's in Bombay and Madras were valued as an emergency ladder. What was ignored was the fact that this was what the hungry masses actually ate (ibid: 5-6). Hunter (1873) in his book *Famine Aspects of Bengal District* notes for Darjeeling, "there would be no danger of famine so long as there was no famine in the tarai or Districts to the south, but if prices rose steadily so as to reach 8 *seers*¹⁸ of Indian corn or rice for the rupee, or Rupees 5 a *maund*¹⁹, the Deputy Commissioner reported that he would send notice of the rise in prices to Sikkim, Nepal and the to the districts on the plains, and also make inquiries regarding edible jungle vegetables and fruits" (Hunter 1873). He further states, "The hill people would not be likely to suffer very much, as they would migrate to where they could obtain yams or other edible roots, if they could not get better food" (ibid).

The importance given to such famine food by tea planters till around 1930-1940 is evident from a narrative of Bir Man Zimba, aged 79 years of Phuguri Tea Estate, Darjeeling. He says: -

I remember suffering from shortages of food grains. We would get rice and wheat from Baundagi in Nepal. I had to cross the Mechi *khola* (stream/ river). I would leave at two in the morning with a masha and return only at five in the evening. Once my mother had even cried, as I had carried fifteen kilograms of rice on my back. I was only fifteen years of age then. While those days the Britishers would get beef meat for their dogs from Kurseong! Those days the management (British) would tell us to plant *gitta byagur* in our own backyard (kitchen garden) when there was food shortage. They even provided us with *baajra* (a type of millet) at one time when rice was not available. People survived on this when food was not available. We would boil the *gitta*. It was bitter to taste, then we would add *kharani* (ash) and boil it and have. It looked like boiled potato. We would then wash it in cold water and eat it. We sometimes even ate it thrice a day and at times there was no food to eat. We have survived on two bowls of boiled *iskush* (squash), fried maize, *chapattis* made out of millet. Our mothers would call us aloud to come and eat something. But as children we would reach late. She would say that the food was kept in the containers but then there would be nothing in it.²⁰

¹⁸ One unit of *seer* is equivalent to 2.057 pounds or 0.9225 kilograms.

¹⁹ One unit of *maund* is equivalent to 82.28 pounds or 36.926 kilograms.

²⁰ Interview with Bir Man Zimba, op. cit.

Likewise Padma Tamang, 100 years of age says,

During the period of food shortages we would have *sisnu*. *Baajra* was given by the garden. We would fetch *gitta byagur* from the jungles and would eat it boiled. At Rs. 1.50 we got forty kilograms of rice in those days. From ration we would get wheat (flour) at a subsidized rate but during food shortage even this was difficult to procure. Sometimes the Britishers would throw coins and people would scramble for it. ²¹

Such parallels of consuming 'famine food' are seen in the African diets as described in Doyal's (1989) study. In the 1930's in Africa, colonial regulations required the compulsory cultivation of particular foods such as maize and cassava. Although these 'hardy crops' alleviate starvation but their 'nutritional value' was considerably lower than sorghum and millet, which during that period was replaced by the hardy crops (Doyal 1979: 110).

In the case of workers travelling from the labour catchment areas to the Assam plantations they faced a problem of a change in the diet especially in the case of workers from Upper India, from a wheat diet to a diet consisting of rice. Das (1931) says that this probably had "as much to do with the high mortality amongst them as the change from a dry to a damp climate" (Das op. cit.). On an average the diet of the coolies in Assam consisted of "... low-grade highly milled rice and a small quantity of vegetables and dhal; milk and milk products are rarely used but fruits are available in certain seasons.....Qualitatively the diet is very deficient in fat, poor in all vitamins, and its protein is almost entirely obtained from vegetable sources. As regards quantity it is decidedly less than provided in hospital or prison..." (Shlomowitz & Brennan 1990: 107-108). Likewise Behal states, "The variety was not nutritional enough to enable the *cooly* to 'resist the effects of the climate'" (Behal op. cit.: 17).

The Royal Commission of Labour Inquiry, in 1931 stated that the physique of new recruits in Assam was frequently a matter of concern to garden managers who sometimes found it necessary to issue free food for several weeks to new arrivals in order to improve their physical condition before they were put to work. Along with their staple rice, their diet consisted of milk, *dal* (pulses) and vegetables (RCLI 1931: 406). This Report provided suggestions on improving nutrition among the workers viz. 'provide supplies

²¹ Interview with Padma Tamangni, op. cit.

of fresh milk, ghi, and vegetables' but did not present the actual food taken by the workers.

Arnold (1994) cites the study by M. Balfour of the Women's Medical Service on 'Maternity Conditions and Anaemia in the Assam Tea Gardens' in 1933. The latter's inquiry shows that anaemia was related to several variables like malaria, hookworm, and inadequate maternity leaves for women workers. But she also blamed the "estate managements for vitamin-and mineral-deficient diets that consisted largely of highly polished rice and few fresh vegetables" (Arnold op. cit.: 21). Diet of a certain number of families' showed that each adult received about 15 ounces of food yielding approximately 1,360 calories. According to Balfour, anaemia and stomatitis were common among tea labourers of both sexes in Assam (ibid). According to Behal and Mahapatra (1992), 'under nutrition and overwork' were important causes of death (Behal and Mahapatra op. cit.: 160).

Jones (1947) remarked that intake of first class protein among North Bengal plantation workers was more as compared to that of the Assam labourers. He reasoned that as games (wild pig, jungle fowl, and species of deer) were plentiful and the workers had separate independent holdings and not lines unlike Assam, they cultivated in their own plot (Lloyd Jones 1947: 6). According to him the most important single cause of ill health was the 'poor standard of nutrition' (ibid). He mentioned in his report that even the garden doctors did not realize the 'importance of a balanced diet'.

The above descriptions illustrate the conditions that the workers faced in terms of food shortage, under-nutrition, and their coping mechanisms during the colonial period. Lack of proper food, housing, sanitation and water supply, conditions of work, diet and weather conditions did have an impact on the health of the labouring population. It is questionable whether the plantation labour received 'two square meals a day'. There might have been a prevalence of both acute and chronic hunger among the workers leaving them exposed to a host of communicable diseases like malaria, cholera, dysentery, diarrhoea, hookworm and tuberculosis.

The following part broadly deals with the health conditions in plantations of Assam and Bengal including Darjeeling. These workers on reaching the plantations and on their journey succumbed to various diseases and even deaths. This was more so in the case of Assam as distances travelled

were long and exhausting. High mortality became a significant indicator for such conditions of work and life. In Darjeeling, cold and humid climate aggravated health but probably there was no such significant mortality as Assam. This section ultimately attempts to draw out linkages to the health with working and living conditions. The physical capacity to work was reflected in the labour rate of those recruited to work in the plantations of Assam as the next section shows.

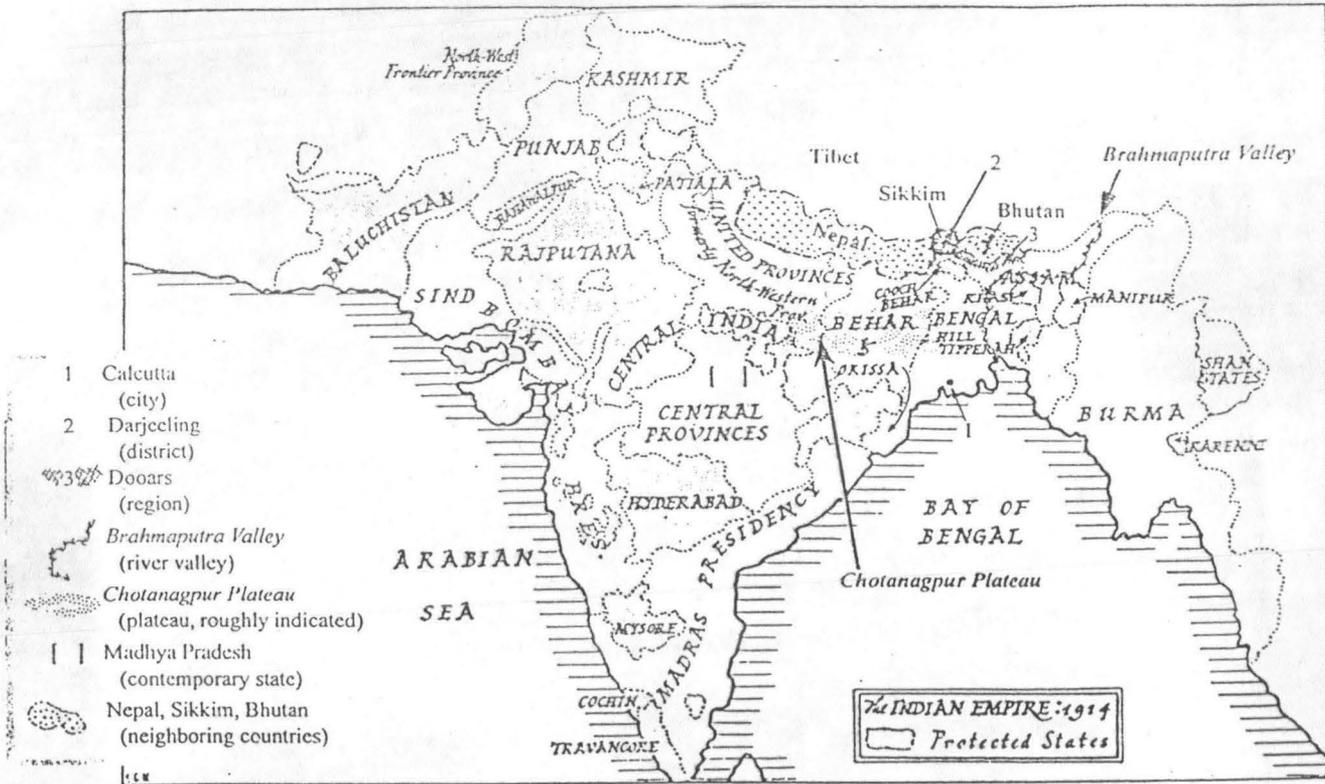
Conditions of Health

Labour Rates Determined by the 'Physical Capacity to Work'

For most planters recruitment was, termed as 'high costs of cheap labour'.²² The Deputy Commissioner of Darjeeling in 1896 noted that the average cost of landing coolies on a Terai garden varied from Rupees 6 to Rupees 10, of which Rupees 5 was the travelling expense. Advances paid to the recruiters comprised a major part of the expenses for the planters. In 1896, according to the Secretary to the Terai Planters' Association, it is said that garden *sardars* were given advances of Rupees 8 to Rupees 10 per head and Rupees 15 per head to recruiting companies employed by only a few gardens. The average cost then varied between Rupees 8 to Rupees 15, while Rupees 6 was the travelling expense. And the Secretary of the Doars Planters' Association estimated the cost at Rupees 10, of which Rupees 5 were again travelling expenses. In this process the middlemen could profit about 'Rupees 20 on the poorest coolies, to Rupees 100 on the best' (Williams 1896: 34-35).

Such rates ('poor' and 'best') of the coolies were determined by their 'racially embodied' characteristics. According to Chatterjee (1995), from the 'labour catchment' areas the British assessed the *adivasi* (tribal) communities who would prove to be the 'best castes' of labour for their tea estates (Chatterjee 1995: 50). The criteria among other things were the 'notions of appropriate physical capacity to do manual work' and the 'willingness to remain on plantations'. The most suitable workers for this arduous tropical labour were classified as *jungles* (wild tribes) - attributed to the various *adivasi* communities of the Chota Nagpur Plateau and the Santhal Parganas.

²² Planters had to face high recruitment costs, though wages were low much below the level in which labour power could be reproduced. It was not that with the increase in wages, labour supply also increased. Labour supply was not dependent on low wages. Also increasing indebtedness was an important factor for entering into contracts/ agreements to work in plantations



Tea cultivation began in India in the 1830s when the demand for tea was increasing in Britain but the British Parliament had abolished the East India Company's monopoly on the tea trade with China and there was growing frustration with China's monopoly on its tea. Earlier attempts to grow tea in Malaya and Java had failed, and an influential British expert insisted that tea plants would grow only in conditions similar to those where the best tea was grown in China: at an elevation of at least 3,000 feet (about 915 meters) and in a temperate climate that was warm but not tropical and had frost and snow in winter months. Consequently the first English plantations in India were started in Assam and in Dooars and Darjeeling in North Bengal, as well as in large areas of southern India. In fact, Darjeeling became India's "quintessential hill station" on land recently acquired from Sikkim. This map is by Eric Midgley and is from Philip Woodruff's *The Men Who Ruled India: The Guardians* (London: Jonathan Cape, 1954), p. 206. The Bulletin of Concerned Asian Scholars has adapted the original map by adding the names and approximate locations of places featured in this article. The Chotanagpur Plateau is actually a much more irregular shape than shown but in general cuts a rectangular swath across what is noted on the map as Behar and Orissa into Bengal on the east and what is now Madhya Pradesh on the west.

SOURCE : CHATTERJEE, PIYA 1995 : 45
 NOTE : THIS MAP SHOWS THE TEA GROWING
 AND LABOUR - CATCHMENT AREAS

The characteristic *jungli* was associated by the colonizing 'self' with a primitive uncivilized other. Gradation of caste was directly linked to the type of recruit with *junglis* being most expensive—followed by Bengalis and 'northwesterners' (ibid: 51).

The map (see overleaf) shows the long distances travelled by labourer from the North Western and Central Provinces to the tea districts of Assam. Similarly, in the case of the Nepali labour, as seen from a classification by a planter²³ the physical capacity to work was of utmost importance. In the Assam plantations, "The Nepalis were characterized as unable to acclimatize to the tropical labor of jungle clearing in 'unhealthy districts'" (ibid: 50). The planters "preferred paying the higher price for Chotanagpuris and keeping out North Westerners, whom they for the most part characterized as weakly, dirty and discontented...though they still seem of weaker stamina than the *junglis*, they are comparatively free from sickness" (ibid).

According to the Labour Enquiry Commission Report by H. C. Williams in 1896, the rates offered by a local contracting agency, Begg, Dunlop and Company were as under.

Table No.: 3.2

Coolie Rates Determined According to their Physical Capacity

For Pure Aborigines or <i>Junglies</i> -	Rupees 115
For Good, Hardy Coolies-	Rupees 100
For Coolies Suitable for Healthy Gardens In the Brahmaputra Valley-	Rupees 90
For North Western Province Coolies Suitable For Healthy Gardens in the Surma Valley-	Rupees 60

Source: Williams, H.C.: *Labour Inquiry Commission Report, 1896, p 34*

However, these rates were fixed in order to "keep down the costs of coolies" (Labour Enquiry Commission Report 1896: 34). An account by Mr.

²³ Chapter II, p 24-25.

Green, a manager²⁴ of Panka garden in Assam (1870) reflected the susceptibility of the North westerners to diseases and deaths. In this garden, from July to December 1869, 25 of 116 workers i.e. 22.4% had died, of which the distribution of diseases was, 5-diarrhoea, 5- dysentery, 5-spleen, 4- cholera, 3-dropsy, 1- fever, 1-ulcers and 1- old age respectively. Out of these figures, three were imported in 1867, nine in 1868 and thirteen in January and February 1869. More specifically, in August 1868, 8 men and 11 women were imported; and of these 19 only 5 were alive. He noted that in the nearby Diffloo garden every inhabitant was swept away in one year by cholera. There were 90 deaths in 1869 in this garden, after which new importations were stopped. The mortality in these gardens was greater between July and December than between January and June.

The manager denied that improper food and drinking water were the cause, but mentioned that the coolies who died were 'nearly all from the North Western Provinces'. While the native doctor said that the coolies who came were 'sickly men' and 'two had died almost immediately on arrival'. General weakness was the reason given for such deaths. The understanding of disease and immunity was linked to race.²⁵ Also race had an important bearing on the capacity to work in plantations.

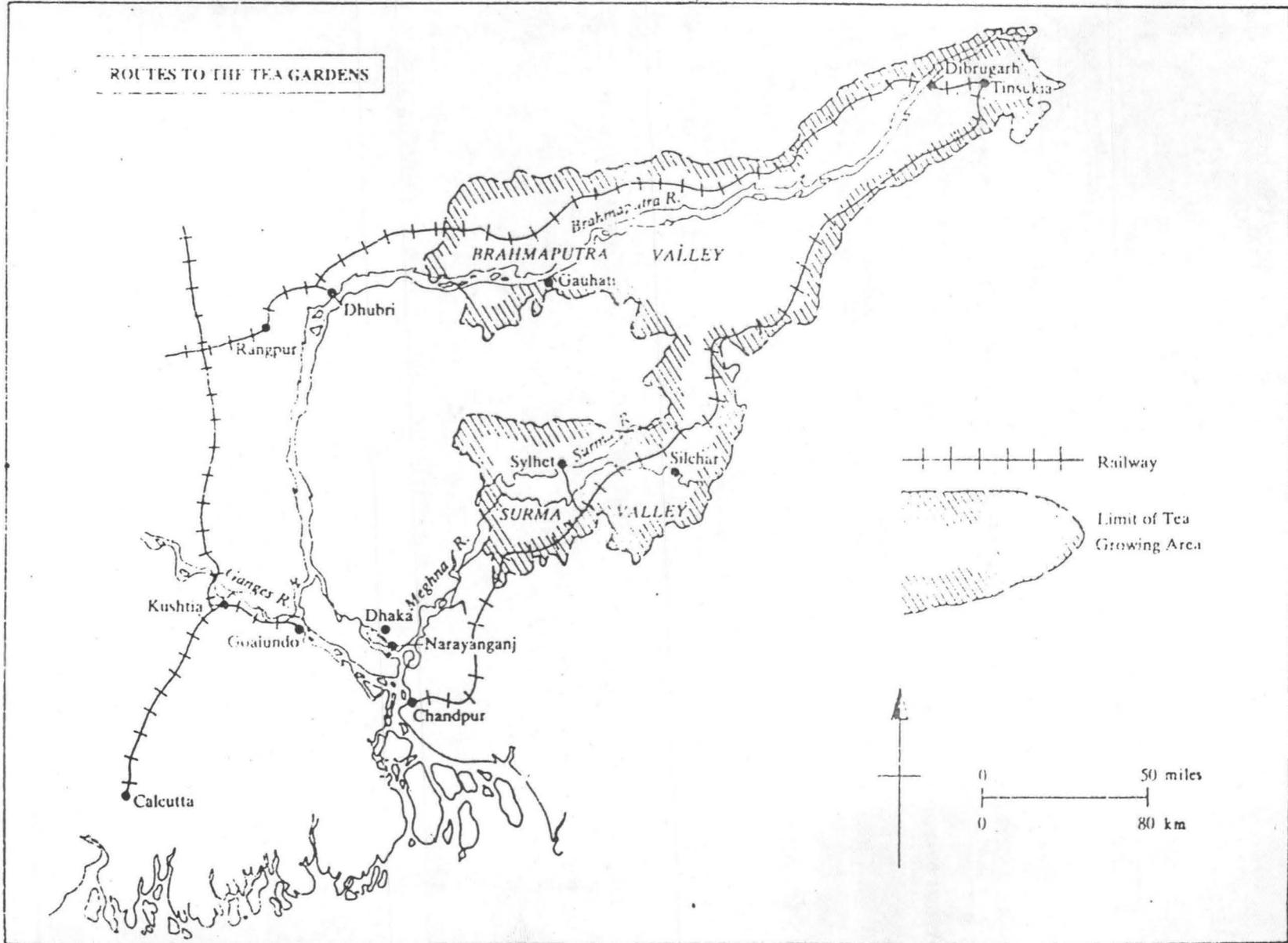
In fact tea gardens in Assam were classified as healthy and unhealthy gardens. According to Das (1931) in 1880, there were 48 unhealthy gardens out of 1,055 i.e. 4.6%. In 1884 it increased to 93 or 8.8%, in 1889- 119 or 11.3% and in 1892 the number increased to 143 or 13.6% respectively.²⁶ The

²⁴ Report on the Excessive mortality in the Central Assam Company's Tea Gardens. Extract of a letter from Capt. L. Blathwayt, Asst. Commissioner of Golaghat, to the Deputy Commissioner of Seabsaugar- No 103, Dtd. Golaghat, the 2nd August, 1870, p 11.

²⁵ "Race in a dictionary definition, suggests groups of people having or supposed to have common ancestors. {It exists as a sociological construct but to some authors have also assumed or attempted to prove that it has a biological or genetic component. The idea that race in a genetic or biological sense determines health is now discredited for all but a very small minority of specific ailments. Belief in racial determinism and particularly as regards superiority or inferiority of races in physique intelligence and potential - this trait was seen in writings of the 19th and 20th centuries and linked to an extent with the history of colonialism."(Thomas Rathwell and David Phillips (Ed.)1986: 2) Stone puts it more succinctly "the classical sociologists understood the fundamental point: the study of race and ethnic relations has little to do with biological 'race' and a lot to do with patterns of social relationships and structures of power and domination" (J. Stone (Ed.) Race Ethnicity and Social Change, Duxbury Press, Massachusetts. Pg 11 in Pp 4-5 of Rathwell, Thomas and Phillips, David (Ed.): *ibid*).

²⁶ Das notes, "a garden was declared unhealthy on the basis of the average mortality either for the garden populations as a whole or for the Act or the non-Act labourers taken separately, exceeded 70 per thousand and if the number of deaths from the average struck exceeded 10" (Das op. cit.:104).

SOURCE : SHLOMOWITZ, RALPH ; 1990 : 315
NOTE : THIS MAP SHOWS THE ROUTES TO
THE TEA GARDENS OF ASSAM



North Westerners, the cheapest on examining the cost, Rupees 60 in 1896 were sent to the healthy gardens in Assam.

Recruitment and Mortality in the Assam Plantations

As noted by Edgar (1868) manager of a Assam tea garden about the workers:

“They had found themselves set down in a swampy jungle, far from human habitation, where food was scarce and dear, where they have seen their families and fellow labourers struck down by diseases and death, and where they themselves, prostrated by sickness have been able to earn less by far than they could have done in their homes” (Report 1868: xvii).

According to Behal and Mahapatra (1992), mortality was linked to the Penal Contract System. Due to penal sanctions, strict work regime, death rates increased more because they were not given sick leave (Behal and Mahapatra op. cit.: 159). The planters had quite a different explanation. “They do not die from diseases engendered by local conditions of gardens but from diseases engendered which are induced by their own inherent faults” (ibid).

The series of Detailed Reports by the Indian Tea Association during the period of 1889-1897 were letters of dialogue between the Government of Bengal and the Indian Tea Association. They bear witness to the situation of the emigrant labour going to the tea districts of Assam. Circumstances under which these emigrants were recruited were disheartening. Insufficient food, lack of proper clothing, untimely meals, are issues discussed in the aforementioned report. Travel to distant gardens in Assam included journeys through roads, railways, commercial steamers, with detention at some depots. Earlier even ordinary country boats were used and it also included travelling by foot.

During the late 19th century among the labour force in the Assam plantations, mortality outstripped birth rate. Therefore, net reproductive rate was negative. Death rate was 5.4% for tea estate workers recognised as labour under the 1882 Act, while it was 2.4% for non-tea garden population. Birth rate for women employed in the tea gardens from 1880-1901 averaged only 86 per 1000, in comparison to the non-tea garden population of Assam, which had an average of 127 births per 1000. Such difference was due to the high abortion practices in some gardens. It is said, “65% of the pregnant women

did not give birth” (Behal and Mahapatra 1992: 158). The reason was ascribed to the women ‘not wanting her earning interfered with’ or as the Indian Tea Association concluded, to the ‘weakness of marriage ties amongst the coolies’. It was impossible to escape the conclusion that abortion was due to the absence of maternity leave coupled with low wage levels that compelled women to work throughout pregnancy and immediately after childbirth. Low birth rate was accompanied by a high death rate. The following tables calculated by Das (1931) based on various Assam Labour Reports provides the birth and death rates in the Assam plantations from 1878-1929.

Table No.: 3.3

Birth Rate and Death Rate Variations in Assam Tea Gardens

<i>Year</i>	<i>Birth Rate</i>		<i>Death Rate</i>	
	<i>Per 1000 Women</i>	<i>Per 1000 Of total Population</i>	<i>Act Workers</i>	<i>Non-Act Workers</i>
1878	101.3	31.9	106.2	38.9
1900	80.2	27.6	43.5	26.2
1919 1920-21 (For death Rate)	70.1	19.3	----	31.9
1928-29	-----	31.5	----	22.5

Source: R. K. Das: *Plantation Labour in India*, 1931, p 109 and p115

Note: Shown only at specified period. Birth rate per 1000 women and per 1000 of the total population is used by Das as the number of women earlier was less as compared to the men.

The table above shows that death rates were higher among the Act workers rather than the Non-Act workers. The reason given by Das is that the former comprised of fresh immigrants who lacked immunity to change from one climate to the other. Change of diet and composition of the immigrants of poor physique, who little stamina left on reaching the gardens, which were generally unhealthy. For instance the native Assamese were healthier than the imported labourers, while the immigrants from the Bengal were healthier than those of the distant provinces.

Das ascribes lack of immunity and susceptibility to the climate and harsh conditions in the tea plantations of Assam as reasons for the low birth rate among the fresh recruits. He further said that though the number of women were lesser than men, in 1901, even when women were greater in number, birth rate was lower i.e. "29.1 per 1000 total population and 93.2 per 1000 adult women, as compared with 33.9 and 101.6 respectively in the whole province" (Das op. cit.: 110).

A drop in the birth rate according to Das was, that women workers under contract of the 1882 Act suffered, since they 'were kept regularly at work during the plucking season and malingering was not allowed' (Behal and Mahapatra 1992: 160-161). Arduous working conditions along with lack of acclimatisation power of the already starving and diseased people from the famine and pestilence-prevailing regions had a negative impact on their fecundity. Miscarriages and still births were among the causes of low birth rates. "In 1918 there was 113 still births in five districts of Assam as compared with 569 infants born alive" (ibid).

Miscarriage as a result of syphilis and anaemia and lack of sufficient care placed them at high risks. Abortions were another cause of low birth rates. Women's objection to child birth was because of the difficulty to work and raise the children. Irregularity in marriage like the 'depot marriages' also contributed to low birth rates. The 'system of herding men and women of different castes in the line led to irregular unions', which in turn affected procreation. This was an important reason for the lower birth rates in the Assam plantations. An evidence in the Report on the Assam Labour Inquiry Committee, 1906 of Dr. G. H. Glover who said, 'One hears that abortions are frequently induced, but I doubt if this is true as I have only known of one proved case' (ALIC 1906: 84). He attributes miscarriage to the prevalence of syphilis and anchylostomiasis". Some of the common diseases in the tea plantations of Assam, Bengal and Darjeeling specifically are covered in the following section.

Common Diseases in the Assam tea plantations

The following sections present an overview of the diseases that led to deaths in the Assam tea gardens during the period from 1887-1929. A difference in the death rates for Act and Non- Act labourers in reference to the main causes of deaths in Assam plantations is shown in the following table.

Table No.: 3.4

Main Ascribed Causes of Death of Act and Non-Act Labour

Year	Cholera		Diarrhoea			Dysentery			Malaria **			Anaemia #	
	Act	Non-Act	Act	Act	Non-Act	Act	Act	Non-Act	Act	Act	Non-Act	Act	Act
1887-9	19.4	18.7	---	---	---	33.2	---	27.1	9.8	---	14.9	----	---
1880-9	20.6	19.1	---	---	---	22.9	---	16.9	9.4	---	14.8	-----	---
1890-9	15.1	13.2	---	---	---	22.5	---	19.4	9.6	---	15.7	-----	12.1
1900-1909/10	8.3	22.6	9.3	---	9.3	22.8	---	16.5	8.0	---	11.2	-----	15.3
1910-1918/9(for Act) 1910/1-1919/20 (For non-act)* #	5.0	8.3	6.8	---	8.6	30.7	---	17.4	4.1	---	8.4	-----	17.8

Note: Figures are percentage contributing to the total.

** Up to 1892, jungle fever for Act labour

From 1893, includes anchylostomiasis for Act labour

* Deaths from influenza: 21,220 in 1918/19; 7, 1170 in 1919/20; and 1,526 in 1920/21.

Percentages were calculated on total deaths minus deaths from influenza.

Source: Shlomowitz Ralph and Brennan Lance: Mortality and Migrant labour in Assam 1865-1921. Indian Economic and Social History Review, Vol. 27, No 1, 1990, Sage. New Delhi, p 105

The inferences drawn from the adjoining table are as follows:

- a) Dysentery was the main killer, with cholera, malaria, hookworm and respiratory diseases as important causes of death;
- b) Dysentery was selective of the Act population; and
- c) From the mid-1890's, there was a marked decline in the relative number of deaths from cholera.

From Das's (1931) study the causes of death among the tea plantation labourers of Assam is tabulated as follows.

Table No.: 3.5
Causes and Percentage of Deaths on Assam Tea Gardens

Causes	1893	1900	1918-1919	1928-1929
Cholera	14.4	0.9	8.5	1.7
Diarrhoea	7.2	10.2	4.3	6.1
Dysentery	20.1	19.2	6.7	11.1
Malaria	13.3	14.4	5.4	13.5
Hookworm	8.4	9.5	3.8	6.4
Respiratory Disease	3.6	12.2	10.1	19.5
Other causes	33.0	25.6	61.2	41.8
Total	15,982	19,603	62,176	22,581
Percentage of Total Deaths (1, 20,342)	13.3	16.3	51.7	18.8

Source: Compiled from Rajani Kanta Das: *Plantation Labour In India 1931*. p.121

Note: Shown at specific periods. The figures are in percentages apart from the total, calculated from the total number of deaths due to a specific disease. The percentage in each year is calculated from the total number of deaths over the whole period.

Among epidemics, cholera was most prevalent. Labourers contracted it in insanitary detention depots in Bengal. In spite of sanitary precaution, mortality was high in the lines from cholera as people were more closely congregated than in an ordinary village. Poor housing conditions had a direct link to the appalling deaths from cholera. The highest number of cholera

deaths in 1918-1919 the year of the influenza epidemic was 5288. Influenza was most vital epidemic in India. In 1918-1919 there were 28,552 influenza deaths in plantations (Das op. cit.).

According to Das (1931), diarrhoea and dysentery were common diseases especially in Bengal and Assam. In 1920, the death rate due to these diseases was 6.95 per mille²⁷ on the gardens as compared with 1.84 per mille in the whole Assam Province. Malaria was however the most common of the diseases. In 1928-1929, 13% of the total deaths were caused by malaria alone. Kala azar was one of the causes of high mortality among workers on Assam tea gardens. In a period of 13 years between 1916 and 1929, 270 out of 550 attacked died of it in one single garden, which caused a loss of between Rupees 40000 and Rupees 50000 to the garden. During this period, 'hundreds of infected houses had to be burnt and new lines and a hospital were established' (Das 1931: 121).

Likewise Jones in his Report (1947) cites malaria as the important cause of sickness in the Assam plantations. Typhoid and dysentery along with cholera accounted for 20-3-% of the total sickness of the gardens. He recommended better water supply and sanitation. Various kinds of anaemia according to him were prevalent among the Assam plantation labour. Many were secondary, hypochronic, and microcytic in type, which could be improved by simple therapeutic measures. Hookworm was widespread in plantations. Anaemia caused by hookworm was the severest type and was difficult to be treated once infected. Other diseases like kala-azar, tuberculosis was increasingly prevalent in plantations (Jones 1947: 7).

Schomovitz and Lance (1990) attribute the prevalence of anaemia among workers of the tea gardens to poor nutrition and diseases like malaria, hookworm, beriberi and *kala-azar*. Each death was attributed to a single causal agent. Workers who were infected by malaria for example were particularly susceptible to secondary infections. According to them, malaria weakens a patient, making him more susceptible to other diseases such as dysentery, pneumonia, and tuberculosis (Schomovitz and Lance 1990: 104). Thus the "relatively low number of deaths attributed to malaria is probably due to many deaths ascribed to dysentery and respiratory diseases, being really caused by malaria" (ibid).²⁸

²⁷ One mille is equivalent to one thousand.

²⁸ See Table No. 3.4, p 21.

Schomowitz and Brennan (1990) attribute poor health of the new recruits to factors like

- a) Poor nutritional status, since much of India's inland and overseas migration was famine- induced,
- b) 'exhausting journey' to Assam and exposure to cholera on their journey in hyper-endemic Bengal,
- c) Stress associated during the process of migration.
- d) Low wages relative to that received by experienced workers.
- e) Need to cope with new work demands and new living arrangements (such as having to learn about hygiene under the new circumstances).

With poor physique recruits coming from poverty-stricken districts of United and Central Provinces hardly had any stamina left on arrival to the gardens, and became victims of the 'new climate'. 'Outbreak of epidemics', the 'want of proper houses', 'overcrowding', 'unhealthy sites', 'insufficient and unsuitable food', 'impure water' and 'want of proper medical attendance' especially in the earlier years were some important causes of high death rate. Such hardships were also cited in Das's study.

According to Das, despair and melancholy were some of the reasons to which the majority of the immigrants became victims. Behal and Mahapatra cited from an official document, that "coolies of inferior physique or as they are called 'bad batches' were unfit to stand the Assam climate and garden work, are sent up by contractors and agents" (Behal and Mahapatra: 1992). Clandestine measures were taken recruit coolies. 'Medical standard' was relaxed with the increasing needs of labour.

Shlomowitz and Brennan too have shown that the native Assamese were healthier than the imported labourers and immigrants from Bengal were healthier than those for more distant Provinces. According to them, "movement of people from their childhood disease environment to a new one, accordingly, often exposed them to increased risk. After the initial exposure to a new disease environment, survivors built up either lifelong or partial immunity to the new diseases in what was called the 'seasoning process'" (Shlomowitz and Brennan 1990: 87). Cholera for example was endemic or

even hyper endemic in Bengal, but epidemic in Chotanagpur. The migrations of labour recruits from Chotanagpur through Bengal to the tea gardens of Assam or via Calcutta to overseas colonies accordingly placed them under great risk (ibid: 88). To quote for the Assam Labour Enquiry Committee Report 1906: "Garden mortality rises or falls *pari passu* with the proportion of new immigrants to the total population" (ALIC 1906: 88).

Susceptibility of a particular group of labourers to diseases such as malaria or cholera for instance was related to their low immunity levels. Besides, the conditions of work, living, sanitation, diet, had an important bearing on mortality and disease pattern of mostly communicable diseases. Clearance of jungles in Assam provided breeding ground for mosquitoes leading to diseases like malaria and 'other fevers'.

Diseases in Bengal Plantations

The RCLI (1931) has as far as plantations in Bengal were concerned, concentrated mainly on the Doars region only. The following data illustrates the extent of mortality given in the Evidence for the Report of The Royal Commission of Labour Inquiry.

Table No.: 3.6

Mortality among the Labouring Population in Bengal (1918-1928)

Year	Labour Population	Deaths	Percentage of Deaths Of Total Population
1918	216,000	6,080	2.8
1919	255,000	12,199	5.1
1920-21	190,000	5,547	2.9
1921-22	184,000	4,595	2.5
1922-23	196,000	5,007	2.6
1923-24	206,000	6,012	3.0
1924-25	205,000	5,497	2.7
1925-26	206,000	4,774	2.3
1926-27	217,000	4,984	2.3
1927-28	228,000	5,119	2.2

Source: Report of The Royal Commission of Labour Inquiry, Evidence Vol. V, Part I and II Bengal (Including coalfields and the Doars) Written Evidence. London- Printed and Published by His Majesty's Stationery Office 1930, p 40

Note: Percentage calculated from the RCLI.

The above table shows that deaths were highest in 1919, which was the year of the influenza epidemic. Since 1918, although the population had increased by 15.3% in 1919, the number of deaths was more than double. Data of the year 1920-21 shows that the size of the labouring population had dropped remarkably by 25.5% and number of deaths accounted to 2.9% of the population in 1920-21. thereafter no fluctuations occurred either in the size of the population or the percentage of deaths, which remained between 2.2-3% of the total population. The RCLI states that malaria in Doars was the common cause of death, amounting to 6 deaths per mille, chest complaints cause 3.47 per mille, dysentery and diarrhoea 3.76 per mille, phythisis 1.42 per mille respectively. Hill sores were common (RCLI 1931: 42).

This report provides comparative figures to show that the conditions of the tea garden labour were better than the other areas of Bengal during late 1920s. The RCLI remarks that conditions in the Bengal tea districts were better than other adjoining areas like the mills, towns, the rural areas of Bengal. For example, from 1927-28, the death rate in the tea garden was 25.6 per mille while the provincial figure was 35 per mille. The following table shows thus.

Table No.: 3.7
Decennial Average of Recorded Birth and Death Rates

	Calcutta	Total l towns	Rural Areas	Province	Mill Towns	Asansol Mining Settlement	Duars Tea Gardens
Death Rate	33.5	25.6	27.8	27.6	20.6	23.7	28.0
Birth Rate	18.4	19.1	29.3	28.7	16.9	26.7	40.2
Infant mortality	318.0	223.0	182.0	193.0	173.0	146.0	96.0
Cholera	1.9	1.8	1.6	1.6	2.2	1.3	0.9
Smallpox	1.4	0.9	0.5	0.5	0.7	0.1	0.1
Plague	0.09	0.02	0.0	0.002	0.01	0.0	0.0
Malaria	1.4	2.3	11.6	11.0	2.3	-	-
Enteric	0.6	0.3	0.1	0.1	0.2	-	0.1
Kala-Azar	0.5	0.4	0.2	0.2	0.2	-	-
Measles	0.2	0.1	0.02	0.03	0.05	-	-
Total Fevers	4.9	7.2	21.2	20.3	7.3	3.1	7.5
Dysentery and Diarrhoea	3.3	2.7	0.4	0.5	2.8	1.1	3.5
Phythisis	2.3	1.1	0.07	0.1	0.4	-	0.9
Total Respiratory Diseases	9.9	5.3	0.3	0.6	2.9	4.4	5.3
Injuries	0.7	0.5	0.4	0.4	0.3	-	0.2

Source: *Report of The Royal Commission of Labour Inquiry, Evidence Vol. V, Part I and II Bengal (Including coalfields and the Duars) Written Evidence. London- Printed and Published by His Majesty's Stationery Office 1930, p 341)*

From this table the following observations can be made specifically for the case of the Duars tea gardens:

- a) Birth rate was the highest in the case of the tea gardens.
- b) Diarrhoea and dysentery were higher in the gardens as compared to other areas.
- c) This Report highlights that the health of the tea garden workers was better than the rest of the Province of Bengal. It could be possible that a large number of deaths occurred due to malaria as the figures are not available and that deaths due to 'total fevers' are higher in tea gardens in comparison to the mining settlements.
- d) Hookworm as an important cause of mortality is not highlighted in this table. We see from other studies that anti-hookworm campaign received impetus and was a problem especially among the tea garden workers.

Chowdhury (1995) in his study marked that malaria was the main disease in the district of Jalpaiguri, in Bengal during 1860-1870's. He mentions the seasonal calendar of the diseases like malaria as beginning and end of the rains i.e. March-April to September-October. Kala azar, blackwater fever, were some of the dreaded diseases. Bowel diseases like diarrhoea, dysentery were common. They were prevalent during the beginning of cold weather while the cholera season was between April and November (Chowdhury 1995: 7).

In 1947 Major E. Lloyd Jones was deputed by the Government of India to visit tea plantations in India and draw up the standards of medical care for labour in tea plantations. The summary of his findings for the region of Bengal show:

Table No.: 3.8
Summary of Vital Statistics of Some Tea Estates Surveyed Bengal

	<i>Average Mortality Per 1000</i>	<i>Average live Birth per 1000</i>	<i>Average Infant Mortality Rate Per 1000 Live births</i>	<i>Average Maternal Mortality Per 1000 cases</i>
31 gardens in Dooars (20 European owned and 11 Indian owned)	20.7	34.5	155.1	21.4
6 gardens in the Terai (3 European owned and 3 Indian owned)	17.6	28.7	125.7	16.1
19 European owned Gardens in Darjeeling	21.9	39.7	121.5	6.8

Summary

Average of all gardens surveyed in Assam	21.5	32.7	190.9	33.3
Average of all Gardens-Bengal	20.1	34.2	134.1	14.8
Average of all Gardens-South India	14.0	29.3	122.4	6.5
City of Manchester for 1945 (for comparison)	14.4	18.2	55.8	1.02

Source: Jones, E. Lloyd: *Standard of Medical Care for Tea Plantations in India - A Report, Ministry of Labour 1947, p73*

From the above tables the main observation is that the average mortality in Darjeeling was the highest in comparison to the other regions, despite the fact that the owners were Europeans. His study shows that in Bengal the general health of the labour in Bengal is better than Assam.

Disease Pattern in Darjeeling Tea Plantations

Data on morbidity and mortality per se is not available for the Darjeeling plantations. Therefore, studies on other plantations of Assam and overseas are used here to provide some insights into the conditions of ill health. While the Darjeeling plantation workers did not have to undergo the ravages of industrial labour system that were experienced by labour in Assam and Bengal, yet the lack of hygiene, diet, other sanitary conditions, oppression and inhumane attitude by the tea planters were common to all plantations including Darjeeling. Due to limitations of data, we have for this section specifically relied on the narratives of the older generation of the workers of Phuguri T. E. for an overview of the disease pattern in Darjeeling plantations.

Maintenance of records of births and deaths was solely the responsibility of each planter for his respective garden. There was no systematic recording of vital statistics in the plantations of Darjeeling. Darjeeling was a non-regulated district.²⁹ As there were no inquiries or reports specifically for the plantations of Darjeeling portrayal the conditions of the plantation labourers was totally at the discretion of the planters. Certain

²⁹ See Chapter II, p 7.

reports and documents have underlined the poor conditions of the health of the plantation workers of Darjeeling.

From the Report on the Soom Tea Co. Ltd, the manager during the time of the visit states that coolies were scarce due to a severe epidemic of cholera. As the garden was dirty, clearance of jungle was required. Labour during the time of his visit in Soom T.E. in 1876 was 94 men, 168 women, and 51 children with a total of 313. Before the cholera outbreak the average was about 450 daily and during the cholera there were only 200 labourers a day (Report 1873-93: 6-7).

Prevalence of cholera was high in the Darjeeling hills apart from hill diarrhoea, dysentery, rheumatism and respiratory problems like asthma and tuberculosis, given the geo-physical climatic differences from that of Terai and Doars in Bengal and Assam. A planter in 1873 notes cholera as the main cause of deaths in the tea plantations of Darjeeling. He notes that in the year 1872 the number of coolies in the district of Darjeeling was 12,361 coolies and prior to that year 9% of the coolies had died due to cholera.³⁰

The Darjeeling District Gazetteer of 1907 describes the climatic difference between the plain Terai region and the hill region as: "in the hills fevers are not prevalent. It is, indeed a common saying among the Nepalese in these parts that any child born to them will not live to reach the age of two years; and the infant mortality is very great, being over 38% in 1905 for the whole of the Terai" (O'Malley op. cit.: 54-57). In 1905 no less than 3,470 cases of intestinal worms, producing symptoms of diarrhoea, among the natives were treated at the Darjeeling dispensary Dirty habits, careless about food and drinking water, which was often contaminated were the causes even to occasional small epidemics of cholera, which occurred only at long intervals and were not serious.

* According to the Gazetteer, phythisis was common among the natives. O' Malley (1907) gave reasons to their thin clothing, constant exposure to cold, damp and heat, and to their disregard of elementary hygiene laws. Housing had important relation to the spread of phythisis. Solid brick stone

³⁰ Letter no. 214 C, dated Camp Darjeeling Terai, the 21/31st January 1873. From Major B. W. Mortan, Deputy Commissioner of Darjeeling to The Offg. Commissioner of the Cooch Behar Division in Pp.17-18, Papers Regarding the Tea Industry in Bengal, Bengal Secretariat Press, 1873

or corrugated-iron houses were inducive than amongst those who live in wooden or wattle huts, the former being densely crowded and ill-ventilated, while the latter let in the air at every crevice. Darjeeling with its cold damp climate bears an unfavourable reputation for the treatment of consumption or pulmonary affections. Other diseases were diphtheria, influenza and enteric fever. Goitre and deaf-mutism were fairly common. Rheumatism was common during the rains and was aggravated by the excessive humidity.

According to Sukbir Khawas,

Maasi (dysentery), *pakhaala* (diarrhoea) and *haija* (cholera) were very high. Around 1953-1955 in Soureni almost two people died from each house due to dysentery. In Phuguri and Chandura it was epidemic unlike Soureni. People were saved because of *pahare dabai* (local indigenous medicine). For example a cure given where a stone, would be heated, and *titepati* (a bitter plant) leaves would be placed on it and the patient would be asked to sit on it. People even conducted *Devi-Puja*.³¹ Some say *Bigarera bimar bhako*. Such diseases were common especially during the month of *Baishak*. But then people would hide their knowledge of traditional medicines consisting of *jari-buti* (herbal medicine). I wish that they had passed some knowledge about these traditional medicines to us. Now there are very few people practicing such traditional systems of cure.”³²

I remember around 1948-1949 *joro* (fever), *maasi* were very high. In Palangbari four to five persons had died from one house due to dysentery. This disease is contagious. A doctor from Mechi R. B. Singaury would come and visit. People would mostly go to *Dhami-jhākri* and take *pahare dabai*. Apart from this, Civazol tablets were given for dysentery. This was a famous medicine. For sores and dysentery they would give this medicine. *Kalo-joro* (black fever), *thāngne-joro* (typhoid) was high then. There were a number of deaths in and around 1950-1951. Due to such fever the patient's body and even breath would smell. My own *phupu* (paternal aunt) suffered. We had called the doctor. She was almost dead but after two three hours her feet started moving. She then said that she wanted to have *hareyo makai* (green maize). We cousins got for her from Tingling. We even called the

³¹ “Goddess Sitala was identified as the deity responsible for bringing or preventing the disease like smallpox across Bengal in the east to Maharashtra and Gujarat in the west. In South India, the goddess Mariamma shared some of the similar attributes. Sitala enjoyed a prominence as a deity of exceptional potency. If honoured through prayers, offerings and devotional acts, she could give protection from the diseases or modify its effect. Angered or neglected however her wrath took the form by the violent fever that raged through her victims' bodies and resulted in lasting disfigurement or death. Since Sitala was understood to be intrinsically the ‘Cool One’, she was offered cooling foods and her victims were piled with cold drinks and balms” (Arnold, David 1989 Op. cit.: 48).

In Nepal, “ Hundreds queue up before the temple of Sitala Ajima or Harti Ajima, Goddess of Smallpox, that powerful Grandmother of the World who, if angered and left hungry, harasses little children even unto death, but when appeased alleviates all sorts of troubles and disease” (Anderson, Mary 1971: 78).

³² Interview with Sukbir Khawas, op. cit.

dhāāmi-jhākri (traditional healers). She died of typhoid. This *bimari* (illness) is quite bad.³³

“Many years back *maasi, ragat maasi* (blood dysentery) was very high. Mosquitoes were less but fever was high in Phuguri. Seasonal illnesses were mostly fever, cough-cold and dysentery. Dysentery keeps relapsing once a person gets it. This was high both during the rains as well as the winters. In Marma Tea Estate *haija* was very high. *Kamjoro* (malaria), *dadura* (measles) was high too. One would get sores all over one’s body.

Beyond the Mechi river *haija, dadura* were very high. Medicines were not available then. I would go there to collect *khar* (straw). I had seen with my own eyes. All houses were closed. *Sindoor* (vermilion), *bai* (bangles) were scattered around the houses. Many young women had died because of the epidemic then.

I remember once, some coolies were boiling rice to eat; the *sardars* chased them, as it seemed that they were suffering from cholera. Those *sardars* did not even allow them to have their rice. There was a store at Nagari *godam* where all the coolies were given ration. In Panighata it was Ram Krishna Maya’s shop from where we bought rice.”³⁴

According to Bir Man Zimba,

Dysentery was very high. It was mostly because workers hardly had any warm clothes to wear or even to cover during the night. Houses were made of thatched roofs, which would always leak. We would just spread one layer of *bora* (gunny sack) and sleep. In such conditions one catches cold very easily. We would cover ourselves with our mother’s saris. My elder sister died at the age of fifteen due to dysentery and high fever. One just had a single dress for a whole year.³⁵

Mortality in Darjeeling tea plantations was not severe as in Assam tea plantations but as we do not have mortality data for Darjeeling plantations, so direct comparisons was not possible. This can be partly deduced to a number of reasons: -

- a) The labouring population was largely recruited from the hilly areas of Nepal and hence did not face problems of acclimatising to the harsh weather conditions.

³³ Interview with Sukh Chandra Khati, 9th December, 2000, Phuguri, T.E.

³⁴ Interview with Bir maya Singar, 11th December, 2000, Phuguri T.E.

³⁵ Interview with Bir man Zimba, op. cit.

- b) The distance travelled by them from Nepal was much less as compared to those who travelled from areas of United and Central provinces and Chota Nagpur to the tea districts of Assam.
- c) As there was free recruitment to the Darjeeling tea plantations so the workers were not placed under any contract.

Deaths were not sudden as it was due to, for example malaria in the Assam plantations. Respiratory problems, rheumatism, and phthisis (tuberculosis) were some of the chronic diseases in Darjeeling. Intestinal problems like dysentery, diarrhoea was common. Long-term illnesses due to lack of proper clothing, food (nutrition) were some of the important causes of morbidity.

The prevalent diseases in Darjeeling according to Jones (1947) were chest condition like bronchitis, fibrositis, bowel diseases caused by contaminated water etc that gave rise to high mortality among children. From his study he found, a high incidence of pulmonary tuberculosis in Darjeeling. In one garden in 1946 there were 20 pulmonary tuberculosis deaths out of 54. He gives reasons for the increasing incidence of pulmonary tuberculosis to bad housing, which included poor ventilation and social habits of the people (Jones 1947:10).

He maintained that,

Susceptibility of a primitive population to infection by the *tubercule bacillus* is common. The susceptibility of primitive agricultural races to Tuberculosis when the germ is introduced among them with the advent of so-called civilization is well recognized. The North American Indian the Maori, and the Australian aboriginal are fast disappearing as a result of the introduction of this scourge of civilization into their midst. The hill people of Darjeeling are no exception to this general rule and it is difficult to know what can be done to prevent further ravages (ibid).

He cited the need to isolate known infectious cases. Susceptibility to disease was linked not just to the race but also to the very conditions of living, nutrition, diet, clothing and the overall low wages. In spite of his criticisms Lloyd Jones recognized that "in many cases the general level of medical care was very high- though he regretted that in Darjeeling there were no medical practices and individual garden doctors tended to work in deadening isolation" (in Griffiths op. cit.: 365).

There is thus a marked epidemiological distinction between the workers of plains and the hilly regions of North Bengal, which can be partly attributed to the climatic and geo-physical nature of the hill areas. Literature on the tea plantations of the Terai region of Bengal mostly highlights the common causes of mortality as malarial fever, apart from water-borne infections like cholera, dysentery, diarrhoea etc. This was similar to Assam plantations. Respiratory complaints and rheumatism being chronic diseases, did not take a severe toll in the hills unlike the diseases of the plains. This difference in morbidity undoubtedly affected the mortality rates though hookworm, diarrhoea, dysentery were common in all plantations. The emphasis here is to bring forth how working and living conditions influenced in disease causation. These are strongly reiterated through our narratives that have explicitly narrated the poor conditions in which they lived, insecurity of wages, low wages and overall the harsh conditions.

Health of the plantation workers was of importance to the planters only when it affected the labour supply. Push factors (excessive taxation, famines, bad harvests etc) coupled with the conditions in the plantations (arduous work, lack of proper food, housing, rest etc) resulted in the workers being susceptible to a range of communicable diseases. Public health measures were negligible in comparison to the enormity of the problem. The following chapter will reflect on the colonial interventions taken with regard to food, clothing, health and other welfare amenities. More specifically emergence of labour protests and trade unions and with Independence the formation of the Plantation Labour Act (PLA) and other welfare interventions will be examined through a case study of a tea estate in Darjeeling.

CHAPTER IV

***Welfare Interventions In Tea Plantations :
Colonial And Post-Colonial Period***

WELFARE INTERVENTIONS IN TEA PLANTATIONS: COLONIAL AND POST-COLONIAL PERIOD

With high mortality rates, there was an increasing need to improve the health of the workers in the tea plantations. Specific measures like food subsidies, subsidised cloth provisioning were adopted by the planters to supplement wages, and to enable them to face adversities. Instead of getting into long term preventive measures, the planters preferred dispensing medicines and vaccinating. This was common in all plantations. In Darjeeling, food hoardings frequent revolts and unrests took place that led to the formation of trade unions even prior to India's Independence. Such instances of protests and union formation in the entire Indian tea industry brought tea plantations workers under the gamut of legal legislations, the Plantation Labour Act (PLA) of 1951 being one of the most important welfare interventions. This chapter discusses both the colonial strategies and post colonial welfare interventions in Eastern India with specific reference to Darjeeling through the narratives.

Managerial Strategies

Allotment of Garden Lands and Food Security

Allotment of plots became an instrument of labour control and managerial strategy. Planters were reluctant to allot garden plots to workers for paddy cultivation. Das Gupta (1992) maintains, "The plantation system encompassed two different but closely interrelated and interacting sectors: 'the dominant capitalist plantation sector' and the 'subsidiary non-capitalist subsistence sector'. The latter had several components most significantly among plantations workers in Assam, Dooars, Terai and Darjeeling-regions in which there had been no significant peasant economy-there emerged elements of tenancy and subsistence farming. A large proportion of the tea garden workers were given plots of land by the planters to raise paddy and vegetables towards their subsistence requirements. Later Brahmaputra planters also came to recognise the advantage of allotting garden rice-land to workers as a new instrument for control" (Das Gupta IJPS 1992: 184).

The Report of the Assam Labour Inquiry Committee of 1921-22, also stated that the main forms of the concessions were the allotment of garden land for cultivation with the assumption that the returns were enough for the subsistence of the workers. It was also assumed that there were ample facilities available for obtaining firewood for fuel from the garden grants and the nearby forests.

In Assam, a second component included setting up of ex-tea garden or time expired workers on government *khas* lands or the land of private landholders on the plantation's periphery, who continued to work part-time on the plantation. However there was much controversy within government and among planters about the desirability of encouraging settlement on government owned land. However, the Assam government was keen to promote the colonisation of the sparsely populated province. Low wages and the need to supplement it led workers to accept land allotment. With the availability of cheap and migrant labour there was no bargaining power for the workers in the plantations (Das Gupta op. cit.: 186).

Behal (1992) maintains that garden land provided no more than 40% of workers family staple food requirement, which included rice and some vegetables and occasional pulses. There was no consumption of fruit, milk eggs, fish or meat resulting in a highly unbalanced diet, extremely low in nutritional value (Das Gupta op. cit.: 185). The planters always justified the low wages by them citing such concessions. According to a Report of the Assam Labour Inquiry Committee of 1921-22, the concessions of housing, medical attendance and land for cultivation was difficult to convert into a money equivalent as was demanded by the workers.

Historical studies¹ on expenditure and income reveal that the workers expenditure was much higher; at times nearly 200% more than their wages, thus indebtedness was inevitable. The moneylenders i.e. the *mahajans*, *sahus*, *kayas* as they were called were mostly *Marwari* merchants² who owned food grain and cloth stores and also lent money to the workers at exorbitant rates of interest.

¹ Behal (1992) has cited such levels of indebtedness.

² In the hill districts of Jalpaiguri and Darjeeling and the former princely state of Cooch Behar, the situation was essentially analogous to that in Assam. From the beginning of their modern development the Marwaris were on the spot, and they never faced a serious competitive challenge. A 1945(Dash, 1947) Gazetteer for Darjeeling notes:

"The *Marwaris* dominates most of the exporting trade viz. cardamom, oranges, potatoes, and practically all the import trade of consumption goods. In addition, he has an almost complete control of the retail sale of consumption goods to, and of the purchase of produce from the small consumer and producer. It cannot be denied that the *Marwari* had played an important part in the development of the district. In Darjeeling town itself the firm of Jethmal Bhojraj was established in 1845. And *Marwari* firms were established in Kalimpong soon after its annexation from Bhutan. The part they played in the development of the district can be understood from the following comment on their early activities in Kalimpong: With the advent of the *Marwari* traders who started large scale buying of cardamoms and the impetus derived from the larger demand for agricultural products, with increased pressure on land caused by an influx of Nepali cultivators after the tract became ceded to British India and with the introduction by the Nepalese of new methods of intensive cultivation by means of the plough, the need arose for agricultural capital and the *Marwari* was ready to provide it. In the beginning this was more in kind than in cash, the loan in kind being invariably computed in money value to the advantage of the moneylender. Gradually the system developed into regular money lending in cash at definite rates of interest" (Timberg 1978: 199).

In Darjeeling in order to attract settlers land was given at concessional rates to develop the area (Das Gupta 1992:185). Various categories of land were given out. For example, the building leases with a stipulated rent, the Wasteland Rules of 1864 and 1882 were specific for tea growing, land for agricultural purposes, not less than 10 acres for a term of 30 years and if it was unclear land it was rent-free for 5 years and to pay Rs. 2 per acre for the rest of the term.³ Apart from these broader areas a small patch of cultivable land was given to the tea garden labourers in Darjeeling. Not much has been documented in this regard.

An important aspect of health is food availability among the workers of Darjeeling. Rationing was an important intervention taken by the planters to curb food shortages in the tea gardens. In 1944, according to Griffiths, Darjeeling gardens experienced serious difficulty in obtaining rice for the labour as Nepal had posed restrictions on imports due to its own food shortages during the war. "The weekly ration of rice was therefore reduced to four *seers* for adults and two *seers* for children and the cash dearness allowance was increased to one *anna per haziri* for an adult and half that amount for a child" (Griffiths op. cit.: 214).

Our narratives of workers of Phuguri Tea Estate reflect more about the hardships and coping mechanisms taken to tackle food crisis. Taking resort to 'famine foods' as discussed earlier was part of the workers' daily diet. The following set of narratives provides a picture of the means taken for food procurement and the workers diet in the tea gardens of Darjeeling.

"Bazaars' those days were in Panighata. We had to walk for 13 miles from Phuguri. Horses were huge then. A local had to get off from his horseback as a mark of respect if a *kuire*⁴ was passing by. Even if a marriage procession passed, the groom had to get off the horse. I remember an instance when Ramu *Sardar* argued with a *kuire* saying that it was his horse and he refused to get off his horseback on the *kuire*'s order. *Bawarchi* (cook) those days was highly respected by the whites. A poor man could only afford a *panchmate* (five musical instruments) and not the usual *solamate* (sixteen instruments) for a Nepali marriage."⁵

"Roads were cobble stoned four-feet wide. During those days only Austin vehicles were there. But roads were motorable only till *bis acra*,

³ For details see O' Malley, 1907, p 148-155.

⁴ *Kuire* means 'light eyed' here signifying a foreigner.

⁵ Interview with Bir Man Zimba, op. cit.

(name of a village near Ghayabari). We had to walk for around ten miles to reach Panighata from where we would buy rice. We had to cross streams and jungles. There was hardly any habitation then. On Sundays people would go to Panighata to buy rice. They would go but were only able to get half kilogram of rice. The policemen would stand on either side of the *pool* (bridge) and catch anyone who bought more than five *pawa* (250 grams) and would throw it into the stream. Around the years 1945-'46-'47 there was extreme food shortage. Rice was not available. Big-sized *makai* (maize), *bajra*, (millet, Indian corn) *musur dal* (lentils) were distributed then. We would grind maize and cook it like rice. We usually ate *makai ko bhaat*, *goan ko chamal*, *kodo ko bhaat*,⁶ *raya ko sag*⁷, *iskush* (squash)."⁸

Sukbir Khawas says, "During the period of the Bengal Famine we procured rice from Nepal. We had to be very careful of the routes we took. Police would be standing on either side of the bridge. If they caught us buying more rice they would throw it into the river. We possessed a *Bharatiya Vikasi kagaz*.⁹ We procured rice from Srinath in Illam *jila* (district) and Balpoth in Jhapa *jila*.¹⁰

Facilities of Bonus started only after the British left. They would otherwise give us ration consisting of *atta* (wheat flour), 10 kilograms to each worker on a fortnightly basis. It was available at 53 *paise* per *seer*. This facility started in 1939. There was no dearth of *atta*. One could buy as much as one wanted."¹¹

"The Britishers gave kerosene oil of four *pawa* per person per month. When I joined the quality of rice was good. They gave five *seers* weekly per person. During the world war¹² period they themselves did not get enough rice. We all had *bajra* then. For ten to fifteen years they gave rice and when Daga and Company took over in 1955 it was Rupees twenty-two per quintal for rice. Rice earlier was two *annas* per *seer*, which increased to four *annas* per *seer* around 1958-59. There was a milkman would come from Toklang

⁶ Items made from various food grains.

⁷ A leafy vegetable.

⁸ Interview with Sukh Chandra Khati, op.cit.

⁹ A proof of residence in India

¹⁰ These areas are in eastern Nepal and are thus bordered with Phuguri and other adjoining areas in India.

¹¹ Interview with Sukbir Khawas, op.cit.

¹² Signifying the 2nd World War.

carrying ten to twelve *seers* of milk. He would go to the *kothi* (bungalow)¹³, the house of the head *babu*, and the second *babu*. Milk was priced at one *paisa* per *pawa* i.e. four *paisa* per kilogram. Then only the manager had a vehicle.”¹⁴

The differences in diet of the managers and the supervisory staff on one hand and the workers on the other reflect the nutritional difference between the two classes. Access to food is an important indicator for health. What they suffered was mainly chronic hunger. Lack of proper intake of food makes them more susceptible to a host of diseases as our earlier chapter has shown. It only increases their vulnerability. Apart from conditions of work, wages, housing etc. an important aspect of health is the ability to clothe oneself sufficiently.¹⁵ The following section deals specifically with the help of reports and narratives on the workers conditions during cloth shortages and the interventions taken by the planters in Assam and Bengal.

Provisioning of Clothing

According to the Report of The Indian Tea Association, 1889, for coolies travelling from Bengal to the Assam plantations, “the supply of warm clothes provided for under this rule should only be enforced from November to February inclusive as it is absolutely unnecessary at other times, and they also think it should only be supplied at head depots at times of despatch” (ITA 1889: 51).

The ALIC 1922, states, “Prior to the war the extent to which clothing, mainly in the form of dhotis, saris or cold weather coats, was given free or at reduced rates was negligible; but from 1917 when cloth price rose, many gardens sold them below the market rates. Others indented for standard cloth as long as it was available. Some gardens, especially in the Lakhimpur district, sold blankets and warm coats at less than the local bazaar rate to those who wished to take them” (ALIC 1922: 25).

The Assam Labour Enquiry Committee of 1921-1922 states that generally free clothing was not given to any large extent. The witnesses had different views about the condition of clothing before and after the War. But the Committee had no doubt that in the majority of cases he was not so well

¹³ Signifying the manager’s bungalow.

¹⁴ Interview with Bir Man Zimba, op.cit.

¹⁵ See Doyal (1979). She says the ability to remain warm and well-clothed is an important indicator for health.

off. Before the war there were about 18 yards of cloth per head of population in India, the average had fallen to 10 yards of cloth as stated by Mr. Rhodes.¹⁶ It was argued by the committee that the amount spent by the coolie on clothing was miniscule as compared to expenditure on the necessities of life (ibid). It was often remarked in various writings, that coolies had an extravagant lifestyle, as they excessively spent on marriages, jewellery etc.

Cloth shortage was so acute that in his Annual Report for 1945 the ITPA (Association of the Indian Tea Planters) Secretary stated, "A large number of female labourers were compelled to use hessians¹⁷ to cover themselves up due to want of cloth. The annual cloth quota was reduced from 20 yards to 10 yards" (Das Gupta 2000: 283). By 1942, Griffiths states that the economic situation had deteriorated in Darjeeling, and "an increased cash allowance, in the form of a lump sum payment of Rs 3 for men and Rs 1/8¹⁸ for women and children to meet the increased price of cloth was granted. In January 1943, further help was given to the labour as cash subsistence allowance, which was different from the new cloth allowance. Cash was doubled as a temporary measure until concession rice could be made available and cloth allowance was also doubled" (Griffiths op. cit.: 214). Some of the narratives give a glimpse of the cloth shortage faced by the workers in Phuguri Tea Estate. According to Sukbir Khawas, in Phuguri Tea Estate and the adjoining areas,

"...There was cloth shortage in the market around 1944-1945. Soureni was the main market then. The shopkeeper was a *Marwari* merchant. We had to queue up at the Phuguri store where white cloth was distributed once a year. Then we would go to the *Marwari* shop and buy *rangeen* (coloured) soap and would colour the cloth! During that period a lot of cloth was stolen from that shop."¹⁹

"We would buy cloth from *Marwaris* Ganpath Ram, Jeevan Ram of Soureni and Tingling respectively. For Dasai (Dusserah) we would buy a shirt, pant and a pair of canvas shoes, to last for a whole year. Once I was wearing a very nice shirt made of flannel after work and was spotted by the manager

¹⁶ At the last meeting of the Legislative Assembly at Delhi, Mr. Rhodes, M.L.A., President of the Bengal Chamber of Commerce, had stated and is mentioned in the, Report of ALEC, 1921-22: 28

¹⁷ A type of thick rough cloth made from hemp, a sack cloth.

¹⁸ 1/8th of a rupee.

¹⁹ Interview with Sukbir Khawas, op. cit.

who pulled at my shirt angrily and asked where I got it from. It was of a very good material. We wore an old shirt to work in the factory, as our clothes got very dirty. Cloth Distribution at a subsidized rate of four *annas* per *gaz* i.e. a yard of printed cloth, began only from 1951-1952. Even blanket which was more like a '*dhusa*' (rough rug) was distributed around this period. Earlier we had hardly anything warm to cover ourselves. We would sleep on sacks. Those days it would rain incessantly for 10-15 days. We were not given *tirpal* to cover ourselves."²⁰

His wife further added, "While working we would wear black saris made of *sitan*. Wages were low then. A sari would cost us 7-8 *annas*. Later it even increased to one *rupaiah* and four *annas*. Earlier saris would last only for a week. It would tear while plucking around the tea bushes. Then there were two kinds of cloth- *aalpakka* and *makhmal*. There was no cloth distribution by the British. They gave only *dhusa* to the poor."²¹

Proper sanitation and provision of warm clothes especially for the labourers of the hill districts was negligible. There have been accounts of the hill people being clad in *ek sarlunga luga* i.e. one piece of cloth. It was only in the event of the Nepali New year or the festivals of *Dasai/Tiyar*²² that they got a new set of clothes. O' Malley in his gazetteer of 1907 says that their thin clothing generated diseases like phythisis, respiratory problems, rheumatism etc. The narratives reflect the dependence on the *Marwaris* shops for the annual cloth provision. Indebtedness with regard to food and cloth shortage was great among the labourers. Indebtedness was very high among the tea estate workers. It was one of the reasons why they fled their homelands only to continue with the same disease in the plantations. Local poets and ballads have always mentioned about indebtedness in their works during 1899-1900.

"Brother is the head, (*Sardar*), sister is the labourer (coolie)

But their debt is up to the crown of their head!"

In the tea gardens both labourers and *sardars* were indebted to moneylenders at high rates of interest. The latter would deduct the dues of interest from the labourers and *Sardars* and the remainder of the wages were distributed among the labourers for sustenance. One *Sardar* remarked, "I

²⁰ Interview with Sukh Chandra Khati, op. cit.

²¹ Interview with Kaumati Khati op. cit.

²² Hindu festivals of Dusserah and Diwali. See Anderson, Mary, On the Festivals of Nepal.

have always been in debt of not less than Rupees 200 and I will have to die to pay back the debt” In other words due to circumstances, being in debt had become second nature” with labourers and *Sardars* (Pradhan: 1982).

Tea planters never employed the labourers directly but through *Sardars*. Indebtedness was high among both the labourers and *Sardars*. In extreme financial need labourers used to look up to the *Sardar* and the *Sardar* to the *mahajan*. The influence of the *mahajans* was very strong. It is said that in some gardens the *Mahajan* would come on pay day while the money was being disbursed and would take away the complete pay of the labourers i.e. around Rupees 2000-3000 from the *Sardars* (ibid).

Pradhan (1982) maintains that in 1902, 808 cases of debt defaulting were registered in Darjeeling Court. Out of these cases, in 97 cases 30%, in 458 cases 36-37%, in 93 cases 48%, in 38 cases 150% and in one case 300% interest rates was charged. In the opinion of the British planters apart from the bad influence of debt-habit of the workers, other conditions had improved. The ‘fault lies in the extravagant nature of the Nepalese men folk indulged in gambling and women used to prefer velvet clothes’ (O’Malley op. cit.).

LSSS O’ Malley further says,

“The coolies employed in the hills are almost entirely Nepalese, and in the Terai they are drawn from both from Nepal and Chota Nagpur. The labour is free, i.e. it is not controlled by any special legislative enactment, as in Assam. There are no agreements, labourers being free to come and go, as they like. They are employed directly by *sardars*, who take advances from the estates on account of the coolies debts, which are many and heavy: some estates occasionally suffer heavy losses on this account owing to the managers having no proper hold upon the debtors. A *coolly* earning Rupees 6 a month usually spends about Rupees 50 upon his wedding, and occasionally a similar amount upon funeral, all borrowed money. The *coolly* looks to the *Sardar* for an advance, and the *Sardar* to the manager. The latter lends without interest; and if he will not, the *coolly* and *sardar* turn to the *Marwari*, the Shylock of the hills, who commonly charge 75% interest” (ibid: 84).

Pradhan (1982) feels that if there were some educated Nepalis in Darjeeling, then, the fleecing by the *mahajans* could have been averted. Workers indebtedness was a clear reflection of the living conditions and their

inability to a proper food. Health care interventions in these plantation enclaves occurred with either the fear of contriving the disease or losing labour.

Chakraborty (1989) in his study of jute mill workers in Bengal (1890-1940) states that only when the context of the search for an "efficient" working class, that working class conditions became an object of knowledge in India. "A good example is the treatment they gave to the question of the 'health' of the workers. This was an important question from the Government of India point of view, carrying obvious implications for the dietary condition, the standard of living, the wages situation, and the efficiency of the worker. For years this report carried a section called General Health of the operatives, where the workers' health was always described as 'good' if there had been no epidemics" (Charkaborty 1989: 78). The measure of the severity of epidemics was the drop in production (ibid: 79).

Health Care Interventions

The health of the military remained one of the prime objectives of medical action. Government was prepared to dedicate resources to the protection of the army's health and sanitation to an extent unthinkable for civilian populations. There was an increase in the number of British personnel in relation to Indian troops in the rate of 3 to 1.

Chatterjee (2000) notes that the Royal Sanitary Commission Report of 1863 gave a detailed study of the hill stations and their utility for health purposes. The report on Darjeeling stated "the climate was temperate and damp, beneficial in debility after fever or in ordinary debility but not beneficial for serious organic diseases or rheumatism. Dirty water led to diarrhoea, rain fell incessantly for five months and men were pent up in barrack rooms to the great injury of their health"(Chatterjee 2000: 14).

British troops stationed in the hills found it difficult to cope with the illnesses. There were doubts about the salubrity of many hills stations. Darjeeling, Nainital, and Lantour, were all thought to be unhealthy in this respect, and had a high incidence of diarrhoea and dysentery. "Medical officers warned that there were 'numerous examples of elevated positions being unfavourable to health', especially those which rose abruptly from alluvial or jungle-covered tracts" (ibid).

The health of Europeans in the tropics was a major concern for colonial medicine (Harrison 1994: 2). Studies by Arnold and others²³ testify that with colonialism, importance was given mostly to the health and nutrition of the European troops. Fear of contracting 'tropical diseases' was an important concern for medical research. Interventions through vaccination of those around them like the natives, who came in direct contact with the Europeans was promoted. "Physical contact between doctor and patient could be one of the most direct and traumatic aspects of the colonial encounter. To supplement its own limited manpower and to carry out the more menial medical roles of dressers and vaccinators, colonial medicine looked for local recruits" (ibid: 61).

High morbidity and mortality rates interfered with the efficiency and profitability of production in mines, plantations and factories. This discouraged further labour recruitment (Arnold op. cit.: 15). Arnold maintains that some degree of medical interventions was clearly in the colonial interest. "Medical interventions were piece-meal and selective, with scant resources concentrated in areas vital to the operation of the colonial economic and administrative system. Thus, while the mine compounds, the plantations, the barracks and the main urban centres were favoured, there was a general neglect of the rural population and of the health of women and children. There was an emphasis on epidemic rather than endemic disease and upon curative rather than preventive medicine" (ibid).

"Demands that inoculation be prohibited and vaccination made compulsory were prompted first by a desire to protect Europeans, rather than Indians. Later, however, wider commercial and administrative considerations were involved, with European planters and factory owners seeing practical advantages in a vaccinated workforce" (Arnold: Smallpox and colonial medicine in Nineteenth Century India in Arnold op. cit.: 48).

Use of the vaccine made from calf lymph, introduced on an experimental basis in Bombay in the late 1850s 'received considerable opposition to the practice from orthodox Hindus who objected to what they saw as a violation of their sacred animal'. "W. J. Simpson, health officer of Calcutta, was another enthusiastic advocate of calf lymph, claiming that only

²³ Arnold David: *Imperial Medicine and Indigenous Societies* Oxford University Press Delhi 1989, Harrison Mark: *Public Health in British India: Anglo-Indian Preventive Medicine 1859-1914* Cambridge University Press 1994.

certain tribes in up-country areas consistently opposed it. However the Nepalese and the Lepchas, who inhabited the hill districts of Bengal, were equally opposed to arm-to-arm vaccination, and were generally unwilling to permit their children be used as vaccinifers" (Harrison op. cit.: 85).

Attention was drawn to the coolies who were transported long distances into the plantations of Assam. For proper medical examination of coolies' travelling to Assam, rest houses, proper conservancy and supply of good drinking water were required. There was also a need of a competent medical officer for the examination of coolies. The Superintendent of Emigration (1889) of the depot at Ranegungee carried out an inspection and reported that "he had found the sanitary arrangements to be very defective, the water -supply to be drawn in many cases from more or less unclean tanks the cooking of the food to be imperfectly attended to and the total absence of special hospital accommodation for the treatment of coolies attacked with cholera or other contagious diseases, and of satisfactory arrangements for the disposal of the dead or of their belongings" (ITA 1889: 57).

Various Acts were enforced and amended for the benefit of the tea growing community. A special reference can be made here of Act I of 1889 also called the Inland Emigration Health Act of 1889 which ultimately got implemented in June 1892 chiefly in favour of the planters. This Act was mainly to provide sanitation for the Emigrants during the passage through Bengal to the labouring districts of Assam i.e. the districts of Lakhimpur, Sibsagar, Nowgong, Darrang, Kamrup, Goalpara, Khasi Hills, Cachar and Sylhet in the Chief Commissionership of Assam (Detailed Report of the General Committee of the ITA 1890: 54).

This Act reflected on the labourers' state. They were entirely at the mercy of the agents for their transport, food, wages etc. It states thus:

"...The Agent must give them cooked meal before they start; and if the journey is likely to occupy more than six hours he must distribute biscuits and one ounce of sugar to each emigrant of and above ten years of age, and one biscuit and half an ounce of sugar to each emigrant under the age of ten years and if more than eight hours, dry provision must be supplied such as *chewra*, *sattu*, and the like, in such quantity as may be determined by the Superintendent of Emigration or other authorized officer. It must be seen that the emigrants wear the clothing provided whenever the weather renders such

a precaution necessary. At the close of every day's march or a train journey the emigrants must be properly housed and provided with a cooked meal and wholesome supply of water for drinking and ablution purposes" (ibid: 58).

The General Committee of the ITA recommended in lieu of the Inland Emigration Health Act of 1889 that no coolies should be vaccinated in the recruiting districts, as this would certainly have a tendency to hinder recruiting by alarming the coolies, and would also cause detention in the depots. It would also, in the opinion of the committee, prove detrimental to the health of the coolies to travel by rail immediately after vaccination, and they would suggest that the vaccination might be performed at Dhubri after the emigrants had been put under contract as heretofore (Detailed Report of the General Committee of the ITA 1893: 107).

A proposal was made for the establishment of Anti-cholera inoculation centres in Bengal for the recruits proceeding to the tea districts of Assam. Examples are at Bilaspur for the Central Provinces, Purulia and Asansol for Chota Nagpur and up-country stations, and Goalundo for free-labour North Western Province coolies proceeding to Cachar and Sylhet direct. Around 1886 recruitment was stopped due to the serious outbreak of cholera on the routes to the tea districts (Detailed Report of the General Committee of the ITA 1897: 68). The General Committee suggested increasing the diet of the coolies, raising the allowance for adults from 9 ½ *chuttacks* to 11 *chuttacks* and for children from 4 ¾ to 5 ½ *chuttacks* and recommended an alternative route for the emigrants (ibid: 69).

"The Indian Tea Association made generous grants to the Calcutta School of Tropical Medicine to assist its researches on malaria and hookworm and also helped to finance the successful campaign against *kala azar*" (RCLI 1931: 482). These actions show the extent to which such measures were required in order to contain the increase in mortality on board steamers, trains etc from the recruiting depots to the tea districts of Assam. The journey included travelling by boats, steamers, and rail and for the remaining distances even by foot. There are accounts where the planters even considered allowing the recruits to travel by foot.

Available accounts and travelogues on Nepal have made known the nature and kind of living of the natives of the Himalayan belt. The examination of the physical conditions of coolies was entirely at the hands of

the employers and the recruiters. Medical examination by the Government was not possible because the coolies came under the 'free recruitment' system. There was no means of preventing a medically unfit coolie if he entered into a local contract. There was no problem of logistics to procure labour in Darjeeling due to its proximity to the labour-catchment areas (LCAs).

As part of the interventions, the first inquiry was carried out in the tea gardens of Assam and Darjeeling districts during the winters of 1915-1916, by Col. Sir Clayton Lane. A second enquiry was carried out in the jails of Bengal Presidency in Calcutta and Hoogly. The first lot of 4,894 persons examined, showed an infection rate of 66.91%. These included jail prisoners, school children from the Darjeeling High School, S.A. Mission School at Ghoom police from Bloomfield and labourers of five tea estates. The infection rate in schools was 72.22% while in case of tea estates it was between 65.38%-80.96%" (Kavadi 1999: 20). This shows that hookworm incidence was high among the children. The initial survey on the tea gardens got extended into an extensive anti-hookworm campaign in the Darjeeling district till March 13, 1917. Col. Lane had examined in all 22,448 with a presumable hookworm infection of 60.99%, which was lower than the first 11,142 cases where the incidence rate was 66.02 % (ibid: 21).

This difference according to Lane was due to the fact that in most tea gardens where the second group was examined, the managers already gave thymol treatment freely before the investigation. Lane's survey which included an investigation of 33,500 persons concluded that two-thirds of the labouring classes in Darjeeling were infected with hookworm. For treatment of infected persons thymol was used instead of betanaphthol or any other mixture of oil of chenopodiums. Despite thymol being less effective, it was cheap and safe and was manufactured in India and thus administered (ibid).

Prevention of soil pollution was essential for the control of hookworm. Therefore they experimented with different types of latrines. The only known latrine to fulfil these conditions was the septic tank. A number of such latrines were provided by the International Rockefeller Foundation for Health. According to Lane, 'cultivating the latrine habit was an absolute must'. The Darjeeling Planters Association supported Lane in this activity. Lane's work

helped in curing over 20,000 infected persons from hookworm and he marked an 'improvement in the general health of the estate workers and enhanced their capacity to work' (ibid). Curjel (1923) also noted such preventive measures as mentioned in the previous chapter.

Das (1931) provides a classification of the existing system of latrine accommodation in the Assam plantations as: -

1. The bucket system, which is liable to become insanitary and for which there is always a necessity for keeping a class of sweepers;
2. The trench system, which often runs the risk of infection by flies;
3. The aqua-privy system, which although very convenient and sanitary, is very much limited in scope, being dependent on the availability of streams and rivers;
4. The septic tank system, which is the ideal system of conservancy.

Das notes two major difficulties in the septic tank system, a) lack of sufficient water supply since it requires four-five gallons of water per person using it. b) High initial expenses (ibid).

As long as poor sanitation and conservancy did not affect the planters directly, in terms of labour mortality, interventions were inadequate. The 'fault' always lay on the 'bad habits' and lack of hygiene of the natives. It was only when the labour force was affected in large numbers that thymol treatment was administered. Such interventions ignored the social, cultural and economic context of disease. Moreover in those days most of the workers walked barefoot. Infestations of leeches and worms were common occurrence in the hill terrain. Evidence of annual treatment of thymol in Darjeeling was captured through narratives of the natives of Phuguri Tea Estate who belonged to the earlier generation. L. B. Dewan aged 64 years, says,

"Hookworm and malaria were very common among the tea plantation workers. In Marma Tea Estate (where he worked) malaria was prevalent. It was endemic here. This is due to the fact that it is located at an altitude of 1400-3700 feet while Phuguri is located at an altitude of between 2000-3500 feet. Hookworm, dysentery and malaria are all water borne diseases. It is a result of poor sanitation. During the rainy season workers would go barefoot

to work. Their feet would get soiled would get blisters in their toes. (*Khutta pastheo*) The workers would be given an applicant. It was a purple-coloured medicine, which was applied in between the toes. It was called 'Jenson-violet. Thymol was administered for hookworm. It would be reported in the dispensary. The medical personnel were responsible for administering thymol treatment annually for hookworm. It was only when the Company stood to lose 30 man-days that provision of treatment for hookworm was considered. Patients were given this purgative, which would kill the germs in the stomach. For example the worker would be reported as a labourer of a *Sardar* even though he might be a staff, a *marad* or an *aurat*. They got their daily wages on the day they took the treatment. Workers were asked not to consume alcohol for two days prior taking the medicine. I remember a death case at Okaity Tea Estate where the person had died as he had consumed alcohol'.²⁴

From a memoir by a planter in Darjeeling:

"...Although most gardens have a doctor, who visits when called for, the coolies will, in most cases, have to be doctored by the planter. For coolies only a few simple remedies are generally employed and in most cases, if they are not cured by first and second dose, they will not come again and the following lists will be formed quite sufficient. A thing to be remembered is that the stronger a remedy is the more a coolie will believe in it" (Notes by a planter in Darjeeling: 77).

This planter gives a list of medicines administered to the workers for different complaints.

Such a listing provides us with insights in to the range of complaints that the workers faced. Given these conditions health interventions were minimal in Darjeeling and catered to mostly eradicating hookworm in Darjeeling. As long as it did not reach epidemic proportions no measures were taken owing to a steady supply of labour. Women were an important segment in the labour force. Therefore care was taken to provide maternity benefits in the required gardens, with the realisation that importing labour was becoming increasingly expensive.

²⁴ Interview with Mr. L.B, Dewan, op.cit.

Table No: 4.1
Medicines administered to the plantation workers

<i>Medicine</i>	<i>Used For</i>
Carbloic Acid	Disinfectant, Ulcers, Scabies, with oil for burns
Chlorodyne	Dysentery, Diarrhoea
Castor Oil	Purging
Cholera Mixture	Cholera, Dysentery
Camphor	Cholera, Diarrhoea, keeps away fleas, toothache
Antidysenteric Pills	Dysentery
Tinture of Kino	Diarrhoea and Pysosis
Epsom Salts	Purging
Jalap.	Dropsy and Purging
Alum	Astringent, good for leech bites, Emetic
Friars Balsam	Cuts
Aconite	Rheumatism, Neuralgia and Toothache
Phenyle	Disinfection, blight sores
Podophyllin	Sluggish liver
Spirits of Nitre	Dropsy and kidney diseases
Quinine	Fever and tonic, Neuralgia
Santonine	Worms
Zince Ointment	Ulcers, Foul sores
Sulphur ointment	Itch
Simple ointment	Mild sores, dressing
Paregoric	Colds
Ipecacuanha	Emetic, Coughs, Dysentery, stings of insects
Ammonia	Headaches, Bronchitis, Hornetor snake stings
Borax	Sore throats, skin diseases
Cardamoms	To prevent Griping
Bicarbonate of Soda	Dropsy, stings of Mosquitoes and Wasps
Glycerine	Dressing for wounds, slight sores

Source: Notes by a planter in Darjeeling: 77

Note: The complete reference of this was not found as the first few pages were torn. Referred at The National Library, Calcutta.

Maternity Benefits

Conditions of work were tough for women working in tea plantations. As mentioned earlier, planters provided the 'birthday reward' once the child reached one year of age. This was to ensure careful nursing during the first year but was more a part of the planters' strategy for 'cheap reproduction of labour'. A hundred year old Padma Tamang who earlier worked in Phuguri T.E. says,

"In those days we carried a *phurlung* (a bamboo basket to keep tea leaves) and a *kokro* (a cradle) to carry our babies. We even used a *ghoom* (a bamboo knitted cover) used to protect our bodies and the *kokro* from the rains and strong sun. Those days there was no crèche service. We had to carry our infants to work. Even later when crèche was established we could leave the infant only after the age of six months. I had eight children, six daughters and two sons. My eldest child, a daughter died at the age of one and half years. She had sores all over her body. *Kaile*, my fourth daughter died of fever and dysentery at the age of 8 years. *Maile*, my second eldest daughter died of fever at the age of 15 years. I did not have any miscarriage. Abortions were unheard of. During pregnancy I had to work. We would get leave for only a week to fifteen days. I remember that there was no other benefit apart from the fact that they gave me a *bakshish* of Rupees twelve on the birth of my eldest son. He's now 72 years of age. (She says pointing out to him.) I received this *bakshish* of rupees 12 for all my children."²⁵

Kaumati Khati, 65, an ex-tea garden worker of Phuguri T.E.

"Earlier there was no maternity leave. After delivery a leave for six weeks was given and then would join work. On the completion of the first year of the child the British would give us a sum of Rupees 20-30 (she is not sure). Sometimes the baby would be born in the field itself. Later maternity leave was given for three months, one and a half months before and one and half months after delivery. But if the child was not born within the given date then their *hazira* would be withdrawn for example if the child was born before the due date then one *kharcha* was deducted (i.e. their fortnightly wages). Many women concealed their pregnancies and worked continuously for fear of losing

²⁵ Interview with Padam Tamangni, op. cit.

their *hazira*. During miscarriage women were given 1½ months *kharcha* (wages). During that period emergency cases were taken to Darjeeling.²⁶

Sukbir Khawas says,

“I married in 1944. My wife worked for 20 years, till 1960. I had 12 children. Some houses had 4-5 to even 10 children. There was no concept of birth control. Abortions were unheard of here. Crèche was established only after 1952. All the benefits came into force only after this period. Mothers would carry their babies on their back and hold the basket in front while plucking. *Pechari kokro agari tokro*. While climbing uphill a female worker needed a friend to carry her child.”²⁷

These narratives illustrate the conditions in which the women workers lived and worked in the tea gardens of Darjeeling. For fear of losing their wages women worked even throughout their pregnancies. Abortions were unheard of in the Darjeeling plantations but in the case of the Assam plantations there were *dais* who helped women in getting abortions done. It is stated that 65% of the pregnancies were terminated around the late 19th century in the Assam plantations. It was mainly because women did not want to give birth under such conditions and also make the child suffer. Thus in Assam, low births rates was coupled with high death rates during the late 19th and early 20th century. Brij V. Lal has shown that in the case of the Fiji plantations, women workers were unable to take care of their children due to overwork.

Medical Facilities

Medical facilities were provided in the tea plantations to a certain extent. In most gardens according to the Royal Commission of Labour Inquiry Report of 1931, there was a ‘highly qualified medical doctor for a group of ten to fifteen gardens’. Also in many gardens only the compounder was in-charge of the dispensaries while the chief medical officer visited the garden once or twice a week. Some gardens like of Surma valley in Assam had a group hospital for 18 gardens. The group hospital had nursing staff, separate wards for men, women and children, an infectious diseases block, an operating theatre and a central store for the issue of supplies to the outlying dispensaries” (RCLI 1931: 411).

²⁶ Interview with Kaumati Khati, op. cit.

²⁷ Interview with Sukbir Khawas, op. cit.

Lees, in his Memorandum Written After a Tour Through the Tea Districts of Eastern Bengal in 1864-1865, writes,

“In 1866 in Assam, there was not a single government hospital throughout Assam with the exception of the Jail and Regimental hospitals. Outside patients are not admitted in these hospitals. In the Assam province an enormous amount of the children are carried off by small pox. There is just a supply of simple medicines in plantations. “Dysentery and fevers are the very scourge of Assam. Statistics there are none, but from all the enquiries I made, I should think the percentage of deaths from dysentery to be very high among the imported coolies.

But as regards imported coolies, I am of opinion that more attention is required to the health of the coolies before he comes into the hands of the planters than afterwards. The mortality on board the steamers, which take coolies to Assam and Cachar, though the average may not be so great as it was before, is as I shall show below very high. It is attributed to various causes, bad or insufficient food, want of space among the coolies, wet decks, want of protection from the cold winds, and to those sudden changes of temperature so remarkable in Assam; but though on a point of this nature I give an opinion with much diffidence, and one which I would on no account desire to place in opposition to the professional opinions on the subject, I am inclined to think that the contrary. A good blanket, or let it be two as the law requires-though one is quite enough in the summer and rains to sleep upon, and in the winter to sleep within- is a sensible adjunct, to the health and comfort of the coolies; but flannel *banians*, linen or cotton shirts, dhotis, and other articles of clothing are not only senseless but positively useless if not mischievous impedimenta. Hundreds of native boats containing 1000's of natives may be seen sailing up and down the Ganges and Brahmaputra daily but in none of them do we find the natives encumbered with these superfluous garments. The ordinary clothing of the Dhangurs, Jungles or the Santhals and other classes who form the bulk of the transports to the tea districts, consists of little more than sufficient to cover their nakedness-they are quite unused to be encased in flannel *banians* and the like and the consequence is that it is difficult to get them to keep them on. I went up to Assam in the month of Dec. And I visited each flat daily, and very often at night, IT was 'the order' that all coolies should put on their flannel at night fall

and this order was a source of perpetual strife between the medical officer and the colliers, the former insisting on the flannel *banians* being kept on and the latter as determinedly tearing them off. This undoubtedly is the cause of sickness, and one that might be very easily be remedied but allowing the colliers more closely to follow nature and the best of their own inclinations” (Lees 1866: 58).

According to Engels, “each plantation financed a dispensary and some kept sick-wards for in-patients. Although attendance and medicine were free, workers were reluctant to avail the facilities due to the incompetence of the medical officers. As they were badly paid, no qualified people applied. Besides, preventive health care was rudimentary” (Engels op. cit.: 241).

Darjeeling was started as a sanatorium for the health of the British troops who could not afford expensive health trips overseas. For the general European population the Eden Sanatorium was established. According to the Darjeeling district gazetteer (1907), the natives were accommodated in the Lowie Jubilee Sanatorium while the Victorian Memorial Dispensary was for the natives as well as the Europeans in Darjeeling. Apart from such health services there were some charitable dispensaries at Kurseong, Kalimpong, Pedong, and others areas like Sukhia Pokhari. The Church of Scotland Mission established a hospital at Kalimpong and some dispensaries in the adjoining areas. But the larger native population was taking treatment from the traditional healers, the *jhānkris*.

Tuberculosis, asthma, and respiratory problems are diseases created by the very conditions of their life. In some regions where labour replacement was not possible, interventions like food subsidies, vaccination, dispensing medicines etc came in only after a period of recurrent epidemics and food crisis. In terms of medical facilities in Phuguri Tea Estate, according to Sukbir Khawas,

“I remember that there was no *kuire* doctor here in Phuguri. In fact he was a ‘Singaurey *thar ko*’ (a sub-caste of Biswakarma, which is a scheduled-caste). There was a *kuire* doctor at St. Mary’s in Kurseong. Around late 1920’s a hospital was constructed at Mechi. There were also two *Dabaiwalas* (medicine men). One would go to Toklang and the other to Chandura. They would come on horseback and dispense medicines. The Mechi doctor would go about on a horse and check patients. These *dabaiwalas* would go to

Phuguri, Mechi, Toklang, Chandura and also the Bazaar line at Soureni. They would conduct an annual eye check up. 'Thymol' treatment was given if anyone was found unwell."²⁸

In Darjeeling, diseases like phythisis, dysentery and pulmonary complaints were completely ignored in terms of immediate treatment. The emphasis was mainly on vaccination against smallpox and to control hookworm among the labouring class. This set of diseases were due to the poor conditions of living, lack of warm clothing, workers inability to afford hot-water-baths during the cold season and above all, low wages, which perpetuated indebtedness. Planters simply brushed aside these factors citing that the workers were dirty, unkempt, unhygienic, conservative, and superstitious- believed in spirits as a bodily cure.

Lack of proper drinking water, sanitation, clothing, poor diet coupled with inadequate health services, had a profound affect on the workers' health. Mortality in the hills was not as severe as in the *Terai* regions of Bengal but morbidity did contribute largely to the above-mentioned diseases. The section on public health in the Gazetteer of Darjeeling of 1907 reflects on the health of the Europeans and the armed forces. Darjeeling, which was first meant to be a sanatorium for the troops of the British army, instead developed into a highly profitable tea-growing district. But these profits were not extended for the welfare of the large number of workers who had toiled so hard to build the industry.

The previous two chapters exemplify the conditions that forced people to move towards Darjeeling hills in search of livelihood. Harsh economic conditions viz. land tenure system, heavy taxation policy, high interest rates, increasing pressure of population on land, recurrent famines, food shortage; crop failures were some of the main factors for migration. Conditions in the tea estates were no different to their earlier circumstances. Low wages, pitiable living conditions, inadequate food, lack of warm clothing, persistent indebtedness, disease, pestilence were part and parcel of their daily lives in the plantations. And in the name of health services, vaccination and anti-hookworm measures were the 'one-shot' treatments made available to them. Such conditions led to labour unrest only though sporadic, in the tea gardens of Darjeeling.

²⁸ Interview with Sukhbir Khawas, op.cit.

Period of Workers' Unrests in Darjeeling Prior to Independence

The earlier narratives suggest that food grains were provided mostly during the severe crisis in Darjeeling. Nepal government in 1941 had imposed restrictions on food grains exports due to their own food shortages during the war. As rice was mostly procured from Nepal this imposition caused serious hardship. Darjeeling was the station headquarters for the army. During the world wars, measures were taken to provide supplies of food grains to the army. Procurement of rice from Nepal was difficult so steps were taken to ensure that food grains were immediately available to the armed forces. It was the natives who faced major setback both in the towns and villages.

In the tea gardens, as exemplified by the narratives, the management provided *bajra* and workers were even asked to grow yams and other tuberous roots on their own plots of land. Rationing was insufficient. It was during this period according to L. B. Dewan that rampant food hoarding by the *Marwari* merchants brought Ratan Lal Brahmin, a social activist into the limelight.

L. B. Dewan describes,

"There was no paddy in the hills. Rationing started during the World War II. This was not out of charity. It was out of compulsion that the planters provided food grains. There was food shortage here. People suffered from hunger and were unable to work. The management was forced to organize food provisioning to the workers and their dependents. The 1943 Bengal Famine was man-made. The government had to mobilize food for the army. Rice in the beginning was imported from Morong side of Nepal. It was the incidence of food hoarding that brought Ratan Lal Brahmin in the forefront. He was a taxi driver, but a comrade. In the tea gardens the Darjeeling Planters Association started giving rations. Army rations shops were also opened. It was the general public (towns and bazaars) that suffered. Merchants had started hoarding food grains. He was a social activist. He threatened and looted these merchants, and helped the people. This was around 1940-1941, a period of major crisis. Such initiatives led to the formation of the CPI party under the influence of Sushil Chatterjee, a veteran leader from Calcutta who told R.L. Brahmin that the only way to fight was to be organized. The latter thus formed the Darjeeling Chia Kaman Majdoor Union in 1946."²⁹

²⁹ Interview with L.B. Dewan, *op. cit.*

An interesting description given by Sukbir Khawas (who earlier was a party member of the Congress and now is of the GNLFF) says about Ratan Lal Brahmin,

“Ratan Lal Brahmin alias *Maila Baje* had started the Communist party here in the hills. He was originally from Singabari Tea Estate (in Darjeeling). He would come and talk about *kranti* (revolution). He would tell about the facilities and rights of the workers. Though he was uneducated he was a powerful man. He was huge and had a towering personality. Later on he even became an MLA at the Calcutta Legislative Assembly. He would carry a *khukuri*.³⁰ Once they did not allow him to enter the Assembly even though he was with Jyoti Basu. He had a *meit*³¹ (friendship) with a *Marwari*. He was clever too. He and *Kurseonge Maila* who was a driver were mostly together. They both would induce passengers to sit in the car and not in the train on the way from Sukna to Darjeeling. They would then rob them of their money and belongings and hand over to the poor and needy. I remember once there was a delivery case in a poor family. They went up to the *Marwari* shopkeeper and asked them to supply food to that house. In this way he threatened the rich and helped the poor.”³²

Eviction or *Hatta Bahira* as discussed earlier was common in the tea gardens. As the case of B. B, Lama aged eighty-six years of age; himself an activist shared his own life's experience.

“In 1939 I had worked as a clerk in Phuguri Tea Estate for a year. After that in 1940 I joined the military (*bbharna bhayera gaye*). In 1946 I went to Nepal to set up a school and then I came back here in 1953. During this period I got involved in the *Nepali Jan Kranti*. I also worked with the *Nepali Jan Congress* for sometime. Due to my political inclinations, the British Company here (James Finlay and Company) gave me an eviction notice in 1953 thinking that I would mobilise the workers of the tea gardens here. In order to save myself I joined the Gorkha League with Deo Prakash Rai. I told him about this problem of eviction. He couldn't solve it, so I went to T. Menon of the Congress. He too couldn't talk to the managers. It was after this that I approached the Communist Party of India (CPI), Ratan Lal Brahmin and

³⁰ A Nepali knife usually borne/ carried by the Nepalis

³¹ *Meit* in Nepali means friendship. A bond between two individuals and their families. Marriages usually do not take place between the two families. And the family members address each other by some form of relationship (another word) example, uncle, sister etc.

³² Interview with Sukbir Khawas, op.cit.

Ananda Pathak, the then District General Secretary. He said that 'we are not lawyers. You should have at least fifteen representatives from Darjeeling only then will your voice be heard'. I then formed a fifteen-member group with an annual membership fee of rupees three. This is when the Darjeeling Zila Chia Kaman Union was formed (1955). Ganesh Lal Subba, who was a renowned lawyer, gave a notice to the manager of Phuguri Tea Estate, H. Henry of Finlay Company. He said, 'India has got her freedom, how can you evict him? You all instead should be evicted'. This eviction notice then got withdrawn at the Kurseong court and a compromise was reached. In those days wages were low in the tea gardens. There were no trade unions. Darjeeling Zila Chia Kaman Mazdoor Union's President Ratan Lal Brahmin and Ananda Pathak gave me a letter stating that I should do something and that I can also become a member. The association was registered and the Registration number was 2056. Slowly I started collecting members from Mechi Tea Estate. It increased to 100. Then Milikthong, Ghayabari, Singbulli, Okaiti, Marma, Thurbu, Seyok and Gopaldhara tea estates joined. The membership increased to 700-800 members in 1954. In 1955 the Darjeeling Zila and the Shramik Sangh of the Gorkha League organised a big *andolan*. The slogan was *roti roji lai bharowne 1400 mukhi ko mang leera*.³³ On June 22nd 1955, there was an agitation where there was police firing in Margaret's Hope T.E. Some of our people were killed. They were Kala Limbu (age 14), Amrit Maya Kamini (unmarried-age 18), Jit Man Tamang (majhi, 45 years old), Mouli Sobha Limbuni (pregnant, 23 years old) and Kancha Sunar (22 years old). It was after this incident that trade unions got a chance to sit for discussion. The issues were mostly to increase wages, remove eviction system (*Hatta Bahira*), provide provident funds, pension for the retired, and provide sweaters during winters and umbrella during the rains. Then, the *nara* (slogan) was *Rashtriya Roji Dui Rupaiyaa Naga Hunuparcha*.³⁴ The issue of separate autonomy was going on simultaneously. The question of Nepali language came up much later."³⁵

Formation of Trade Unions in Darjeeling

Sharma says, "no union in the clear sense of the term could take place in the Himalayan tea industry as union was considered an illegal organisation by management and government or local administration in Darjeeling"

³³ A Slogan citing their demands.

³⁴ A Slogan citing the need for wage increase.

³⁵ Interview with B. B. Lama, op.cit.

(Sharma: 2000: 60-61). Das Gupta (Das Gupta 1999: 85) gives reasons to non-unionisation in Darjeeling hill areas as:

- a) Isolation of the workers
- b) Non-emergence of proper leadership
- c) Bad system of communication and access to gardens was difficult
- d) Employers' association played a vital role in deciding all issues affecting labour. Attempts to form trade union was seldom successful as the employer's association played a vital role in deciding all issues affecting labour. In addition the British planters maintained their own army, the North Bengal Mounted Rifles that was very active in the hill areas. This regiment was disbanded on August 14th 1947-day before independence. This dreaded organisation was keen to stop any union activity in and around the garden of the hills". (ibid)

According to Griffiths, there was an incident at Dhaj out-garden of the Moondakotee Tea Estate in the second half of 1946. He says, "The Communist Party of India had secured a firm footing in that garden and had for some months deliberately encouraged indiscipline and fostered a go-slow movement. Disciplinary action was taken in December 1946 and eleven of the ring leaders signed a declaration that they would be amenable to garden discipline and refrain from subversive activity" (Griffiths op. cit.: 389). In April 1947 the garden was declared a lock-out, which continued till July 1948. It was "the most prolonged lock outs ever known in the north-east tea districts" (ibid: 390). In Margaret's Hope Tea Estate, Griffiths says, "...an estate employee known by the police to be an active communist, set himself out to make work impossible, In the words of the Association's Chief Labour Adviser, he organised a reign of terror in the garden. By day all appeared to be quiet, but at night workers were forced to join the Communist Party and pay subscriptions, and were assaulted if they refused" (ibid).

Sharma argues, "Griffiths could not understand that the landmark of trade union movement in Darjeeling had already started before in 1946" (Sharma 2000: 63). Sharma argues that the origin of the trade union movement in tea industry dates back to 15th September 1945, when the first union was established. It was known as the Darjeeling Tea Garden Workers Union under the leadership of Sushil Chatterjee, Ratanlal Brahmin, Ganeshlal

Subba, B. B. Hamal and B.B. Chhetri for the tea plantation workers. In the early 1950's under the leadership of Deo Prakash Rai another union known as the Darjeeling District Chia Kaman Shramik Sangh (DDCKSS) was formed. It was affiliated to the Gorkha League. Despite their ideological differences, both the unions joined hands in 1955 for the restoration of 14-point demands of the workers and were successful. The Congress Party formed the National Union of Plantation Workers under the leadership of Dr. Maitree Bose and L. M. Pradhan in the early 60's (ibid: 64).

With the Gorkhaland Movement in the late 80's and the formation of the Darjeeling Gorkha Hill Council (DGHC) in 1988, another trade union known as the Himalayan Plantation Workers Union (HPWU) emerged in 1989 for the plantation workers. "Recently in 1998, another union known as Darjeeling Terai and Doors Chia Kaman Mazdoor Union (DTDCKMU) had emerged under the political patronage of Communist Party of Revolutionary Marxist, a splinter group of the state Communist Party of India (Marxist). Presently, HPWU has 88% of the plantation workers as members, while DTDCKMU has 6%, and DDCKSS has 3% today" (ibid: 67).

Legal Interventions in the Post-Independence Period

During the British period the RCLI was instituted in 1931 to study the conditions of labour. It came up with various recommendations, which were never implemented as the planters always argued that the condition of the tea industry made it economically unviable. The Rege Committee of 1945 recommended the formulation of a plantation labour code applicable to all plantations in India. After Independence, and receiving criticism in the legislature about the conditions of the workers, the Central Government brought a bill after a prolonged tripartite discussion which was termed as the Plantation Labour Act (PLA) 1951. After the bill became an Act the Planters' Association strongly urged that the implementation of the Act be postponed as the industry was undergoing a severe financial crisis. It then came into effect only in April 1, 1954.

This Act was based mainly on the report of the RCLI, 1931 and the Labour Investigation Committee of 1946. To implement the PLA, which is a central government Act the West Bengal State Plantation Labour Rules was framed in 1956. These acts made it mandatory for the employers to provide

welfare and health facilities to the workers in the tea industry. Some of the key areas for health and welfare are as follows:

- i. Rights and duties of the labour inspectors to look into the problems of the tea gardens and supply information to the government
- ii. A Certifying Surgeon to examine and issue certificate of fitness to workers
- iii. Compulsory housing should be built every year for 8% of the resident workers
- iv. Adequate supply of wholesome drinking water to be made available at all times during working hours
- v. Latrine accommodation to be provided on the scale of one latrine to every fifty acres of area under cultivation
- vi. Provision of medical facilities within the gardens and construction of group hospitals: "a plantation employing 1000 or more workers shall run a group hospital wherever possible while plantations employing less than 1000 workers which are situated within reasonable distances from one another, may with the approval of the Chief Inspector provide joint hospitals, dispensaries and share their expenses including the expense of transport of patients."³⁶
- vii. Provision of crèches and conservancy for women and children
- viii. Display of proper notices regarding the period of work of the labourers and weekly holidays on Sundays, a day of rest
- ix. Provision of sickness and maternity benefits
- x. Supply of umbrellas, blankets and raincoats to the labourers as protection against the weather
- xi. Appointment of welfare officers in the gardens employing more than 300 workers.

A government organisation was established to enforce various provisions of this Act and Rules (Rai: 1995). It is as follows:

I. Labour Commissioners and Chief Inspector of Plantations (Calcutta)

³⁶Plantation Workers In West Bengal, Special Issue, Labour Gazetteer 1994 Department of Labour Government of West Bengal, p 59. For further details refer page numbers 59-64

- II. Additional Labour Commissioner in Superior Charge of Implementation of the Plantation Labour Act (Calcutta)
- III. Deputy Labour Commissioner North Bengal Zone (Siliguri)
 - a) Assistant Labour Commissioner posted at Head Office
 - b) Inspector Assistant Labour Commissioner at Darjeeling
 - c) Inspector Assistant Labour Commissioner Siliguri
 - d) Inspector Assistant Labour Commissioner Jalpaiguri
 - e) Inspector Assistant Labour Commissioner Malbazar
 - f) Inspector Assistant Labour Commissioner Alipurduar

The Inspector in each regional office is required to inspect eight to ten gardens in their region once every month to see that the Plantation Labour Act is properly implemented. They have the power to prosecute, conduct or defend before a court any complaint or other proceedings arising under the PLA. Their activity is directed at making the employers comply with the provisions of the PLA. Complaints can be registered individually or collectively, directly or indirectly through the respective trade unions. It is essential to note that there are indeed a large number of labour legislations applicable to plantations in India. (See appendix)

Plantations like tea, coffee, rubber and cardamom have been treated as a separate entity within the agricultural sector. Two reasons are given for this:

- a) These four agricultural crops have been granted exemption from land ceiling, thereby facilitating corporatisation of cultivation
- b) All the four crops have been declared as 'industry' by the Parliament. Special labour welfare measures are covered under the Plantation Labour Act, discussed earlier.

Though governments have provided a large range of benefits, it ultimately depends on the employers to dispense these facilities. Our earlier review on the socio-economic and health conditions in tea plantations in northeast India (includes Assam, Terai, Dooars and Darjeeling of West Bengal) was not in favour of any positive development for the workers in the tea industry. Studies specific to the implementation of the PLA in Darjeeling like

of Rai (1995), Bhowmik, Xaxa and Kalam (1996) show after calculations that in spite of the subsidies given for rationing etc, workers' expenditure is higher than their income. An important aspect that needs to be reiterated is the concept of wage determination. "The 15th Indian Labour Conference held in 1957 decided on the concept of 'need-based minimum wage', which took into account three units of consumption while determining the wage of the worker. But the employers' organisation argued that since employment is family-based 1.5 units of consumption should be considered" (Bhowmik, Xaxa and Kalam: 1996). As such the daily wages in plantations are low as compared to the other sectors.

Change in Ownership Patterns in Darjeeling

With India's Independence there was a marked change in the ownership pattern in the tea industry. For example in Darjeeling as Das Gupta maintains, "the growth of agency houses led to the growth of 'absentee owners' and they were mainly satisfied with remittances, which were once free from exchange control regulations of the Reserve Bank of India" (DasGupta 1999: 119-120). He further gives reason to the tea crisis of 1927-37 that created some serious problems, in the context of successive unremunerative prices and fixation of export quota. Neither the managing agents nor the British Commercial banks were interested in providing the working capital.

The 'absentee owners' began to feel less attracted to their tea gardens as they were also aware that most of the bushes planted in the 1870's were reaching an unproductive age and that bulk investments were required. The decline of the London auction market and the coming up of the Calcutta Auction Market in 1947, were some of the other reasons for the change in ownership. "The setting up of the Tea Board in 1950 implied the end of the unrestricted freedom or *laissez faire* of the earlier years" (ibid: 120).

In the 1930's and after independence the *Marwaris* moved rapidly in acquiring tea gardens both directly through the purchase of shares from the Calcutta market. The directory of tea plantations (1961), giving the names of proprietors and managing agents, shows that a little less than half were still British controlled. The *Marwari* gardens appear to constitute a third of the remaining gardens by number, and far more by acreage. The 1960's saw considerable British withdrawal, both at the plantation level and in managing

companies so that the *Marwari* participation has obviously improved (Timberg 1978).

Such a change in ownership in Darjeeling from 1949-1970 is highlighted in the following two tables that includes a Das Gupta's (1999) study of 53 gardens.

Table No: 4.2

Change in Ownership Pattern in Indian tea industry

Categories	Ownership in 1947		Ownership in 1970	
	Indian	Non-Indian	Indian	Non-Indian
Proprietary	31	8	32	--
Private	1	--	12	--
Public Limited	11	10	41	--
Sterling	--	40	--	16
Total	43	58	85	16

Source: Manas Das Gupta: 1999: 120

Table No: 4.3

**Direction of Change in Ownership (1947-70) of Darjeeling Tea Estates
(Sample)**

From/To	Indian Proprietary	Rupee Public Ltd.	Rupee Private Ltd.	Total
British Proprietary	6	2	--	8
Indian Proprietary	10	1	3	14
Rupee Public Ltd.	1	--	--	1
Rupee Private Ltd.	1	--	4	5
Sterling Companies	1	22	2	25/53

Source: *Ibid:* 121

Plantation hierarchy was distinctly characterised by the white *sahibs* or the planters at the top, followed by the managerial and the supervisory staff.

The latter belonged to the same ethnic background as the large number of workers at the base. During the post independent period, the upper layer of this hierarchy was replaced mostly by the *Marwaris* and Bengalis. The managerial staff, apart from the assistant managerial level is mainly composed of non-locals.³⁷ A minuscule percentage of Nepalis belong to this layer while the workers are mostly Nepalis. The labouring class of plantation workers in Darjeeling is predominantly comprised of the middle caste Kiratis, Mangars etc and the lower service castes like the Kamis, Damais and the Sarkis. Migration forced them into a situation where their survival became tough. The hierarchy witnessed during the colonial period still percolates into the lives of the workers. With independence, came freedom, but the plantation workers were and still are entrapped in a world where the management as *maai-baap* are still revered and feared. Albeit a lot has changed over a period of almost 150 years, but the workers continue to live in a hand to mouth situation. The case study of Phuguri tea estate will take the reader into a journey of field realities.

³⁷ By non-locals here we mean the non- Nepalis in a generic manner.

CHAPTER V

Work and Life in Phuguri Tea Estate

WORK AND LIFE IN PHUGURI TEA ESTATE

*Ek tal company ko sindoor lage pache, ra doko ra namlo diya
pachi, kaman ko kam chornu ta saro parcha*

(The moment one is smeared with the Company's *sindoor* (vermilion), and laden with *doko* and *namlo*, as the bride price, one is tied to the job forever)

Chelimaya Khati, Phuguri T.E.¹

Decline of the Tea Industry in Darjeeling: an economic crisis

Darjeeling tea is known for its 'orthodox variety' and flavour in the international market. The tea industry is currently going through severe recession with drastic decline in production and prices.² According to an official in Tea Association of India, all India production of tea is likely to hover around 825 million kg in 2002, decline from 854 million kg (The Statesman, 11th January 2002). He further stated that India's share of export has declined from 34% in 1980 to 16% at present. Due to the sharp drop in tea prices and non-sale of the crop, cash flow has been severely affected.

Apart from the PLA (1951) and the WBSPLR (1954), the Darjeeling tea plantation workers since 1998 are under the purview of the Panchayati Raj System. Sharma (2000) in his study concludes that plantations workers perceive trade unions as more powerful than the panchayat members. He maintains that as both the organisations i.e. the trade unions and panchayats have legal sanctions, it has created contradictions and confusion owing to different political backgrounds (Sharma 2000:144). Problems also arise with regard to the implementation of their respective projects.

"The Darjeeling Planters' Association (DPA) has demanded that the state government should bear the expenses for the labour welfare activities in the tea gardens" (The Telegraph 30th October, 2002). Failing to meet the international standards and stiff competition from countries like Kenya, Sri Lanka and recently Nepal has thrown the tea industry into turmoil. "The number of locked out and abandoned tea gardens in Darjeeling district including Terai, are around six and about 10,000 workers have been thrown out of employment" (Statesman News Service, 3rd January 2002). Many gardens are unable to pay wages and ration on time and workers are

¹ Interview with Chelimaya Khati, 12th November, 2000, Phuguri.T.E.

² See table in appendix no. 2.

compelled to take up any contractual employment outside the tea estate, for example in road construction. Darjeeling tea industry now presents a dismal picture and the worst sufferers are thousands of workers and dependents whose livelihood is at stake. With this background of the tea economy, the case study of Phuguri Tea Estate will adequately reflect field realities.

This chapter seeks to delineate the interrelationships between work and social hierarchies, work processes and living conditions of the workers in Phuguri tea estate. As health is conceptualised as an outcome of the interplay of various factors, it becomes imperative to understand how all these factors impinge on the workers' health. This is reflected from their income, nature of work, and their living conditions. Such factors throw them into the vicious cycle of indebtedness. This chapter is broadly divided into two sections. The first section after a background of Phuguri Tea Estate includes the social and work hierarchy and the working conditions of the plantation labour. The second section deals largely with the living conditions that include housing, sanitation, food consumption, etc and the various coping mechanisms of the workers.

Background of Phuguri Tea Estate

Phuguri is located on the way to Mirik, a beautiful place that attracts hoards of tourists. It is one of the more economical tourists' spots in North Bengal. A number of private and state-run buses ply from Siliguri to Mirik. The bus that one takes gets crowded with both tourists as well as local passengers going to the various tea gardens which one comes across during the course of the journey. As the bus slowly climbs uphill from Siliguri to Mirik the topography begins to change. One passes through a number of tea gardens, New Chumta Tea Estate in Sukna, Makaibari Tea Estate in Garidhura etc after which we reach Dudhia. Dudhia has a beautiful landscape and the journey becomes especially enjoyable when the bus takes a long loop-like bend across the River Balasan. Here the people are mostly agriculturists. Small motels have sprouted and become a thriving business. The bus comes to a halt at Dudhia for a tea break. Across the road one sees few local men engrossed in playing *housie* (tam-bola).

A weekly *haat* (market) is held here on Sundays, where apart from the locals, the neighbouring tea gardens workers also throng this market place. This market is locally called *bange bazaar*, literally, a 'crooked market'. Such a name has been given since whoever returns from this market walks in a

drunken state! As the bus resumes its journey uphill, we cross more tea estates like Ghayabari, Palangbari, Singbulli and Manju. A panoramic view of the tea gardens and small dwellings with the Himalayas in the background is a breathtaking sight.

Occasionally one comes across children carrying *ghas* (grass), *daura* (firewood) and even *pani* (water) on their *dokos* (a basket made of cane carried at the back with a *namlo* (strap) holding onto their head). This of course is a common sight for any one travelling to the hills. On approaching Phuguri Tea Estate, one sees the High School building beside the main road. On the other side there are two single storied buildings, one a private primary school and the other a residential house, whose owner has a chemist shop and a provisional store in the same building. There is a sub-centre located next to this building. The people alight here as most of the labour quarters are situated around this area. A *kuccha* road connects the main road with Lamatar the neighbouring village, passing through the labour quarters, the factory building and *kothis* (bungalows) of the managers. This road becomes precariously slippery during the rainy season and the conspicuous absence of any street lamps makes it worse during the night.

From the manager's bungalow one gets a bird's-eye view of the entire tea estate of Phuguri. This bungalow overlooks the tea garden, the factory, the clusters of houses and labour quarters, as well as the neighbouring tea estates of Soureni, Tingling, and Manju. The famous *Ambutia paiero* (landslide) of Kurseong is also distinctly visible. For a city dweller this scenic view is extremely soothing to behold. As one approaches the tea garden, or for that matter even makes an attempt at sliding downhill between the tea bushes, realisation dawns that although the tea bushes may look soft and lush green from a distance, they are actually hard and sturdy. This disjuncture between the idyllic notion and the lived experience is analogous to the arduous lives of the workers, which is hidden beneath the veneer of meagre returns provided by the management.

Phuguri Tea Estate is one of the numerous tea estates in Darjeeling whose ownership has changed from a British to an Indian Company. Owners of Phuguri Tea Estate, James Finlay and Company sold it to Daga and Company in 1955. Tea estates became the principal areas of investment by *Marwari* merchants in Bengal and Assam. Likewise, Phuguri Tea Estate too came into the hands of such merchants. A Nepali, *Sardar* Dakman Rai initially started this garden circa 1870. The East India Company had given

three Grants from 1840-1850: a) The Rungpo Grant to Bahadur Rai b) the Mirik Grant to D. Lloyd and c) the Phuguri Grant to Dakman Rai. Like other *sardars*, *Sardar* Dakman Rai was employed by the Company to look after the labour supply. Being an enterprising and hard-working *Sardar*, Dakman Rai, by 1870s started his own tea garden at Phuguri and in 1878 he acquired the neighbouring area Soureni, where he too established a tea garden. After his demise his elder son, Bhaujit Rai took over and looked after till 1904. He then became indebted to the *Marwari* merchants and had to dispose his property of Soureni to the merchants Ram Lal and Jaloo Lal Tiwari.³ It is said that Phuguri Tea Estate too went out of the hands of Bhaujit Rai.⁴ Later the British acquired it from these merchants. Till 1954, Phuguri Tea Estate was under James Finlay and Co. Daga and Co. bought it in 1955 and in 1999 sold to Bokardia Steel Company. It is the latter's first investment in a tea garden.

When the garden was established, the *Sardars* basically belonged to the same caste or tribe as that of the labourers and thus set up the labour quarters in a localized manner. In the case of Phuguri, the labouring population was mostly the Tamangs and the Kamis. It is said that almost 90% of the population during the setting up of Phuguri Tea Estate around circa 1870 were Kamis. They mostly came to work as fitters; blacksmiths and a large section were the labourers.

Social Hierarchy

Plantations were always identified with the prevailing social hierarchy composed of the 'white' managers on top, followed by the supervisors and labourers of the same caste or tribe. Likewise in Phuguri Tea Estate the social background among the various levels of the work hierarchy is as follows:

- a) At the managerial level, (the manager and the assistant manager), both hail from North India. The manager originally is from Rajasthan but is settled in Delhi and the Assistant manager is also from Delhi. From an interview with an executive member of a governing body in Darjeeling, it was found that representation of Nepalis in the managerial posts is insignificant.

³ Timberg's (1978) study shows the entry of the *Marwari* merchants in the tea industry of Assam and Bengal. Their role as moneylenders and storeowners had played havoc in the lives of the working class.

⁴ Interview with Til Bikram Nerubang (Bairagi Kaila), op. cit.

- b) The office and the supervisory staff along with the bulk of workers are composed of the local Nepali population.

The social composition of the work force in Darjeeling hills has already been dealt in chapter II. It is through our case study of Phuguri that we are trying to draw associations with the past. From our earlier table on the social composition of the plantation workforce we see that in 1881, the Jimdars i.e. the Rais were highest with 32.5%, while the Limbus, Mangars and Gurungs comprised 36.3% and the service caste groups comprised of 13.1 % respectively. In the case of Phuguri Tea Estate, the Tamangs and the Kamis are the highest which is evident from our historical section. A composite table as shown below provides a comparison of different ethnic groups in different periods in Darjeeling hills.

Table No: 5.1

Ethnic Composition of the Labour Force in Darjeeling

<i>Ethnic Group</i>	<i>In Darjeeling only</i>		<i>Sharma's study#</i>	<i>In Phuguri Tea Estate only</i>
	<i>1901</i>	<i>1941</i>	<i>1999</i>	<i>2000</i>
Kiratis (Rais, Subbas, Limbus)	32.50	32.47	58.9	6.93
Tamangs	18.68	21.61	20.0	26.84
Gurungs and Mangars	5.84	6.67	8.0	12.12
Newars	3.86	5.28	2.0	12.99
Kamis, Damais, Sarkis	10.96	11.15	4.0	19.48
Upper Caste Brahmins	4.33	3.88	9.5	0.43
Other Nepali Groups	10.93	9.58	5.0*	20.73**
Lepchas	6.67	5.38	1.0	-----
Bhutias	6.23	3.28	-----	-----

Source: Das Gupta, Manas 1999: 27, Sharma 2000: 68 and Field Work, Phuguri Tea Estate, 2000

Note: # Sharma's (2000) study on 49 tea gardens of Darjeeling with a workforce of 52,913 tea plantation workers, Refer pg 68, Sharma (2000)

* includes Chhetri, Thakuri, Sunuwar, Bhujel and Thami caste groups.

** includes Chettri, Puri, Bharati, and Thapa, Khawas / Bhujel caste groups.

Sharma⁵ says that there is a change from unequal caste and economic relations to a more homogenous structure in the region. According to him majority of the tea garden workers belonged to the middle castes. The socio-economic position of these middle castes forced them to migrate to India. This is clearly elucidated in our previous chapter on the social history of the labour force. He further says that though they had different socio-cultural and linguistic background, they had to settle on specified areas example within the tea gardens. Thus the settlement pattern and inter caste and inter-cluster relationship brought about homogeneity as they worked in the same class of wage-earners. In the following two tables the number of workers in Phuguri Tea Estate within different caste categories of general, scheduled caste and scheduled tribe along with the percentage across different ethnic groups are given.

Table No: 5.2

Title: Social Composition of the Workers in Phuguri Tea Estate

<i>Ethnic Group</i>	<i>Daily rated male workers n=76</i>	<i>Daily rated female workers n=112</i>	<i>Sub-staff male and female workers n=32</i>	<i>Staff (male and female) n=11</i>	<i>Total</i>
Kiratis (Rais, Subbas, Limbus)	4 (5.26%)	8 (7.14%)	4 (12.5%)	---	16 (6.93%)
Tamangs	14 (18.42%)	38 (33.93%)	8 (25.0%)	2 (18.18%)	62 (26.84%)
Gurungs and Mangars	11 (14.47%)	14 (12.5%)	2 (6.25%)	1 (9.09%)	28 (12.12%)
Khawas (Bhujel)	11 (14.47%)	--	4 (12.5%)	3 (27.27%)	18 (7.79%)
Newars	12 (15.79%)	10 (8.93%)	6 (18.75%)	2 (18.18%)	30 (12.99%)
Kamis, Damais, Darji, Sarkis, Dhobi	14 (18.42%)	25 (22.32%)	3 (9.38%)	3 (27.27%)	45 (19.48%)
Upper Caste Brahmins (Bahun)	--	1 (0.89%)	---	----	1 (0.43%)
Other Upper Caste Chettri, Puri, Bharati, Thapa)	10 (13.16%)	16 (14.29%)	4 (12.5%)	---	30 (12.99%)
Sherpas	----	---	1 (3.13%)	---	1 (0.43%)

Source: Field Work, Phuguri Tea Estate, 2000

⁵Sharma K.R.: Changing Plantation Life, a study in Darjeeling hills, North Bengal University. n.p.

Table No: 5.3**Percentage of workers in different social categories**

Work Category	General	Scheduled Caste	Scheduled Tribe
Daily Rated male and female workers (<i>marad and aurat</i>) n=188	77.66	20.21	0.53
Sub-Staff (male and female) n=32	90.63	9.38	-
Staff (male and female) n=11	63.64	36.36	-
Total n=231	80.09	19.48	0.43

Source: Field Work, Phuguri Tea Estate, 2000

From the above table we see that both Tamangs and Kamis together constitute 48.32% in Phuguri Tea Estate and a negligible number of Kiratis unlike the overall data of Darjeeling and tea plantation workers. Apart from one worker there is a complete absence of Brahmin caste although there are a considerable number of other Nepali upper castes. Gurungs, Mangars and the Newars are almost equal in number comprising around 12% of the workers. There is thus a preponderance of the same ethnic group of workers in Phuguri Tea Estate as it was in the initial years of setting up of tea industry. An important reflection of this social hierarchy is on the work hierarchy in plantation structure.

Work Hierarchy

The workers in Phuguri Tea Estate are broadly categorized as daily and monthly-rated workers. The term daily rated is used as the workers wages are calculated on a daily basis and are paid fortnightly while the monthly rated workers are salaried employees. These can be further divided into three occupational categories.

a. Administrative staff in the office, which includes

- a. Head clerk
- b. Provident Fund clerk
- c. Second clerk and other clerical staff

b. Other staff members include

- i. Factory *babu* (Factory)

- ii. Pharmacist (Medical)
- iii. *Munshi* (Garden)
- iv. Garden *Babu* (Garden)
- v. Senior Garden *Babu* (Garden)
- vi. electrician and the head fitter (Technical)
- vii. the store clerk (Store-room)

c. Sub-staff includes

- i. Crèche attendants
- ii. Overseers (*chaprasi, dafadar, kamdari*)
- iii. Carpenter
- iv. Roller *Baidar*, Factory *Sardar*, Factory Assistant *Sardar* and Factory Clerk (Factory)
- v. Midwife (Medical)
- vi. Fitter and electrician (Technical)
- vii. Store keeper (Store-room)
- viii. Clerical staff and a field-writer (Office)

d. The above are the Other Monthly Rated Employees (OMREs), which also include the chia walas or the tea makers.

e. Lastly, the main bulk of the workers are the male (*marad*) and female (*aurat*) daily rated workers. These include sprayers, pluckers, factory workers both male and female, water distributor, bungalow servant, cleaner, loader, dhobi, blacksmith and daily rated carpenter and chowkidar.

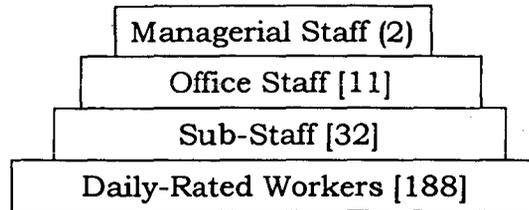
The number of workers in each of the above broader categories is as follows:

Table No: 5.4
Number of Workers in each Work Category

Work Category	Total
Daily-rated <i>marad</i> (also includes <i>dhobi</i> , blacksmith, D. R. <i>Chowkidar</i> and carpenter, Bungalow servant and tea makers)	76 (32.90%)
Daily-rated <i>aurat</i> (includes pluckers, water distributors, factory workers)	112 (48.48%)
Sub-staff (male)	28 (12.12%)
Sub-staff (female)	4 (1.73%)
Staff (male)	9 (3.90%)
Staff (female)	2 (0.87%)
Total number of workers	231 (100%)

Source: Phuguri T. E. Office and Fieldwork, Phuguri Tea Estate, 2000

This hierarchy can be visualized as illustrated below where the daily-rated unskilled workers are at the base comprising the bulk of the workforce.



As we move up the number reduces and is constituted by the semi-skilled and skilled workforce. This distinction is important for our understanding of health. Above this structure is the Executive Body or the management comprising of a manager and two assistant managers, one for the factory and the other for the field. During the course of fieldwork, the post of assistant manager (field) was vacant. The office staff attributed this delay to the Company's negligence. The management is the main link between the owners of the company and the workers. The following sections with tables will clearly illustrate the levels of work hierarchy as mentioned above vis-à-vis wage-structure and education.

Patterns of Employment

In Phuguri Tea Estate the workers are either a) self-employed or b) are employed on the basis of *badli* or 'hardship'. The system of *badli* or replacement is one way of ensuring a steady supply of labour in the tea gardens. In this system the members within the same workers' family are absorbed as workers or the job is transferred to some other relation. While 'hardship', means that the workers are given employment by the company on the ground when there is no earning member in a family. The following interview with Mena Tamang, who was the first woman *kamdari* (field supervisor) in Phuguri T. E. for two years before retiring, comments,

Here in Phuguri we get replacement after our retirement. But in gardens like Soureni and Palangbari (neighbouring tea gardens) it does not work that way. We are very lucky to get jobs in the same family after the worker retires. In this way you do not lose the job. If there are two people working in the same house and one retires then the job is given to some other family member. We are also given employment on the basis of hardship i.e. if there is no earning member in a house then the company provides employment keeping in mind that the income is nil from that particular house ⁶

⁶ Interview with Mena Tamang, 19th November, 2000, Phuguri Tea Estate

After her tenure there has been no allotment of female *kamdaris* in Phuguri. Mobility and vacancy of the male workers gets jeopardized if women too get promoted as *kamdaris*. There is a conflict on this issue between the women representatives and their male counterparts. The management prefers to promote the male workers in order to appease them ahead of the female workers. A large percentage of the workforce is employed on *badli* and a considerable size on the basis of hardship. The following two tables provide a break up of a) number of workers working on the basis of *badli*, hardship and self-employment and b) from whom the *badli* specifically has been transferred.

Table No: 5.5
Employment in Phuguri Tea Estate

<i>Employed on</i>	<i>Percentage of workers</i>
<i>Badli</i> or replacement based	83.98
Hardship based	12.12
Self-employment	3.89

Source: Field Work, Phuguri Tea Estate , 2000

Note: (n=231)

Table No: 5.6

Number and percentage of Workers who have taken *badli* from

Father	46 (19.91%)
Mother	48 (20.78%)
Brother	8 (3.46%)
Sister	4 (1.73%)
Father-in-law	10 (4.33%)
Mother-in-law	24 (10.39%)
Husband	30 (12.99%)
Wife	0 (0%)
Brother-in-law	5 (2.16%)
Sister-in-law	4 (1.73%)
Maternal aunt	4 (1.73%)
Others	4 (1.73%)

Source: Field Work, Phuguri Tea Estate , 2000

Note: n= 231

83.98% of workers are employed on *badli* as compared to 3.98% with self-employed. Apart from a high percentage of workers employed through a direct transfer of work from parents to children. There are also transfers from parents-in-laws where daughter-in-laws are the scapegoats. It should be noted that 30 women have taken up employment from their husbands but there is not a single male worker employed against their wives. This is an important aspect in analysing gender relations in this context. For fear of losing some earnings, women are compelled to take up labour in replacement of their husbands. Our M. Phil study observed that more than 50% of the women workers were single earners with their husbands working on *thika-bigha* i.e. on a contractual basis. A common response among women workers was after retirement she would instead prefer the daughter-in-law to work. This would only push the daughter-in-law into the same conditions as her mother-in-law.

Wage Structure

As mentioned earlier the workers are called daily or the monthly rated workers. The daily rated workers are paid fortnightly on a daily basis while the latter are salaried employees. The table below shows the workers' monthly wages/salary and the overtime wages in respective occupations. The overtime wages have historically been present in the plantation wage structure, through which the workers earned an 'extra' income. In Phuguri the overtime wages per hour are calculated as:

$$[(\text{Daily Wages} * 2) / \text{Number of Hours}]$$

As we see in the table below the overtime wages are mainly applicable to the daily-rated workers, the supervisory, factory, garden and the technical staff along with the carpenter and the crèche attendant. These workers are directly linked to tea production during the peak season. The office staff, medical and factory do not get such facilities.

Table No: 5.7

Work Category (according to monthly income)

Department	Work Category	Monthly Wages approx. (in Rs.)	Overtime rate (O.T.) per hour approx. (in Rs.) ⁷	Male workers	Female workers	
Daily-Rated Employees	Plucker	680-720	0.50 per kilogram of leaves plucked	-	98	
	Water Distributor	676-700	No O.T.	-	4	
	Factory Worker (female)	720-760	9.33	-	7	
	Daily-rated (<i>marad</i>) ⁸	700-720	8.70 or <i>doubli</i> ⁹	58	-	
	<i>Chowkidar</i> (daily rated)	700-720	No O.T.	4	-	
	Blacksmith	800	No O.T.	1		
	Dhobi	825	No O.T.	1		
	Bungalow Servant	740-880	No O.T.	8	3	
	Other Monthly Rated Employees (OMRE)	Tea Maker	840-969.80	9.33	3	-
		Sub-staff Crèche (2)	Crèche Attendant	1020-1026	10.00-12.00 approx.	
Overseers (16)	<i>Chaprasi</i>	1300	14.00	1		
	<i>Dafadar</i>	1050-1150	12.91	7		
	<i>Chowkidar</i> (it includes one <i>chowkidar</i> who is of technical grade 'C')	1500-2400	13.37 and 20.00 (for C grade)	7 1		
	Carpenter (including 1 paid as Daily-rated worker)	970-1230	3.00 per box and 9.33 for daily rated (1)	3		

⁷ The method of calculating the overtime wages is $\frac{\text{daily wages} \times 2}{\text{Number of hours}}$

⁸ It includes blacksmith, dhobi, loader, and office boy, and the worker at the oil-engine, dispensary, water line and coal-furnace areas.

⁹ Depending upon the task (if it is double the work for example use two drums) the sprayers get paid *doubli* i.e. double their daily wages of Rs. 36.80 per day.

Factory (4)	Roller <i>Baidar</i>	1030	11.00	1	-
	Factory Assistant <i>Sardar</i>	1050	11.66	-	1
	Factory Clerk	2200	25.26	1	-
	Factory <i>Sardar</i>	2400	27.13	1	-
Dispensary (1)	Midwife	1700	No O.T.		1
Technician (3)	Fitter	1700	14.50	1	-
	Driver	1359- 1500	12.50 approx.	2	-
Store (1)	Store Keeper	1400	No O.T.	1	-
Office (3)	Clerk	2400	No O.T.	1	
	Clerk	2800	No O.T.	1	
	Field Writer	1256	10.50	1	
Staff Dispensary (1)	Pharmacist	3200	No O.T.	1	-
Technician (2)	Electrician	2822	27.00	1	-
	Head Fitter	3132	30.00	1	-
Store (1)	Store Clerk	3100	No O.T.	-	1
Factory (1)	Factory <i>Babu</i>	3150	No O.T.	1	-
Garden (3)	<i>Munshi</i>	2900	25.00-26.00	1	
	Garden <i>Babu</i>	3500	33.00	1	
	Senior Garden <i>Babu</i>	3700	No O.T.	1	
Office (3)	Provident Fund Clerk	3051	No O.T.		1
	Second Clerk	3300	No O.T.	1	
	Head Clerk	4000	No O.T.	1	
Total				113	118

Source: Phuguri T. E. Office and Fieldwork, Phuguri Tea Estate, 2000

The working hours in Phuguri Tea Estate is from 7 a.m. to 4 p.m. with a lunch break from 11.30 a.m. to 12.30 p.m. The daily-rated male and female factory workers get equal wages of Rs. 37.30 and overtime wages of Rs. 9.33 per hour. The number of hours of overtime for the factory workers extends to 4-5 hours during the peak season. The tea makers are paid a monthly salary of Rs. 969.80. Their overtime rates are fixed at Rs. 9.33 per hour. The field daily rated male workers get Rs. 34.80 and overtime rate of Rs. 8.70 per hour. The women workers involved in plucking the tea leaves are paid daily wages @ Rs. 34.80 for eight hours of work. In the last meeting with the management and the Himalayan Plantation Workers' Union (HPWU) unit in the month of July 2000 the rate of the extra leaf price was discussed according to the trade

union leaders. The women workers demanded Rs. 5 as overtime wages for each kilogram of leaves plucked, and then they reduced to Rs. 4 but was ultimately settled for only Rs. 3 per kg. It therefore increased by only 0.50 paisa/kg from the previous year. The argument of the workers was that they get Rs. 34.80 per day and they pluck 6 kgs daily, therefore should be paid at least Rs. 5 per kg¹⁰.

In fact in Phuguri Tea Estate there is also a system of *doubli* i.e. they do double the *thika* (work) and therefore get double *hazira* (wages). This is common among the sprayers. Roshan Pradhan, a daily rated worker who also sprays informed that this,

Hazira for spraying is divided as: (i) Between 7.30-11.30 a.m. Is the first *hazira* i.e. Rs 36.80; (ii) Between 11.30-2.30 p.m. Is the second *hazira*; (iii) Between 2.30-5.30 p.m. Is the third *hazira*; (iv) Between 5.30-7 p.m. Is the fourth *hazira*

The workers therefore can earn more wages by working overtime. The *kamdaris* or the supervisors are paid a monthly salary of Rs. 1200. They have no overtime per se but during the peak season they are paid double for each day. The *chaprasi* gets a monthly salary of Rs. 1300. He is paid Rs. 14 per hour for overtime which goes for two to three hours daily during the peak season. The *Munshi*, the Garden *Babu* get overtime facilities. In the factory the Roller Baidar, the Factory Assistant *Sardar*, Factory Clerk and the Factory *Sardar* get overtime. Within the staff category their salaries range from Rs. 3000-4000. This category does not get overtime wages apart from the garden *babu* the *munshi* and the technical staff. The head clerk is paid the highest with Rs. 4000.

The previous table along with the descriptions gives a hierarchical classification based on monthly wages/salaries of the workers in Phuguri Tea Estate. It is important to categorise this hierarchy as it is based according to the nature of work. This will help to understand its implications on health as income is a major determinant of the living conditions of the workers. It is also pertinent to locate whether education plays a role in situating the workers position within this hierarchy.

¹⁰ Interview with Ruma Pradhan, a member of HPWU, 30th November, 2000, Phuguri Tea Estate

Employment and Education

With the growth of Darjeeling hills by the British and the missionaries' initiated Scottish propaganda of setting of schools in the hills, education expanded slowly among the common masses. According to Chakraborty (1986), the Catholic missionaries faced a lot of difficulties initially in starting schools in Darjeeling hills. To quote: "the Nepalese immigrants were very poor, backward in education, failed to introduce anything in the shape of indigenous education. Hence the people, in general were lacking in the tradition, which would make education when offered to them readily acceptable. Poor socio economic conditions of the workers, tea plantation workers, agriculturists with hand to mouth existence, education was a luxury they could hardly afford. "Biting cold and inadequate clothing stood in the way of regular attendance to school by the children" (Chakraborty 1986: 4). "Older boys working in the field, younger ones attending to the cattle, plucking of tea leaves during the plucking season were responsible for the slender attendance in school" (Hunter: 1847: 194).

During 1871 there were two English medium schools and 25 primary schools with 613 students in entire Darjeeling. These primary schools were kept under the management of Rev. William Macfarlain (Scottish Mission). Out of these 25 schools, there was one each in Dhotraj, Changthung, Cinchona plantation and one in Sitang Busty (Pradhan 1982: 25). That year there was plan to open another 10 schools but the tea planters, came in the way as they felt that opening of schools and admission of children would deprive them of cheap labour of children known as *lokra/chokra*, who were paid Rs. 3 per month. Besides this, children had to tend and graze the cattle etc. Consequently attendance in the school used to be almost nil from March to November. (Ibid.) It was said that reluctant girls had to be given one *anna* per day to induce them to come to school. (Observed by Miss A.D. Wallace of the Nepali Girl's High School, in Chakraborty: op. cit 26)

In his study he has mentioned that the planters took interest in educating workers children. By initiating the education with parables of Christianity, the children could be attracted towards the religion slowly. "Attendance of Bible lesson classes and ordinary branches of education for one and half hours each day was compulsory" (ibid: 26). It is also said that

the Lepchas were easy converts compared to the Nepali Hindus. The latter had their own tradition and culture.

The planters realized that the conversion of the coolies to Christianity would make them more loyal to them. Again, "controlling the tea plantation labourers through the missionaries was definitely an easier job. Majority of the mission school had the support of the planters" (ibid: 23). In fact in Ranchi the Christian missionaries had their own Labour Bureau, Catholic Labour Bureau to help the Tea District Labour Association who also took a share as recruiting fees for their funds. (Bhadra 1992) Bhadra mentions in the study that the Roman Catholic Church in Mallaguri established in 1891 near Chandmoni Tea Estate in the Terai region of the Darjeeling district played a direct role in the supply of labourers there.

The hill stations are otherwise known for the quality of education in the schools especially run by the missionaries and attract students from far and wide. In Darjeeling it was the aftermath of the GNLF (Gorkha National Liberation Front) Movement, when outstation parents withdrew sending their children for education. This has hampered the position and respect that the schools had maintained for decades. Presently, schools especially primary level private schools are mushrooming in Darjeeling. This has become a small business nowadays rather than maintaining the standard of education. A simple example of mushrooming of schools can be taken from the field itself.

In Phuguri there are two government schools a) Phuguri Basic Primary School established in 1955 b) Phuguri High School established in 1970. Three private primary schools are a) Himalayan Nursery (Nursery- Class V) b) Rosebud Academy (Nursery- Class IV) c) Little Flower (Nursery- Class IV). These schools have recently emerged. There is also a library in Phuguri called the Phuguri Jan Pustakalaya established in 1986.

An important criterion for employment is education. We seek to explore any association between the educational level and workers' position in the work hierarchy. The following table shows the distribution of workers and their educational levels.

Table No: 5.8

Workers Occupation in Relation to their Educational Level

Work Category	Illiterate	Class I-V	Class VI-X	Till Class XII	Graduation	Non-formal Education
Daily Rated male workers (marad) n=76	7.89	32.89	55.26	2.63	1.32	---
Daily Rated female workers (aurat) n=112	40.18	33.61	19.64	2.68	-----	0.89
Sub-Staff (male) N=28	7.14	32.14	50.0	3.57	7.14	--
Sub-Staff (female) N=4	25.0	25.0	25.0	--	25.0	---
Staff (male) N=9	--	11.11	22.22	44.44	22.22	---
Staff (female) N=2	--	--	--	50.0	50.0	--

Source: Field Work, Phuguri Tea Estate, 2000

Note : Figures are in percentages

From the above table, the following inference is concluded:

- a) The dropout rate is high especially at the higher secondary level of education.
- b) The level of illiteracy is higher among women than men.
- c) The level of literacy is more among the staff-office, garden and store.

In Darjeeling, Nepali-medium schools follow the West Bengal Board (i.e. the state level education system), while the English medium schools follow either the former or the Delhi Board i.e. the I.C.S.E. /C.B.S.E. pattern. A large percentage of the tea estate workers studied in government schools as shown by the following table.

Table No: 5.9
Type of School attended by workers

<i>Studied at</i>	<i>Percentage of workers</i>
Government schools	72.29
Private schools	0.87
Other institutions	3.03
Private education	0.43
Did not attend school	23.38

Source: *Field Work, Phuguri Tea Estate , 2000*

Note: n= 231

There were few cases among the workers who discontinued their studies and were compelled to join work due to economic constraints and other factors. The system of *badli* i.e. replacement invariably ties the younger children to work. It is sometimes due to such compulsions at home that students end up quitting their studies.

For instance, Chandra Pradhan, 25, a bachelor had to discontinue his studies and join work when his mother fell ill after retirement and his sister-in-laws did not want to work. He had studied till Class XII (Higher Secondary level) at Mirik but due to this emergency had to discontinue his studies. For the last five years he has been working in the garden as a *marad*. Likewise Roshan Pradhan, 23, could not continue his studies after class X. His mother worked as a plucker. The poor health of his mother, a blind sister increased his responsibility towards his family added by after his father's sudden death. He has been working as a *marad* for 2½ years and is also undergoing treatment for tuberculosis.

Tara Puri, 25, after appearing her Higher Secondary exam eloped¹¹ and got married to a boy in Phuguri. She is now working as a plucker in replacement of her mother-in-law. She regrets she could not carry on with her studies. The same is true for Shiela Pradhan who discontinued her studies (class XII) and got married only to work as a plucker. She is the sole earner of

¹¹ In Nepali society, there are two types of marriage, a) *bhagaune bihya*, where the young couple can elope and get married. Usually done with the help of friends and others and later might gain acceptance in the family, b) *mangni bihya* i.e. an arranged marriage keeping the customs and norms in mind.

the house and has two children to look after. She lives with her in-laws who earlier worked in the tea garden. Her husband works on a contractual basis and has no steady income.

Education and work matrix depicted in the previous table (Table No. 5.8) shows that despite being educated the workers are placed in a position of daily worker earning wages of around Rs. 700 per month. This can be attributed to the lack of alternative employment in the tea garden, low wages and individual helplessness. Therefore an attempt has been made to see the interrelationship between work and social hierarchy with the process of work and living conditions. Health is dependent on various factors. There is a particular set of factors, for example, the women workers who are uneducated and unskilled are in the lowest rung and with their working and living conditions are more precariously placed. After discussing the levels of work reflected through the wage structure, patterns of employment, relationship between education and work and the social composition of the labour force, we seek to understand the nature and conditions of work, that get compounded further in certain specific work processes.

Occupational Hazards in Tea Plantations

The West Bengal State Plantation Labour Rules (WBSPLR 1956) has a section on a) Occupational Safety and Health (OSH) for factory workers and b) for workers engaged in garden. It states, "Occupational Hazards in the tea industry can be broadly classified into

- a) *Mechanical hazards*
- b) *Health hazards.*

Hazards which are responsible for causing injury or death in the tea estates factories are mainly the following:

1. Hand finger trapped in the nip between the belt and the conveyer and the Roller.
2. Finger/ hand injury by the worm of the Retorvane
3. Entanglement of hand with the C.T.C. Roller while cleaning jams by broomstick.
4. Safe-guarding of transmission machinery parts.
5. Accidents due to fall of persons from a height.
6. Electric hazards
7. Fire hazards"

Other health hazards are caused mainly due to

i) Tea dust and ii) noise vibration

i) Tea dust is generated especially in the refining stages viz sorting, sizing and discarding etc. Tea dust being organic in nature, in-halation of the respirable portion of the tea dust may cause disorders like chronic Rhinitis, nasal obstruction, Pharyngitis and asthma and other lung diseases. ii) Considerable level of noise is produced during shifting and screening processes and the machines for reciprocating, vibrating, shifting and circular screen sizing may even produce noise to the level above 90 dBA (ibid: 42-43)

c) *Occupational Safety and Health for workers engaged in garden*

Every employer shall supply free of cost to every worker for protection from rain and cold, the following materials every two years:

- i. an umbrella
- ii. a water-proof apron and
- iii. a woollen jersey with full sleeve or a blanket

Such material shall be of such type, size and quality as may be approved by the Chief Inspector of Plantations to guard against the health hazard of indiscriminate spraying of insecticides. There should be standards involved in the use of pesticides and the need for the implementation of the Insecticides Act, 1968. West Bengal State Plantation Labour Rules (WBSPLR 1956: 42].

The Shramshakti Report (1988) as discussed earlier gives a list of various occupation hazards specifically for women workers. Inhalation of dust, exhaustion due to heavy work-loads and working barefoot coupled with high environmental temperatures and humidity results in heat strokes and undue physical stress. The tea pluckers working with unsafe chemicals, unsafe work terrain results in problems like insect and snake bites, allergies. Occupational asthma, irritation of bronchi, pesticide hazards, accidents and falls due to steep slopes, pain in back due to carrying heavy loads etc are some of the occupational hazards. Apart from recommendations like regulation of hours of work, health and medical facilities etc. the report recommends warning and training about the use of chemicals etc to the workers.

Pesticides have some serious health hazards for the workers. The following table shows the consumption of pesticides in different crops in India. As compared to cotton, pesticide use is less in plantations; nevertheless the workers in Phuguri Tea Estate confirm that they do face health hazards.

Table No: 5.10
The Consumption of Pesticides and Cropped Area

Crop	Pesticide share (%)	Cropped Area (%)
Cotton	52-59	5
Rice	17-18	24
Vegetables and Fruit	13-14	3
Plantation Crops	7-8	3
Cereals/Oilseeds/Pulses	6-7	58
Sugarcane	2-3	2

Source: *Toxic Link: 2000: 19*

In the cotton fields of Warangal district of Andhra Pradesh, there were a number of suicides by farmers.¹² According to the Fact Finding team of Toxiclink, continuous spraying of pesticides in cotton crops was an important cause of death. Also, expensive infrastructure and a decline in cotton prices attributed to the large number of suicides by farmers. After spraying activity, vomiting sensation, itching, fever, uneasiness in stomach and thickening of tongue was exhibited. Problems of nausea, vomiting, eye irritation etc were some of the symptoms. Women too helped the sprayers in pouring the chemicals. Gynaecological disorders, miscarriages etc. were reported by women workers. The sprayers did not use masks, but instead use cloth to cover their faces. According to the Fact finding team, there were no birds around.

This is one example of a recent case in point where spraying has resulted in deaths of the workers. There are various studies on occupational health but the aim here is to show through a case study of a tea garden the

¹² The Killing Fields: Farmers deaths due to exposure to pesticides in Warangal District, Report of the Fact-finding team, Toxiclink, Delhi, January 2002

intensity of the effects of pesticides on health and various other occupational health hazards which have adverse implications on the overall health status of the workers.

The following sections explore the processes of work and its implications for health. These are not just descriptions but workers' perceptions with regard to work and health. Certain specific occupations in tea gardens have specific health hazard, like the occupations where the workers are in a direct relation to tea production. The male (factory workers, sprayers) and female, (pluckers and factory workers). The supervisory-staff follows within these descriptions. Workers like the blacksmith, *dhobi*, bungalow servant, fitter, driver, and the electrician are not taken in detail but are incorporated in the overall analysis. The office medical-staff is dealt within the section on the health services provided in Phuguri Tea Estate/. Perception of the office staff are taken to understand the distinction between the work categories.

Work Processes and its Implications on Health

In a tea plantation, work can be categorised as field and factory work. Field operations include planting, plucking, and pruning, hoeing, weeding, clearing, and spraying of pesticides. The most exhausting of all operations are plucking, pruning and spraying. Women workers who are physically weak or unwell do not prune but instead are given the work of hoeing (locally termed as *gorai*). According to Manoj Thapa, a daily-rated worker, there is no nursery¹³ in Phuguri Tea Estate so they get the saplings from outside on a contract basis. These saplings are cut at the node and kept in tubes for three years. As bushes later they survive for only 20-30 years.

Each tea bush has to undergo a 'Pruning Cycle' where the bushes with respect to their age are maintained by pruning and 'skipping' at a level where the leaves are best for optimum production. Pruning usually begins from November to March. In order to keep the bushes and soil free from attacks by insects and pests, insecticides and pesticides are used. The leaves after being plucked are then sent to the factory for further processing.

The factory is the central area for production. It is located between the *kothis* (bungalows) of both the manager and the assistant manager. Within

¹³ A nursery is where new saplings are grown.

the factory there are various stages viz. withering, rolling, drying, sorting, and finally packaging. Each process has its own mechanisms and there are supervisors to take charge of these operations and the work of the labourers. Inside the factory, although the whole process is mechanized, the workers are directly involved in doing these operations.

Another section of the workforce is the office staff. The office staff members maintain records of the accounts of the operations, quantity and quality of leaves plucked, disbursement of wages, various other benefits provided under the Plantation Labour Act and so on. The following section will specifically examine the nature and processes of work, wage structure of the different operations in Phuguri tea estate and its implications for the health of the workers who are directly linked to tea production i.e. from plucking to packaging operations.

Field Operations

Plucking

In Phuguri, it is the women workers, locally called *aurat*, do a task which from a distance looks very simple i.e. of plucking the stipulated *dui pathe suiro* i.e. the two leaves and a bud. The shoot of which is left behind for the new leaf to grow. The quality of the tea leaves is determined by the tenderness of the two leaves and a bud, which is simply nipped while plucking. This operation involves plucking 'gently' the two leaves and a bud. Women are considered as excellent pluckers as they show patience and dexterity of work.

Plucking is at its peak during the flush season i.e. March to September. In April the quality of the first 'flush' (i.e. the first growth of tea leaves) is excellent and with rainfall the quality improves. Prices are marked the highest for this quality. From the second flush in May, the quality of the tea remains somewhat constant throughout the following months. The workers are asked to pluck the leaves around the 7th and 8th of December. These leaves are small in size and are considered to be superior in quality. The workers are given *thika* i.e. daily tasks to complete in the allotted area of work (locally called *melo*) in different sections, called *decks*. The Garden *Babu* and the overseers decide the *thika* and *melo*. Depending on the capacity to pluck,

women who pluck the highest are in *Deck No. 1*¹⁴ and are given the sections where the leaves are abundant. Older and sick women are given lighter areas for plucking.

The women are provided with *dokos* (basket), which they place on their back tied with a band called *namlo* on their head. The capacity of a *doko* according to Kiran Lama is 20-25 kilograms. Very few women use gloves while plucking, as they say it is inconvenient to pluck fast. I noticed that some of them even use a small stick to literally pull out the leaves. This is a type of hard leaves a little larger in size, locally called *bajhi*. They said that plucking of such hard leaves is important as it obstructs further growth of new leaves. According to them, the *kamdaris* or supervisors strictly instruct them to pluck this 'hard leaf' which otherwise ruins the quality of the tea leaves. Plucking especially on steep slopes, at an elevation of 2500 feet to 3000 feet is extremely difficult. It is often said that section no. 1 in Phuguri is so steep that 'while climbing uphill one can even hurt one's nose'! Like Sunita Lohar, 57, had fallen down while working 19 years back. She then she stopped working for 5 years but had to join again as there was no one to work as *badli*. Her legs swell up. She gets a pain below her waist. She laments that she does not have a son to make the daughter-in-law work.

During the monsoons, incidentally when the flush is the highest, the working conditions are the worst. The workers are given umbrellas once in two years. Along with the umbrella plucking becomes even more challenging. Further, workers are made to wear gumboots during the monsoon. An umbrella and tarpaulin is given once in two years and Rs. 48 is given annually to buy slippers. The workers use this money to buy gumboots which actually costs Rs. 95 for a pair and lasts for only six months. The sole of these boots gets worn out fast and the workers slip and even fall during the monsoons. As water seeps into their boots with no air circulation, blisters and rashes on their feet (*khuta pachincha*) becomes a painful and common sight. During the rainy season is given an umbrella (meant to last for three years). Since it is uncomfortable for her to pluck workers prefer using polythene sheets to cover themselves.

¹⁴ This deck has an area of 3000 tangs, is the largest in Phuguri Tea Estate 1 *tang* is 12 square feet i.e. roughly covers nine tea bushes and 300 tangs is equivalent to one acre. In the Doars and Terai areas of Bengal it is called either *nal* or *dang*. The equivalent is the same.

These are some of the common problems the workers face in the field. Adding to their woes, chemicals spraying make their conditions even more deteriorating. It is important to wear socks and then gumboots. To quote one worker, "*abo chata bokera, gloves lagaera, patti kasseri tipnu?* (How is it possible to pluck, wearing gloves and holding an umbrella!)? While it is raining heavily in the morning we do not feel like venturing out at all. We feel miserable about our own conditions."¹⁵ Anita Dhutraj says, "We get wet completely during the rainy season. This time we forcibly stayed at home on a rainy day. Earlier we would get holiday on a day of heavy rain."¹⁶ As the region experiences heavy rainfall, rainy day was declared a holiday. But since the past three years the workers instead sacrifice 1-2 days from their own annual leave of 14 days. Also during the month of March-April there is more dust on tea leaves, which directly hits the workers on their faces. *Ruga-margi* (cold and fever) and headaches are very common.

All of them tie a tarpaulin around their waists with a rope. But during the rains they get completely drenched while plucking. The quantity of leaves to be plucked is decided by the Garden *Babu*, based on the density of leaves on the bush. During fieldwork it was six kilograms. Any extra amount plucked, the workers receive an incentive wage of 0.50 *paisa* for every kilogram of leaves plucked. Another set of incentive wages is the overtime traditionally called *bakshish* i.e. on plucking beyond the stipulated time i.e. 3.30 p.m. a worker gets paid Rs. 3 per kilogram of leaves plucked. The management argue that workers earn more wages through overtime along with their daily wages. But this harsh reality solely depends on the workers' capacity to pluck. Some women pluck 30 to 35 kilograms of leaves per day. They have to walk fast in order to pluck more. The number of kilograms of leaves plucked clearly determines their overall wages. The drive to pluck more often affects their health. Women's income is directly proportional to working hours. In Phuguri the wages are paid fortnightly. The women workers earn around Rs. 680-700 monthly excluding overtime hours. In fact their bonus, which is received around the month of October, depends upon the number of overtime hours invested.¹⁷ According to these workers the leaves in Darjeeling are of the orthodox Chinese variety while in Doars and Terai the leaves are of the Assam variety and are bigger in size. So Assam variety leaves weigh more.

¹⁵ Interview with Chelimaya Khati, on 7th October, 2000, Phuguri Tea Estate

¹⁶ Interview with Anita Dhutraj on 10th October, 2000 Phuguri Tea Estate

¹⁷ This will be discussed in the section on facilities for the workers.

The following two tables show the number and percentage of workers in specific age group and the quantity of leaves plucked by workers during overtime.

Table No: 5.11

Distribution of Workers in Different Age Categories

Age (in years)	Total number of pluckers
18-25	10
26-33	30
34-41	32
42-49	19
50-57	8

Source: Fieldwork

Note: n=99

Table No: 5.12

Quantity of tea leaves plucked during overtime by women

Age (in years)	Quantity beyond thika						
	0-5 kg	6-10 kg	11-15 kg	16-20 kg	21-25 kg	21-25 kg	31-35 kg
18-25	-	1	5	1	2	-	-
26-33	-	5	9	4	7	2	1
34-41	-	6	11	11	3	-	1
42-49	-	2	6	2	2	4	2
50-57	-	3	4	-	1	-	-

Source: Fieldwork

Note:

1. Such a class interval has been taken as the range of the workers age is from 18-57 years
2. n= 99, of which only 4 don't work overtime.

We see that the pluckers are mostly concentrated in the age group of 26-41 years, although the capacity to pluck more is higher between 42-49 years age group. A responsibility for a woman increases with marriage, with growing children and the burden of managing the household expenses. To quote Geeta Subba, "I am compelled to earn extra money for the house as my husband is not earning."¹⁸ Her husband earlier worked as a *Dafadar*. She has

¹⁸ Interview with Geeta Subba on 15th October, 2000, Phuguri Tea Estate

taken *badli* from him since five years. She says her calf muscles ache while doing overtime. She plucks 27 kilograms during overtime. She has two sons studying in school. In fact women cut on their own consumption/expenses of better food, clothes, and above all health. Irrespective of their health, they pluck as swiftly as possible carrying the weight of tea leaves on their backs. Earlier it was worse when the women had to carry their babies on their backs with a *doko* in front.

According to the women the months of March and April are time for school admissions for their children, so they have to earn more in order to pay their fees, purchase books, uniforms and so on. There is a constant drive to pluck maximum. The *kamdaris* instigate competition among the women by passing comments like, “your friend is plucking more than you”, “didn’t you eat boiled squash (a vegetable) today to kill your hunger so that you can move fast” and so on. At times the comments are curt and women feel very vulnerable in front of these *kamdaris*. Also due to ill health some women cannot pluck more. Shobhna Sinchewry says, “I get headaches therefore I cannot carry heavy load. In a hurry I usually go empty stomach to work.”¹⁹ Likewise Premika Thapa, 28, says, “I cannot carry heavy load on my head. So I cannot carry a *doko* on my head therefore I use a bag instead.”²⁰ And Monica Pradhan, 45, says, “I have pressure problems, my leg pains; my head spins while bending down, as the sun is very strong. I cannot walk much.”²¹ Such problems affect the capacity to pluck more and thus affect their earnings.

Working conditions are tough for the women pluckers. Asha Zimba says, “while working we do not realize how much we walk with the heavy load of tea leaves on our backs. Because of continuous plucking of tea leaves finger tips get cracked miserably.”²² Sometimes she bandages her fingers with cloth. She describes the working conditions with great pain. They are provided with gloves (meant to last for two years) but it only hinders their plucking. The workers rarely use gloves while plucking. Due to continuous plucking, pain in the hands, joints and backaches are common complaints for the women workers.

She further says, “Weather here in the hills is extremely unpredictable. There are days, when there is strong sunlight and days when it rains heavily. So when it rains heavily the tarpaulin that is supposedly waterproof gets soaked in the rain. Suddenly the sun comes up. Thus *chiso* (cold due to

¹⁹ Monica Pradhan, 11th Oct.

²⁰ Interview with Premika Thapa, on 30th November, 2000, Phuguri Tea Estate

²¹ Shobhna Sinchewry., 26 Oct.

²² Interview with Asha Zimba on 15th October, 2000, Phuguri Tea Estate

moisture) enters one's body from the wet tarpaulin and simultaneously one is sweating as the sun is strong. One is sweating from inside and is also wrapped with the wet tarpaulin. We are constantly getting drenched as well as sweating. With such weather fluctuations, we suffer from stomach-ache. I think it is what you call 'gastric pain'.²³

During the monsoon as the soil is muddy, there is a tendency to slip and fall while moving around the tea bushes. There are no pitched paths around the tea garden. There is a constant fear of snakes for the workers in the field. According to some, they are found encircled inside the tea bush while plucking, which is a common sight. Cases of snake and even scorpion bites are common in the gardens. Anjana Tamang, 28, a female worker says, "During the rainy season I am very afraid of snakes. This season we killed about three snakes in a day. There are more snakes in the Upper Section Number 1200."²⁴ Kiran Lama says, "In the eagerness to pluck more face, eyes swells up. We don't realise because of the strong sun, weight of the *doko* and bending posture."²⁵ The *Munshi*, Rahim Ramudamu, also stated this "during season we see the workers faces swelled up (*phuleako*)."²⁶

After the first round of plucking in March it takes eight to nine days for the new shoot and leaf to grow. There is also the need to terminate the *banjhi* bud around the month of May. This is a slightly larger bud without a shoot and it obstructs the growth of fresh shoots resulting in a delay of 20 to 29 days for the new shoot to grow. The women not only have to pluck the maximum but even pluck delicately by just nipping the two leaves and a bud. They have to avoid plucking the hard and old leaves else they destroy the quality of the tea leaves. Once the leaves are plucked the women carry them in their *dokos* towards the factory for weighing. The leaves are weighed from each woman's *doko* outside the withering section. Here outside the factory the women workers wait for their turn to come and in the meanwhile some visit the dispensary, which is located next to the factory.

During the first flush i.e. March to April the plucked leaves have to be lightly placed in the basket to avoid damaging and increasing the temperature which otherwise deteriorates the quality (*patti pakcha*). The workers otherwise have to face the *kamdaris*.

Complaints of back-pain, headaches, and dizziness were especially high among the women workers due to strong sun and constant bending

²³ Ibid.

²⁴ Interview with Anjana Tamang on 25th September, 2000, Phuguri Tea Estate

²⁵ Interview with Kiran Lama, 20th Oct. 2000.

²⁶ Interview with Rahim Ramudamu on 16th October, 2000, Phuguri Tea Estate

while plucking. Most of the women complained of white discharge and suffered from terrible weakness. Lack of appetite was a common complaint among them during the peak season.

Pruning

Each tea bush depending on its age has to undergo a pruning cycle. The tea bush is pruned in a five-year cycle every year during *huido* i.e. the lean season (winter). There are various levels of pruning as explained by the Garden *Babu*. According to him, they have maintained a Pruning Chart since 1970 according to which the pruning is classified. First in heavy pruning the bush is almost cut at ground level. The task given is eight tangs. Once the shoots grow with a height of eight inches from the node then tipping is done. 'Tipping' levels the leaves. The nodes are cut at about 60 to 80 degree-angle facing outward so that the tea bush grows in the shape of a bowl. After this the bush grows to a height of 24 to 26 inches. For two years the bush is left un-pruned, then again is cut as 'deep skip' for a year and again un-pruned for two years. For 'medium skip' the height is 6 inches, light pruning height is 12 inches and the task is 12 to 14 tangs, while for 'hard skip' is 25 tang and light or '*hawa skip*' is 100 tangs. If they are unable to complete the *thika* then their *hazira* (daily wage) is deducted or at times they complete it the next day.

Both male and female workers are involved in pruning, (*kalam katnu*). It starts in mid December and continues for a month. The first few days are for hand setting after which *thika* or the daily task is allotted to them. In this last skip i.e. the *hawa skip* the workers have to literally run to complete the task. A safe distance is maintained between the workers to avoid hurtling each other with the sickle. One of the male workers, is responsible for sharpening their sickles in the field itself. Swelling of the wrist and hands is common especially during the first few days of work, ('setting' of one's hand). There is a tendency to cut one's finger or hand while using the sickle. One day on the field, a new worker (who had just joined), an 18 year old, cut her finger while pruning. The *kamdaris* (supervisors) then teased by saying, "Her hands will gradually get used to such minor cuts and bruises."

All the women workers interviewed found pruning tougher than plucking. It is a backbreaking job, which entails continuously bending and cutting the bushes at a certain height. It includes carefully cutting the nodes at the right points. The worker has to bend and cut using a sickle. The workers complained of chest pain and body ache. Pruning is considered as semi-skilled work. Apart from the men only stronger and efficient women are selected for pruning. Sick and older women are not included for pruning. One

of the worker said, "During winter, days are shorter and we do not realize that in our drive to finish off the day's work the work pressure goes unnoticed. Pruning of the tea bushes involves accurate measurement and the cutting of the nodes at the right angles. Doing such work for hours causes chest pain. Our hands and back ache."²⁷ Ruma Pradhan a female worker says, "Managers make us work extra. This year too we worked on Sundays. We mostly don't care about our health. Many suffer from palpitation, given the nature of work. The cold gets into our bodies and leads to asthma."²⁸ Indra Kal Tamang says, "we cannot even move our bodies once we come back home from work."²⁹ Anita Dhutraj says, "The *kamdaris* do not consider the age factor while pruning. We have to compete with the youngsters."³⁰

Immediately after heavy pruning the *marads* apply Blitox especially on the larger nodes so that the stems do not dry up. They then spray lime and caustic in order to kill the moss stuck to the stems. Blitox (copper oxychloride)³¹ and Caustic soda³² (sodium hydroxide) are both used as fungicides.³³

Another herbicide³⁴ used is 2, 4-D (sodium salt). This chemical also has some major health hazards.³⁵ Diuron 80% is also used. According to WHO, this is unlikely to present acute hazard in normal use (WHO) and Toxic Link maintains that it is under review by the Government of India (Toxiclink 2000:

²⁷ Fieldwork, Phuguri Tea Estate, 2000.

²⁸ Interview with Ruma Pradhan, op. cit.

²⁹ Interview with Indra Kal Tamang on 18th October, 2000, Phuguri Tea Estate

³⁰ Interview with Anita Dhutraj, op.cit.

³¹ Blitox (copper oxychloride) is slightly hazardous according to the Index classification of Active Pesticide Ingredients (WHO). Health effects of copper oxychloride are gastrointestinal and renal manifestations Toxiclink (2000).

³² Caustic soda causes "severe corrosive damage to the eyes, skin mucous membranes, and stomach. It acts just like a cleaning agent by dissolving the fats and proteins on the surface of cells and resulting in the continuous disintegration of attached tissues. Damage to the eye is probably the severest injury, caused most frequently by contact with the liquid or with dust particles. Injury can be immediate as little as 2 seconds. Complete blindness results in many cases. Skin effects range from redness and swelling to destruction of the entire outer skin layers, depending on the duration of contact and the strength of the solution. Breathing sodium hydroxide dust or mist leads in mild cases to irritation of the mucous membranes of the nose, causing sneezing, and in severe cases to damage of the upper respiratory tract and lungs" (Harte John et.al. 1991).

³³ Fungicide is a class of pesticides that prevents, destroys or mitigates fungi.

³⁴ Herbicide: chemicals used to kill or suppress the growth of all or certain types of plants

³⁵ 2, 4-D: Main use as herbicide.

Acute Hazards: 2, 4-D is irritating to the skin, eyes and mucous membranes, since it is easily absorbed dermally or by inhalation. Acute symptoms of 2, 4-D exposure include: chest and abdominal pain, vomiting, dizziness, and muscle twitching, tenderness or stiffness. Seemingly minor dermal exposures have been known to cause peripheral neuropathy (nerve damage)

Chronic: Further studies are required on the carcinogenicity of 2, 4-D. High doses reproductive toxicity has been observed in animals, consisting of decreased survival and skeletal malformations.

Dioxin is an unavoidable by-product in the manufacture of certain herbicides such as 2,4,5 T. It is one of the most toxic chemicals ever made by humans.

Symptoms of human exposure include chloracne (skin eruption resembling acne), headaches, dizziness, digestive disorders, and generalised aches and pains. Exposure to dioxin can cause cancers, birth defects and foetal death in domestic and wild animals (Toxics A to Z: 296-297).

12). The list of the insecticides used was gathered from the store-room staff where most of the chemicals are stored. In fact, Leelawati Bharati, the store-room keeper complained of skin infection. She had joined as *badli* to her father-in-law who worked as a Garden *Babu*. She has been working for the past eleven years. She has scars on her face and has breathing problems. She has consulted a skin-specialist in Siliguri. She attributes it to the constant exposure to the chemicals in the store room.

Spraying

Spraying of pesticides and other chemical damages the health of the workers. The daily rated male workers are involved in spraying of pesticides³⁶ and insecticides in and around the tea bushes. They are paid daily wages of Rs. 36.80 per day. They get *doubli* for working overtime i.e. they do double the work and get paid double irrespective of the number of hours of work. One of the worker said, "Unlike the factory workers who get paid for the day, here we are given *chutti* (leave) the next day." The workers prefer to be paid for their extra work instead of a day's leave. There are around nine to eleven daily rated workers for spraying. The day of a sprayer goes like this

The tractor leaves the factory at around 8.30 a.m. with a water tank, a 200 litre drum, 13 litres of monocil,³⁷ (a thick black chemical) towards the section where spraying is required. This chemical is then mixed with water by one of the workers. The sprayers use hand sprays for spraying. The 'backpack' is where the chemical is stored for spraying. The weight of the backpack is six kilograms. In the mouth of the backpack there is a strainer to strain the mixed chemical. Inside there is a pump, which has a washer, which absorbs the chemical. A handle outside the backpack acts as an accelerator that reacts with the washer and the chemical is sprayed. Each of this backpack has a capacity of 20 litres but the amount of the chemical added to it is sometimes 22 to 24 litres. Five workers are involved in spraying and five of them carry the *bhuldong* (a barrel) filled with the chemical. One backpack can spray 300 *tangs*. Five workers can spray about 1500 *tang*. The smell of the chemical is strong and gives a suffocating feeling. The worker who does the

³⁶ A general term for any chemical poison that kills or otherwise controls unwanted insects, rodents, weeds or other pests.

³⁷ Monocil is an insecticide used for spraying on the tea bushes. The chemical group of monocil is organophosphate. The specific hazards of monocil 40 can be divided into:

Acute: highly toxic, potent cholinesterase inhibitor. Poisonous if swallowed, inhaled or absorbed through the skin.

Chronic: fetotoxic (a substance that causes degenerative changes in organs, tissues, structures, or biochemical, physiological and anatomic systems that have begun to form in the foetus) decreases fertility, weak mutagen. (mutagenic: substance causing genes in an organism to mutate or change).

mixing pours the chemical directly into the drums with the help of a funnel. He is not wearing any gloves or even a mask. He is directly exposed to the chemical. The sprayers have no protective gears instead they just tie a tarpaulin around their waists just like the pluckers. There is a fear of slipping and falling along with the backpack while spraying. One worker does the fixing and repairing of nozzles and other parts of the backpack. Like others he too does not use any protective gears. During the monsoons they are provided with umbrellas but it is inconvenient to spray holding the umbrella on one hand.

Roshan Pradhan who sprays the chemicals said, "It is the *kamdari* who allots the area for spraying. We then take the medicines with the measurements ranging from 25-50 ml. and mix it with water in the drums. Most of the time our hands get soiled with the chemical especially while pouring into the spraying machines. We know that these medicines are harmful and can kill us for generations."³⁸ He has been diagnosed as suffering from tuberculosis.

Manoj Thapa says, "From the first to second week of February till May we spray insecticide/pesticide and from the rainy season till the 1st week of October we spray weedicide."³⁹ Deo Kumar Khawas another worker says, "Between the months of February to September we use Gramoxin⁴⁰ chemical for spraying. The gas that emits has a strong smell. We feel breathless. I have been spraying since the past eight years. What to do, we have to work to fill our stomachs. During season (April to September) fever, internal joint pains are very common. It is worse for us as we get completely drenched while

³⁸ Interview with Roshan Pradhan on 28th September, 2000, Phuguri Tea Estate

³⁹ Interview with Manoj Thapa on 20th October, 2000, Phuguri Tea Estate

⁴⁰ Hazards of Gramoxin or Paraquat 2 % mainly use as herbicide are:

1. "Acute: very high toxicity. Oral ingestion is most serious, but skin penetration and respiration or absorption are also hazardous. Absorption across intact skin is slow but abraded or broken skin allows efficient absorption. Initially causes severe irritation to the mucous membranes of the mouth and throat, difficulty in swallowing, vomiting, abdominal discomfort and diarrhoea. Paraquat is a powerful skin irritant. Delayed pulmonary and renal fibrosis (scarring) are irreversible and may be fatal after as little as one teaspoon is ingested.

2. Chronic: Long-term skin contact may cause blisters and ulcers, increasing paraquat absorption enough to cause systemic and even fatal poisoning. Long-term inhalation of spray droplets may cause nose bleed. Eye contamination can damage the cornea and cause long-lasting or permanent blindness" (Rengam Sarojini and Snyder Karen (Ed.) 1991: 176).

On the basis of studies the EPA has classified paraquat as a possible carcinogen. Some studies show that the herbicide is toxic to developing embryos, but only at doses that would also kill the mother. It does not appear to cause birth defects or other significant reproductive problems (Harte John et. al. 1991). Paraquat is an effective nonselective herbicide used in 130 countries around the world to control weeds in rice, soyabeans, coffee, bananas, citrus, apples, plums, rubber, potatoes, sunflower and pineapples (Ibid.: 375).

spraying. We know that the chemicals are bad. These medicines percolate in the soil and our children usually play out in the open.”⁴¹

Mohan Bharati a factory worker says, “My daughter has breathing problems. The doctor in Siliguri told us it is due to the spraying of chemicals in the garden.”⁴² Ruma Pradhan says, “Our chickens die when they eat the worms around the bushes.”⁴³

Two types of spraying machines are used, power and hand spray. The *Chaprasi* told me that earlier it was worse when power sprays were used. It not only vibrated a lot but was also held in a heavy iron cast. He said, “I know someone who slipped and fell along with the iron cast.” Even while I was moving around the field sometimes I could hear the vibrations of spraying machines at a distance from Soureni, a neighbouring tea estate. According to Bisnu Pradhan, power sprays were stopped in 1998 in Phuguri and Mechi division as petrol was mostly misused and became expensive. He says, “With hand sprays I feel dizzy, giddiness, feel like vomiting, as the smell of the medicine is strong.”⁴⁴ Before he joined a person had died of tuberculosis and was working as *bigha* (contract basis) in spraying.

Once the pruning is over the workers have to spray caustic⁴⁵, an insecticide at the foot of the bushes. This medicine is very harmful if it comes in contact with the skin. Reactions like burning sensation and blisters are common. Men rub tobacco leaves on their palms and then chew it. After work they wash their hands with the same tank water. They are given a soap, which all of them use in common, but on paper each worker is given soap.

On talking to these workers it is clear that they know about the side effects of these chemicals. These workers are supposed to be provided with gloves, goggles, mask, jacket and boots. Earlier they were provided with masks and goggles but these got spoilt as they were shared among many

⁴¹Interview with Deo Kumar Khawas on 20th October, 2000, Phuguri Tea Estate

⁴² Interview with Mohan Bharati, 17th Oct., 2000.

⁴³ Interview with Ruma Pradhan, Op. cit..

⁴⁴Interview with Bisnu Pradhan on 22nd October, 2000, Phuguri T.E,

⁴⁵ Caustic soda causes “severe corrosive damage to the eyes, skin mucous membranes, and stomach. It acts just like a cleaning agent by dissolving the fats and proteins on the surface of cells and resulting in the continuous disintegration of attached tissues. Damage to the eye is probably the severest injury, caused most frequently by contact with the liquid or with dust particles. Injury can be immediate as little as 2 seconds. Complete blindness results in many cases. Skin effects range from redness and swelling to destruction of the entire outer skin layers, depending on the duration of contact and the strength of the solution. Breathing sodium hydroxide dust or mist leads in mild cases to irritation of the mucous membranes of the nose, causing sneezing, and in severe cases to damage of the upper respiratory tract and lungs” (Harte John et.al. 1991).

workers. On paper they are supposed to be provided with an egg each day but instead are given Rs. 2 extra per day. This is meant to be their extra protein that they need for doing such an arduous work.

Three of these workers were currently suffering from tuberculosis. They were all undergoing treatment from Mirik Primary Health Centre located at Mirik. In Phuguri there are a number of Tuberculosis cases among the workers. The following are some of the cases of workers suffering and who are continuously working especially in the field of spraying. According to the compounder at the dispensary, there are 4-5 confirmed tuberculosis cases in Phuguri. In the following section are the case histories of some of the workers.

Cases of Tuberculosis among Sprayers

Sajan Thing (Tamang), 30, working for 11 years started as a *marad* and is now working as a loader. He gets paid fortnightly on a daily-rated basis. He is one of the workers involved in spraying despite his illness. Ten years back he used both the hand and power spraying machines. After two years of using the power sprays, he fell ill due to excessive vibration on the chest. He started bleeding while at work during winter. The dispensary then sent him to Siliguri for an X-Ray, detected tuberculosis and was under medication for six months. But he resumed spraying again, used both the power and the hand-spraying machines. His wife who works as a plucker is scared that the illness might relapse again. For 8 years he has been spraying continuously for six months each year. He has done his X-Ray five times after medication. He complains of chest pain but so far there has been no bleeding. Currently he is working as a loader and his job now includes driving the tractor to fetch the leaves from Mechi to Phuguri.

Santa Sarki, 21, is unmarried. His brother is an alcoholic. His mother worked for three years and fell ill, so he was compelled to take up the job. He had even worked as a domestic help and even in a circus. It's been 1½ year since he has been working in this garden. He had joined work as a *marad* and had also used power sprays for 4-5 months after which he fell ill. Accidentally someone hit him on his chest while playing football and this became an excuse to show himself to a doctor. He said, "The doctor told me that water had clogged in my chest."⁴⁶ He went for an X-Ray in Mirik and then he was

⁴⁶ Interview with Santa Sarki on 23rd October, 2000, Phuguri Tea Estate

sent to Kurseong⁴⁷ for treatment for six months. At present it has just been two months since he has stopped his medication. Again despite his illness he continues to spray the medicines. He no longer has chest pain while spraying but his hands and back ache while using the machines. He says he cannot afford to consult a private doctor.

Roshan Pradhan, 23, works as a marad for the last 2½ half years. Studied till high school and started work in May 1998 in the factory and soon after he was shifted to the field for 5-6 months. He then moved to work in the bungalow as a *mali* (gardener) for a year. Then from December 1999 he did pruning after which from April- May 2000 he did spraying. It was during the latter period he had dry cough and chest pain for a week. Afterwards it became severe. He then took leave and stayed home. On the advice of Tashi *daju*⁴⁸ he got an X-Ray and blood test done privately for which he was not reimbursed. Presently he is on medication of Rifampicin and B complex from the Block PHC since May 27th. He has to collect his medicines every 15 days from the BPHC. He said, "While spraying we do not know what is happening to our bodies. In other gardens they provide eggs, meat as proteins but here we are given Rs. 2 extra to buy this supplement everyday."⁴⁹

Salim Khawas, 36, was suspected to be suffering from tuberculosis. He has been working for the last 3 years. He first worked in spraying and then in the winter did pruning. During the peak season he worked in the factory. He never had breathing problems before joining the job. After the first year of work it became very difficult. He would cough and even have palpitations while spraying. His job required carrying 5-6 drums daily for 4-5 workers who were spraying. This was of course done in shifts. He then got a blood test done privately in Mirik. The Doctor said that there was a *ghaw* (sore) in his ribs. The doctor had given him very expensive medicines. He got only Rs. 300 reimbursed. It has been 6-7 months that he has stopped taking any medicines.

Despite constant requests from their friends to change the nature of work from spraying to hoeing etc these workers seem adamant to work.

⁴⁷ S.B. Ray Sanatoriun, or Kurseong Tuberculosis Hospital. Here the female ward was first established in 1936 and the male wards in 1950.

⁴⁸ *Daju* here is addressed to an elder brother. He is a local who works at the Mirik BPHC as a Community Health Social Officer and is consulted by many locals for diagnosis and prescription

⁴⁹ Interview with Roshan Pradhan on 23rd October, 2000, Phuguri Tea Estate

Nausea, breathlessness and dizziness are the main complaints that these workers have due to the direct contact with the chemicals sprayed. On carrying the heavy load of the hand sprays, chest, shoulder and back-pains are chronic. Nardeep Biswakarma, a daily rated worker says, "While climbing up and down my knees and joints pain a lot and while spraying uphill the chemical hits directly on our faces. Our eyes burn and we feel breathless. The chemicals especially Thaidon⁵⁰ and Ethane used for terminating the 'red spider' (*rato sindoore*) are extremely harmful and on consumption could even cause death."⁵¹ Ashok Khawas says, "While spraying our back aches a lot. We tend to slip and fall especially during the rainy season."⁵²

Manoj Thapa says, "No mask, no gumboot, no preventive medicines are given. Neither there is any medical check-up. In order to get extra (over-time) wages, we spray continuously for two hours."⁵³ The pluckers say that the smell of the medicines is very strong. Ruma Pradhan, a plucker says, "It is very harmful for all of us. We know that but we are helpless. Once insecticides like Thaidon and Ethane are sprayed we are not allowed to pluck in that area for at least a week. But even after that the smell is so strong that we feel nauseated when we pluck the leaves. The tea leaves smell of the medicines only. Earlier the tea leaves had a different fragrance. The quality of the tea leaves is deteriorating greatly."⁵⁴

The above category of workers needs special attention, as they are the most affected due to direct contact of such chemicals. Health of workers, especially in the Darjeeling hill plantations has received the least attention. It is only with the decline in the share of foreign buyers and especially in 1990's when countries like Germany refused to purchase Darjeeling tea due to increasing levels of toxic chemicals, have resulted in replacement with organic tea. Tea gardens like Seeyok and Selim Hill have converted mostly into

⁵⁰ Thaidon (Endosulphan) is mainly used as an insecticide. It's specific hazards can be divided into:

1. Acute: highly toxic if ingested; skin rash
2. Chronic: evidence of animal carcinogenicity [carcinogen: a substance that can produce cancer (malignant tumours) in experimental animals or is known to do so in humans.] exists, experimental teratogen (a substance that causes birth defects and teratogenicity is the ability to cause birth defects). Adverse chronic effects include liver and kidney damage. [Rengam Sarojini and Snyder Karen (Ed.), 1991: 109] Some of the health effects: Nervousness, headaches, dizziness, nausea, vomiting tremors and diarrhoea (Toxiclink: 2000).

⁵¹ Interview with Nardeep Biswakarma on 23rd October, 2000, Phuguri Tea Estate

⁵² Interview with Ashok Khawas on 23rd October, 2000, Phuguri Tea Estate

Interview with on 23rd October, 2000, Phuguri Tea Estate

⁵³ Interview with Manoj Thapa op.cit.

⁵⁴ Interview with Ruma Pradhan, op.cit.

organic farming.⁵⁵ In fact pests have been under control by using bio-organic farming techniques. This change or investment is made mainly due to direct foreign demand for good quality tea and that they insist on good conditions of work sanitation and hygienic living conditions for the worker.

All the aforementioned field operations i.e. plucking, pruning and spraying are administered by *kamdaris* or *dafadars* i.e. overseers. They have begun work as *marads* only. Each section is overseen by 3-4 of them.

Supervisory Staff (Chaprasi, Dafadar, Kamdari)

The pluckers are under constant supervision by these *kamdaris*. Few women complained that at times they resort to shouting telling them to use their hands faster while plucking. During the peak season when the work pressure is high, on reaching late to work they are rebuked by them. They instigate competition among the women workers and even pass offensive remarks. Nilima Tamang says, “*kamdaris* are very moody. If the Garden *Babu* shouts at them then they shout at us and sometimes they help us to finish the task.”⁵⁶ The *kamdaris* sometimes allows the workers to rest for around five minutes.

One of the workers, Shobhana Sinchewry said, “They tell us, ‘was there nothing to eat in the house that you cannot even walk fast? At least you could have boiled some squash and eaten that and come for work’. Early in the morning when someone abuses you like this we feel like crying. At times they don’t even consider our age or to whom they are addressing. Where will I go? I have to work here in order to survive with my children. I am sending them to school. But then the future is bleak in the tea gardens. Since I stay alone with my children in the house I am scared. I do not venture out in the night. I lock my door immediately once it is dark. Young boys create a lot of ruckus outside, as my house is near the main road. They smoke; drink and all keep bad company. I have no one to look up to. I’m all alone here.”⁵⁷

There are some women workers who felt that the *kamdaris* are considerate towards them. For instance, Sabita Ghalay, says, “*kamdaris* treat us (women) better. They give us less difficult jobs. They say that those who have to take care of children don’t have anyone to look after at home,

⁵⁵ Information gathered from the Labour Department, Jalpaiguri, West Bengal, 2002.

⁵⁶ Interview with Nilima Tamang on 26th October, 2000, Phuguri Tea Estate

⁵⁷ Interview with Shobhana Sinchewry, op.cit.

shouldn't do heavy work."⁵⁸ She is a widow; aged 27 years, has three children to take care of. Her husband had committed suicide three years back.

The *Chaprasi* is the senior-most among the overseers. He too supervises work in the field. In Phuguri there is just one *chaprasi*. He says, "I have been working in the garden for the past 33 years. As a child I used to carry load. I worked as a *marad* for 12 years and then as a *kamdari* for another 19 years and now it's just one year that I have been working as a *chaprasi*."⁵⁹

There has been a great deal of pressure from the women workers to provide them posts of *kamdaris* with regard to their experience of work. As discussed earlier there was a female worker who was appointed as a *kamdari* two years before her retirement. After her tenure there has been no allotment of female *kamdaris* in Phuguri. It could also mean that the mobility and vacancy for the male workers gets jeopardized if women too get promoted as *kamdaris*.

The Field Manager, the Garden *Babu*, the *Munshi* and the Manager; all inspect the garden regularly. Their job is mostly monitoring the area, allotting the work etc. All of them have been working for a very long period of time in this tea garden. While it is either the Garden *Babu* or one of the Supervisors' who note the weights of the plucked tea leaves in a register, the *chai walas* or tea makers immediately take the leaves into the factory for processing.

The tea-makers and monthly rated workers work inside the factory throughout the year. Their job consists of transporting the tea leaves to the withering section, rolling section etc. There is another category of workers called the tea makers. They are five in number in Phuguri. The main difference between the tea makers and the daily rated workers is that the former work in the factory all the year round i.e. they do not work outside- in the field. They perform all kinds of work in the factory like, transporting of tea leaves, work in the withering, rolling and drying section.

Factory Operations

Once the leaves are plucked there are a series of processes involved like withering, rolling, fermenting, drying, sifting, and finally packaging. It is in

⁵⁸ Interview with Sabita Ghalay on 28th October, 2000, Phuguri Tea Estate

⁵⁹ Interview with Mani Kumar Pradhan 12th November, 2000, Phuguri Tea Estate

these work processes that the daily rated male workers are employed. Factory work is also very tough. The first round of tea leaves from Phuguri Tea Estate arrive at 8.45 a.m., second round at 11.30 a.m. From Mechi the first round arrives at 12.30 p.m. and again by 1.30 p.m. Again from Phuguri and Mechi the leaves arrive at 3.30 p.m. Thus there is a continuous supply of leaves both from Phuguri and Mechi and during the overtime period another supply arrives between 5-5.30 p.m. Timings of the factory during the peak hours are from 7 a.m. to 8-9 p.m. Monday is usually given as a day off if there is work on Sunday, but in the factory especially at the withering section the workers are paid for the extra Sunday work.

Withering

Withering is a process where the leaves are spread over large trays for ten to twelve hours. During this process the enzyme within the sap of the leaf develops and increases in size if the withering is carefully regulated. In some case this is done artificially by dry heated air, which is drawn over the leaf by means of large revolving fans. In Phuguri this is the method that is practised.

Here the daily rated male workers carry the wet leaves on their backs into the factory and spread them in the trays where the dry heated air blows over the leaves. During the peak season there are 8-9 *marads*, otherwise only six *marads* work in this section. These workers in this room are suffocated as the windows are closed to prevent the outside air from entering. When it becomes very inconvenient to work, the windows are opened without the knowledge of the supervisors by the workers. The workers are constantly exposed to the hot and suffocating air and are perspiring while working. Long trays are arranged where the hot air blows over the leaves. The leaves are usually wet during the rains. As one worker puts, "we have to dry up the wet tea leaves with the hot air which makes us sweat while it is raining outside. *Garam ma ekdam saro parcha, kam sakera purai jui dukhcha* [it is very difficult in the withering section, (locally called *naram* i.e. soft), our whole body aches after work]."⁶⁰ Another one says, "Factory work is the toughest. Our throat dries up, we feel breathless when the smoke catches the throat. It

⁶⁰ Fieldwork.

is said that we should not work in such conditions but we have to. Such type of work kills our body.”⁶¹

The D.F heater is used for withering. The daily rated worker in-charge of this section informed that for this heater FO oil is used, the gas of which is extremely harmful. The oil is black in colour and is dirty. It directly catches the throat of the worker who is in charge of it. This heater has to be checked regularly. There are four switches to it, two for it to heat and two to filter the oil. The fire at times backfires if the coal is not burnt properly. The oil burns the coal and the hot air passes through the pipes to heat the leaves in the fermentation section.

Bisnu Pradhan, a factory worker says, “One loses three kilograms of weight in a week here. Work pressure is very high. The overtime extends to four to five hours in the night. Common cold and fever are our daily complaints, keep sneezing continuously. People look pale while working here. The engines are oily. The cleaning of the factory is done only once a year when plucking is over. Work is the toughest in the withering section with the D. F. Heater. The gas is harmful. The Furnace oil used is black and dirty. Masks are essential. We are not provided with any. There is no fixed time for food. Sometimes it is beyond 2 p. m.”⁶² Working continuously for over 12 hours is very taxing on the workers’ health.

According to Nir Kr. Thapa, “Due to untimely food, gas forms and our stomach pains severely. We take medicines from the dispensary.”⁶³ Samir Thapa, 18, a *marad* says, “Workload is highest in the factory. Especially during heavy foliage we work continuously, sometimes till 8-9 p.m.”⁶⁴ Kushal Khawas, 18, a *marad* who works in the factory says, “*Garam ma mero jiu tharkincha* (my body shivers while working in the withering section). We get no rest in the factory.”⁶⁵

Workers of different occupations commented on the condition of the factory workers. Asha Zimba, a tea plucker, “at the withering section during the peak period the workers there look as if they are suffering from jaundice. They look like they hardly have blood within them. In the factory there is a

⁶¹ Ibid.

⁶² Interview with Bisnu Pradhan op.cit.

⁶³ Interview with Nir Kr. Thapa on 8th November, 2000, Phuguri Tea Estate

⁶⁴ Interview with Samir Thapa on 13th October, 2000, Phuguri Tea Estate

⁶⁵ Interview with Kushal Khawas on 22nd October, 2000, Phuguri Tea Estate

section called *naram*, (literally soft where the leaves are dried by passing hot air) it is the worst. Whenever we enter, the hot air that is used for drying the leaves hits directly and one feels giddy. It is frightening. As we are not used to the atmosphere we have such problems.”⁶⁶

The above descriptions clearly illustrate the working conditions in the factory. Masks are very essential for the factory workers as the smoke can affect one’s lungs. Because of the dust the workers suffer from *margi rog* (fever), which is the most common complaint. Most of the workers feel even after taking care they fall ill. Sajan Tamang, 29, says, “During the season we earn Rs. 500 in 15 days working overtime.”⁶⁷ Another regular complaint was that they are never able to take their meals on time. Most of them eat before 7 a.m. and in between they are provided with tea till they find time to take their *tiffin*.

Rolling

Immediately after withering is complete, the workers push the dried leaves through broad pipes from the first floor of the withering section to reach the rolling machines, locally called *ghanis*, which is in the ground floor of the factory. Rolling is a process where the prime object is to bruise the leaves so that the cells rupture, and the sap is brought to the surface. The leaves are thus converted into a wet mass and the leaves become curled and twisted. These huge machines are handled by men only.

There are three old and two new machines in this section. A supervisor, or the *Roller Baidar*, is in charge of the operations and supervises works in the rolling section. During the peak season the rolling machines are used 30-35 times in a day. He gets a monthly salary of Rs. 1030 and an overtime rate of Rs. 11 per hour. He had initially started work as a *marad*. Samir Ghalay says, “Rolling work is tough. Factory work itself is tough. We cannot sit. The *Sardar* orders us around. We cannot eat on time. During season we get fever, *kamne joro* (my whole body shakes with temperature); body aches maybe because we are continuously caught in the rains especially during the month of August.”⁶⁸ Jai Kr. Pradhan adds, “Rolling work in the factory is tough. We are never informed if tomorrow we will do the same job. Meals are untimely

⁶⁶ Interview with Asha Zimba op.cit.

⁶⁷ Interview with Sajan Tamang on 29th November 2000, Phuguri Tea Estate

⁶⁸ Interview with Samir Ghalay on 21st November 2000, Phuguri Tea Estate

and we do not know when the work will be over for the day. Sometimes we come back home empty stomach.”⁶⁹

During such operations there have been cases where the workers have injured themselves. Rabin Rai, 27, works in the factory for the past nine years, met with an accident while working with the rolling machine. He said, “I was busy working on the *ghani* (rolling machine) when my hand got caught in the machine. Luckily only half of my finger-nail got cut. Now I have resumed work again. Also, our earlier Assistant manager, Gurung *saheb*, injured his hand in the rolling machine. What happens is that once the leaves start pouring through the tunnel-like pipe you have to constantly use your hands to spread the tea leaves in the base of machine while the leaves are getting rolled and pressed over. In this process if we are not careful or alert we tend to injure ourselves often.”⁷⁰ Ashok Ghalay, 32, too injured his hand while working at the rolling machine. The *ghani* had accidentally hit his right hand. He did not want to talk more about it. All the above workers however received immediate medical attention.

Fermentation and Drying

After rolling is complete, the leaves undergo a process of fermentation and drying.⁷¹ This process requires careful monitoring of the temperature as all the moisture must be eliminated, yet the tea must have no traces of scorching, which destroys its aroma. The workers keep the furnace at a constant temperature. The temperature readings are displayed outside the machines. These drying machines are called *sirocco* and is locally called *suklai*.

⁶⁹ Interview with Jai Kr. Pradhan on 29th November 2000, Phuguri Tea Estate

⁷⁰ Interview with Rabin Rai on 26th November 2000, Phuguri Tea Estate

⁷¹ According to Malley (1907) “Fermentation begins as soon as the sap becomes liberated in the process of rolling and is due to the sap coming into contact with the atmosphere. [At one time it was thought that the change that takes place could be described as simply ‘oxidation’; but the careful analytical researchers of Dr. Mann have established the fact that the prime agent is an enzyme within the sap itself, which becomes active as soon as it comes into contact with the atmosphere. It is properly described as fermentation, but is quite different from the fermentation, which produces alcohol; it is not a process of decomposition or purification and it has no connection with bacterial action.

During fermentation, the leaf is spread about two inches deep upon low tables, or on a bed of cement or glass. In this process it assumes the coppery colour, which infused tea leaves are known to have. It takes about five hours to complete, reckoning from the time that the leaf enters the rolling machine. The temperature during the process must not be over 80 degree F. Drying begins exactly when the fermentation has reached the proper stage. The leaf is passed through a chamber filled with air, which has been previously heated by passing through the tubes of a huge stove. The temperature of the air is kept at 240 degree F and the leaf is slowly turned over within the machine while drying (O’ Malley 1907:82).

Two workers are in charge of this process. In fact they have to constantly feed coal in order to generate the heat. They also have to monitor the temperature of the machines. Once a week they clean the tunnel through which the hot air passes towards the drying machine. The tunnel is four feet wide and five feet in height. They cover their face but dust enters their eyes, ears and nose. It catches their throat too.

Sorting

After these processes the leaves are taken for sifting. Here the workers are mostly women and are called *chunai wali*. The tea leaves are graded with the help of nets that has different numbers, 8, 10, 12, 14, 20, 22, 24, 26 etc. From numbers 12, 14 and 16 tea leaves are of good quality. It is a semi-skilled job and around 9 to 11 women are employed here. These women do the work with the help of machines. During the peak season one or two daily rated male workers too are employed. According to the size and quality after the tea tasting, the leaves are graded. In this section of the factory where sorting is done the windows are closed to protect the tea leaves. Area is layered with dust all around this room where sorting was done. This dust is called 'tea waste', (*garja*).

Though the women workers cover their mouths with cloth and even take short breaks outside the factory, this tea waste is very harmful for them in the long run. The workers told me that their throats itch and they even give out brownish colour sputum. One of them said,

During sorting in the factory the tea waste makes it very difficult to work. There is a suffocating feeling. The exhausts are rarely cleaned properly. Body itches in contact with this dust particles. Such dust particles are not visible to the naked eye.⁷²

There is strict supervision in the factory. The workers do not have the time to rest. If they work on Sundays they get rest on Mondays. But for the workers in the withering section, they just get paid extra with no holiday. They have no tiffin breaks as such end up eating cold food everyday.

One of them said, "*Kaman ko paisa le hamro sas pani aljhawdeina*. (The wages of a tea garden are not enough even to fool our breaths)." Factory operates between March and November. From December for the next four months the daily rated male and female workers of the factory are shifted to

⁷² Interview with some of the factory workers, Phuguri Tea Estate , 2000.

the field for hoeing, digging, pruning, etc. These factory workers resume their factory operations in March as the plucking starts. For hoeing the workers are given a daily task, called *thika* of 12 tangs. In the same way all the field operations have a set *thika*. Hoeing, weeding, construction of roads and walls are some of the other odd jobs that a daily rated worker has to do.

With regard to these odd jobs, one worker says, “the work is tough and rough. Have to carry big stones especially from different places. For repairing the walls houses, have to get wet and work. In August clearing the weeds (*pharai*) is very difficult. During the rainy season holding an umbrella and clearing weeds and grasses around the tea bushes is difficult”.⁷³ During winter, hoeing is done by the workers they are given a hoe but then the workers use their hands too and they get blisters on their fingers. They face the same set of problems like workers in other field operations.

Packaging

Once the sorting process is over the leaves are sent for packaging. The carpenters make the tea chests or boxes. There is a small room adjacent to the factory building. This room houses two carpenters with their paraphernalia who are involved in making tea boxes. The room is dirty. Nails, pieces of wood, cardboard are strewn around the room. These carpenters are paid Rs. 970 monthly and as overtime get Rs. 3 per box made. On other days each of these carpenters daily makes around 10 boxes. In each box they nail 166 times. In order to keep the tea leaves safe there are two linings inside: a) for making it waterproof b) for making the box airtight. During the peak season they make about 50 to 60 boxes everyday. At times there is so much of workload that the manager asks them to stop work for a day or two. While fixing the frames and nailing the chests they often get hurt. One of the workers said: “we have our own solution for it. We apply spider’s cobweb on the injured area, and of course there is the *jaar* or *rakshi* (local fermented drinks) to kill all our pains.”⁷⁴

Mohan Bharati, a daily-rated worker, took *badli* after his father retired as a head clerk. His grandfather was also a head clerk in Samripani, which was earlier a division of Phuguri Tea Estate. For the first two years he worked as a *marad* in the withering section of the factory and then worked as night

⁷³ Field Work, Phuguri Tea Estate , 2000.

⁷⁴ Interview with Adip Pradhan, 26th November, 2000, Phuguri Tea Estate

guard for another three years. He is a graduate from Darjeeling Government College. At present his nature of work is to mark the tea boxes (which comparatively is a light job in the factory) using a seal of Phuguri Tea Estate. During the peak season the number of boxes might go upto 60-65 boxes everyday but at times he is absolutely free. He owns a shop and his monthly earnings are Rs. 4000- Rs. 5000. They buy all the required household items from Siliguri. Earlier this shop was a cooperative owned by a *Marwari* merchant who paid rent to the British company. His family then bought the land from them and is now paying rent of Rs. 300 per annum to the Company.

Factory Supervisory Staff

The Factory *Sardar*, Nima Lama is in charge of all these operations, has a commanding personality, monitors most of the operations. He has been working in this garden for the past 28 years. He got this job on the basis of 'hardship' and had initially started as a *marad*. According to him, here is a system in Phuguri where a person is employed on the basis of 'hardship', if there is no earning member in the house. His father was earlier a factory *sardar* and his grandfather studied Lamaism. His wife works as a labourer in Mechi. He has two sons studying; in class IX and class XII and his three daughters are all married.

His assistant sardar, Sagita Thapa, 31, narrates

"I have completed my B.A. from Darjeeling Government College and I have even appeared for my B. Ed (Bachelor of Education) exam. I had to take replacement of my mother who worked here as a plucker. My father worked as a *kamdari* in this garden. I live with my mother who is 66. For the last six years I have been working as an Assistant *sardar*."⁷⁵ She is single. The income is enough for both of them and has some savings in the Post Office.⁷⁶ She too is an important case in point where people have taken up garden work despite being educated. As her work is that of a factory assistant *sardar* she does not regret much. She thinks prestige is associated with the monthly salary rather than working as an *aurat*.

There was some level of sympathy by one towards the other. Factory workers feel for field workers who are drenched in the rain while plucking the tea leaves. Field workers feel sorry for those factory workers who look pale

⁷⁵ Interview with Sagita Thapa on 24th November 2000, Phuguri Tea Estate

⁷⁶ Just below the factory there is a small post office. There are two employees here. Some of the workers hold an account here.

and lifeless. The office staff compares their income with other government employees. One Provident Fund clerk adds, "Our salary should be at par with the government staff whereas we get much less. Cost of living is going up and with the advent of consumerism life becomes happy and dull."⁷⁷ Making eye contact with these workers, one can make out the utter sadness in their eyes telling one how miserable they are. Workers' living conditions that includes housing, sanitation, diet etc. their income/ expenses, which invariably leads to the vicious cycle of indebtedness are some of the aspects dealt in the following section.

Living Conditions and its Implications for Health

Workers' Dietary Pattern

Consumption of black salted-tea

For the workers of Phuguri, their day begins with a glass of black tea and for many it is *nun- chia* i.e. salted-tea. They are provided with salted-tea twice during the day at their *melo*. Five women workers, called water distributors are in-charge of distributing tea in the field. They are given a monthly quota of two kilograms of tea leaves to prepare tea. They are paid daily-wages like the daily rated female workers of Rs. 36.80. They have no overtime facilities. The company provides them only with tea leaves no salt, compelling the workers to contribute Rs. 2 each, annually, for it.

These water distributors prepare black-tea with salt in their own houses and carry it to the *melo* in a *gagri* (vessel).⁷⁸ According to one worker, "One *gagri* of salted-tea is enough for forty workers." In the first half i.e. around 9.30 a.m., the workers who are engaged in field operations are provided with salted-tea which usually gets cold by the time they drink it and during the second half, at around 1.30 p.m. they are given cold water. Even during winter, the workers drink this cold tea to quench their thirst.

Consumption of black salted-tea is very high among the workers. The daily-rated and unskilled workers get 300 grams of tea leaves called the BT i.e. broken tea every month. This quantity is not sufficient to last the entire month. They say that it is of *ureko* i.e. 'the blown' (dust variety) and is simply not fit for human consumption. One worker says, "We play with the most exquisite variety of tea leaves our own hands but get the 'dust' variety for ourselves." A few buy from the supervisory staff at Rs. 60 per kg. They get 800

⁷⁷ Interview with M.P Sinchewry, 25th November, 2000, Phuguri Tea Estate

⁷⁸Gagri is mainly used for carrying and storing water and it's capacity is approximately 10 litres.

grams per month. But this too is unaffordable for some of them. Some families manage from friends and relatives of other gardens; a few at the staff level occasionally request the garden manager for tea leaves. For the months of December to March the workers get the entire amount of tealeaves together. Kiran Lama, a daily-rated worker says, "Sometimes the quality of tea leaves is so bad that we ask ourselves are we so low to receive such a quality."⁷⁹ The Technical Staff gets 1/2 kg of 'staff' tea per month and the Office Staff gets 800 grams. The office staff of Phuguri receives better quality of tealeaves. It is called the 'staff tea'. According to one worker it costs Rs. 80 per kilogram. At times the daily rated workers buy from the staff this variety of tea leaves. It is paradoxical to see that the people who have nurtured the tea leaves to making one of the best quality tea leaves are devoid of drinking it.

Black tea is mostly taken with salt. One worker said, "*kaman ma yestai chalan cha* (this is what is practised in the tea garden)." At times they just leave for work drinking just a cup of tea. Salted-tea, to quote some workers like Sanchita Pradhan, "does quench thirst and sometimes even kills hunger for at least 15- 20 minutes."⁸⁰ The following table shows the consumption level of black salted-tea among men and women and it is specifically high among the daily rated workers but is also common across hierarchy.

Table No.: 5.13

Percentage of Workers Consumption levels of Black salted-tea

Work Category	Two-three times a day	Once a day	At work only	Do not take
Daily rated <i>marad</i> and <i>aurat</i> N=188	59.57	19.15	6.38	13.30
Sub-staff (male and female) n=32	40.63	28.13 (including 1 who take 2-3 times in a week)	6.25	18.75
Staff (male and female) n=11	45.45	9.09	-	45.45

Source: Fieldwork, Phuguri Tea Estate, 2000

⁷⁹ Interview with Kiran Lama, on 30th November, 2000, Phuguri T. E.

⁸⁰ Interview with Sanchita Pradhan on 24th October 2000, Phuguri Tea Estate

Consumption of black tea is prevalent among all sections. Those who do not consume black tea do so mostly due to health reasons. Given the high consumption of black tea with salt, it is questionable whether they can afford to buy sugar, as they mostly end up buying from the open market. Some like C.B. Ghalay, a daily rated worker aged 52, takes his morning tea with sugar and evening tea with salt as he is unable to afford sugar, both times.

Public Provisioning

Public Distribution Service

There are two ration shops (public distribution system) in Phuguri. One is owned by P.S. Lama since November 1972. Initially the shop catered to a large area like Phuguri, Singbulli, Palangbari, Millikthong, Putung and Naldarei. These are all tea gardens adjoining Phuguri but since 1984 Phuguri is the only area covered. This shop caters to forty workers approximately. In 1991, Shanti Thapa (wife of Kumar Khapangi⁸¹) started another shop. This shop caters to around 200 workers of Phuguri Tea Estate. Each worker with one card gets a weekly ration of:

1. One kilogram of rice
2. 500 grams of wheat
3. 100-200 grams (approximately) of sugar
4. 700 ml (approximately) of kerosene oil per month

Subsidized Food Grains

The subsidized items given by the management are simply rice and wheat. Each worker gets 2 kilograms of rice @ 47 *paise* per kilogram, 4.6 kilograms of wheat @ 49 *paise* per kilogram on a fortnightly basis. The worker's dependent child above one year of age gets 1 kg of rice and 1.4 kilograms of wheat till the age of 18 years. If the child continues school then this benefit also continues. If the worker is a male then the wife gets 2 kilograms of rice and 3 kilograms of wheat, but a female worker does not get

⁸¹ Kumar Khapangi is one of the well off families in Phuguri. He works in the office, as a Senior Garden *Babu*. He did not disclose his total household income while one of his family members revealed that the extra household income amounted to Rs. 40000-Rs.45000 from orange cultivation. Their extra earnings are also from the ration shop that they run, own some cultivable land, brother runs a jeep and so on.

such facilities for her husband. In Phuguri there are more women workers whose husbands are not employed in the garden. This only increases their expenditure as the benefits are meagre for a family. As Sarkar (1986) rightly puts, though the wages have increased but the cost of living has also increased leaving no scope for savings among the plantation workers of Darjeeling.

Production and Consumption of Country Liquor among workers

The workers favour the replacement of the above fringe benefits with an increase in their wages. To quote a worker, "Sometimes the quality of wheat is so pathetic that it is only fit to feed the pigs!"⁸² Wheat that is provided by the garden is mostly used by the workers to make *jaar* or *rakshi*. This is a fermented drink made in the hills with *marcha* [(yeast), which is required for brewing alcohol] which is bought from the market, and along with wheat it is fermented in a separate vessel, which is called *phoshi*. *Marcha* used in the preparation of *jaar* is easily available in the market. Some even use *kodo* (a kind of millet) instead of wheat but since it is expensive, (Rs. 10 per kg) they prefer to use the 'subsidised wheat' provided by the garden. Roughly the alcohol content in *rakshi* is 50% and in *jaar* is 20-30% while carbohydrates and proteins are more in *jaar* as in the process of making *rakshi* the starch gets evaporated during distillation. These are prepared in room temperature and the external air is not allowed inside the room.⁸³

Work in the tea garden both inside and outside the factory is extremely arduous. By the end of the day they are exhausted. The only temporary relief that they get is by drinking *jaar* or *rakshi* or any other alcoholic product. During the winter season the consumption definitely increases. Who do we blame, them or the system itself? This is an important source of income and a common drink that has become a part of the diet among workers of both sexes in Phuguri. The consumption figures across various categories can be captured from the table below.

⁸² Fieldwork, Phuguri Tea Estate

⁸³ Informed by Yandup Lama, Delhi.

Table No: 5.14

Number of Workers who Consume Alcohol across Different Work Categories

Work Category	Jaar				Jaar/Rakshi				Market Liquor				Total number of workers	
	D	W	F	O	D	W	F	O	D	W	F	O	Yes	No
Daily rated <i>marad</i> (male) n=76	8	8	2	5	7	10	-	1	-	-	-	3	45	31
Daily rated <i>aurat</i> (female) n=112	2	5	1	5	2*	2	-	1	-	-	1	1	20	92
Sub-staff (male) n=28	8	-	-	-	2*	8*	-	2	-	-	-	-	20	8
Sub-staff (female) n=4	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Staff (male) n=9				1	1*	1*						2	5	4
Staff (female) n=2	-	-	-	-	-	-	-	-	-	-	-	-	-	7

Source: Field Work, Phuguri Tea Estate, 2000

Note:

D: Daily
W: Weekly
F: Fortnightly
O: Occasionally

* Includes one worker in each cell who takes *country* and market liquor.

The habit of consuming alcohol cannot be simply construed as cultural. It is important to understand the working conditions that compel them to drink. Arduous work both in the field and in the house leaves them completely exhausted; so in order to get a good night's sleep they drink *jaar* or *rakshi* every day. There was a uniform response regarding the fact that on drinking it 'kills their tiredness'. Some women workers like Jayamala Ghalay say, "At times when I am in a hurry I drink one mug of *jaar* made of wheat in the morning before going to work. At times I even go hungry. In the afternoon I eat almost double the meal. At the workplace, I eat what my friends get, *roti* (bread) and *semal-tarul* (tuberous roots). In the evenings, along with food I take *jaar* whenever available. I prepare it myself. I do not sell."⁸⁴ Meenu Tamang says, "It is amusing, after the drink we immediately hit our pillows but in the morning we wake up automatically on time!"⁸⁵ She prepares *jaar* and along with her husband consumes two three mugs daily.

Mepsang Tamang says, "I drink *jaar* particularly when my stomach pains, then I immediately fall asleep."⁸⁶ Asha Singar says, "*Rakshi* tastes like rum. It looks white in colour. I burp on drinking and then the pain and the swelling of the stomach reduces. There is a separate utensil for preparing it. It is mainly steamed."⁸⁷ She buys from the village itself. According to her, *jaar* is thick therefore it kills the appetite unlike *rakshi*. To quote Kamala Mangar "I get tired therefore I buy and drink half kilogram of *jaar* either made of wheat or rice."⁸⁸ Laxmi Tamang cooks *jaar* with *gur* (molasses/raw sugar) and keeps it for three days. She drinks and sells too @ Rs. 10 per bottle of *rakshi* and Rs. 10 for *jaar*. For Premika Tamang, "*jaar khaye bhane aakha bara peep niskeencha, teilagi Rum khanchu* (if I drink *jaar*, pus comes out of my eyes, so I drink Rum). It costs me Rs. 60 per bottle, which I buy fortnightly."⁸⁹ Alcohol consumption is high among men. Bal Kr. Tamang, 53, says, "I drink two mugs of *jaar* daily that is one kilogram."⁹⁰ Rudra Pradhan, a Roller *Baidar*, aged 52 years says, "I drink it as a medicine. It relieves the pain. I drink in three-four days interval whenever I am tired."⁹¹ Binod Bagdas, 22, says, "I do not drink

⁸⁴ Interview with Jayamala Ghalay on 24th November 2000, Phuguri Tea Estate

⁸⁵ Interview with Meenu Tamang on 28th November 2000, Phuguri Tea Estate

⁸⁶ Interview with Mepsang Tamang on 20th November 2000, Phuguri Tea Estate

⁸⁷ Interview with Asha Singar on 20th October 2000, Phuguri Tea Estate

⁸⁸ Interview with Kamala Mangar on 26th November 2000, Phuguri Tea Estate

⁸⁹ Interview with Premika Tamang on 16th November 2000, Phuguri Tea Estate

⁹⁰ Interview with Bal Kr. Tamang on 16th November 2000, Phuguri Tea Estate

⁹¹ Interview with Rudra Pradhan on 16th November 2000, Phuguri Tea Estate

tea at all. If I drink half kilogram of *jaar* I feel hungry but if I consume one and half kilogram of *jaar* then my hunger dies out. We do not prepare *jaar* in the house.”⁹²

Pasang Tamang, 28, says, “I don’t take *jaar* or *rakshi* but *kini*. This is a drink made by boiling hard the liquor of the tea leaves with sugar till it becomes thick. I drink this even before going for work. It does kill my appetite.”⁹³ Most of the workers drink *jaar* or *rakshi* in order to get rid of their aches and pains. Adip Pradhan who works as a daily-rated⁹⁴ carpenter says, “We get severe back pain as we stand and work especially while doing ‘fitting’. Our fingers get cut and bruised. By consuming *jaar* or *rakshi* we forget the pain completely.”⁹⁵

Most people say that by taking *bhate jaar* (*jaar* made of rice) is a cure by itself. Some even believe that it has medicinal values. According to one worker, “we heat *rakshi* with *ghiu* (melted or clarified butter) and *methi* (fenugreek) and drink it. This cures all our aches and pains.” As Nima Tamang, 40, says, “we prepare *jaar* at home with *gur* (molasses/raw sugar). I consume about one and a half bottle daily therefore I eat less but if there is meat, then I eat more. We get beef from Soureni T. E. and *bhaisi ko masu* (buffalo’s meat) for the village itself. I drink *rakshi* daily. During *marau* (death) I drink more, as we have to stay awake the whole nightlong. Then my head feels heavy in the morning and I end up drinking again.”⁹⁶

Consumption of such local drinks is highest among the workers’ who are involved in rigorous physical labour. According to a village elder, “these alcoholic drinks have spoilt our people of the hills.” But no one tries to comprehend or even understand the reasons for such high consumption among both men and women especially among the workers. In fact in Nepal villages, a women’s organisation was formed called the ‘*Ama Toli*’ who stop women from selling such drinks in the village. ⁹⁷ And interestingly these women are from the Chettri and other upper castes and not from the Tamang community.

⁹² Interview with Binod Bagdas on 18th October 2000, Phuguri Tea Estate

⁹³ Interview with Pasang Tamang on 28th October 2000, Phuguri Tea Estate

⁹⁴ Some workers in Phuguri Tea Estate although they have been promoted as a sub-staff are paid on a daily-waged basis.

⁹⁵ Interview with Adip, op.cit.

⁹⁶ Interview with Nima Tamang on 15th November 2000, Phuguri Tea Estate

⁹⁷ See Adhikari J and Bhole Hans-Georg: Food Crisis in Nepal How Mountain Farmers Cope, 1999, Delhi

Consumption of alcohol cuts across all ages. Shekhar Ghalay, 28, a daily rated worker says, "We have no property, just earn Rs. 360 for fifteen days and we have to buy everything. We just drink to forget our sorrows."⁹⁸ He consumes *kodo ko jaar* one kg a day. He consumes 3 packets of *khaini* (chewing tobacco) per day. He says that the packet has less tobacco unlike the *patti* (leaf) that is sold in the open market.

Khaini or chewing tobacco is very common among both men and women. Each packet costs Rs. 1. Their expenditure depends upon the amount that they share with their friends especially at their workplace. Some spend Rs. 10 per month on *khaini* packets. According to Nirmala Puri, a daily-rated worker, she buys two containers of tobacco that last for 15 days. Each container weighs 20 grams. Only four male workers smoke cigarette, especially a Nepal product called '*Khukuri*' that is relatively cheap. Dadang Lama, 30, smokes two cigarettes a day. The following table provides the percentage of tobacco consumption among male and female workers.

Table No: 5.15
Percentage consumption of tobacco/cigarette among different work Categories

Work Category	Chewing tobacco	Cigarette
Daily rated <i>marad</i> (male) n=76	65.7#	1.3*
Daily rated <i>aurat</i> (female) n=112	38.4	-
Sub-staff (male) n=28	62.96	7.4
Sub-staff (female) n=4	-	-
Staff (male) n=9	22.2	11.1
Staff (female) n=2	-	-

Source: *Field Work, Phuguri Tea Estate, 2000*

Note : * Smokes cigarette and also chews tobacco.

Includes 2 workers who smoke *beedi*, and 1 worker who smokes *beedi* and chews tobacco.

⁹⁸ Interview with Shekhar Ghalay on 15th November 2000, Phuguri Tea Estate

Type of Food Intake

As we have mentioned earlier, land was an important mechanism of labour control. In fact plots of land were given rent-free for cultivation and also some government *khas mahal* lands were given for inducing village settlements. The latter is common among the people of Chandura while most of the workers in Phuguri have small patches of land as a *bari* (kitchen garden) in front of their labour quarters. A few grow seasonal vegetables that consist of *aloo* (potato), *iskush* (squash), *sag* (green-leaf vegetable), *tarul* (underground tuberous root), *matar* (peas), *seme* (beans), cauliflower, cabbage, *mula* (radish), *karela* (bitter gourd), *karchira*, *titibi* (seasonal vegetables) etc. *Aloo* (potato), one worker said is taken *yug dakihi yug sama* (eaten for generations). Indra Kr. Rana says, "During the rainy season there is no *bari* (kitchen garden) at all. We then have *gundruk*, *sinki* also."⁹⁹ These are fermented food items made of different leafy vegetables and are common in the hills. He further says, "tomato costs Rs. 10 per kg but it is now (in winter) Rs. 22."¹⁰⁰ *Dal* (pulses) and *musur dal* (lentils) are not cooked at all meals. There are of course a variety of pulses and lentils in the hills called; *kalo dal*, *masyam* etc. Rice is otherwise the staple food of the workers.

Their morning meal¹⁰¹ usually consists of the previous night's rice, which they fry in oil with onions and green chillies whenever available. Most of them take their morning meal of *rotis* with *subzi* (vegetable) or with tea. Many workers, especially women go to work on an empty stomach. Shobhana Sinchewry says, "I usually go empty stomach to work. In fact there is nothing much to eat. I have no appetite whatsoever."¹⁰² She is small and frail looking. She says, "Children too do not want to eat vegetables and meat. They eat *roti* and biscuits for meal. We gave our ration card to a person for renewal. He took Rs. 100 from us and absconded. It's been five years. I don't have money to grow vegetables. At times I buy *sag* from my neighbour's house for Rs. 5. I drink black tea only once in the morning. When friends come I have nothing to offer them."¹⁰³

⁹⁹ Interview with Indra Kumar Rana, 21st October, 2000, Phuguri T. E.

¹⁰⁰ Ibid

¹⁰¹ Taken before leaving for work.

¹⁰² Interview with Shobhna Sinchewry, op.cit..

¹⁰³ Ibid

Ambarkala Tamang, 26, a daily-rated worker, was cooking *raya ko sag* (leafy vegetable) during interview. Both her children were nagging her for food. Only rice was cooked. Her children couldn't wait so she gave them rice with mustard oil and salt. She says, "They like to eat this way."¹⁰⁴ Most of the children and mothers take food in this manner. Nirmala Puri just eats rice with water and goes for work. Many a times she does not feel hungry. Shanti Dhutraaj skips dinner if her lunch is heavy, or she skips the morning meal if she takes dinner. She doesn't feel like eating and doesn't feel hungry too. She is scared to be late for work, that at times she's unable to swallow the food. She had undergone training as a midwife. But then the degree is lying useless. Those who have the power are able to make their way for themselves. There is no one to speak for her. Some like Pushpa Tamang eat *gilo roti* (pancake) before leaving for work. Sometimes she goes to work on an empty stomach. She usually takes *rotis* with *chana* (chick peas) or vegetables like *palak sag*, *ghiroula* (gourd).

Most women workers during the peak season, due to the fear of getting late to the *melo* and get rebuked by the *kamdaris*; they go empty stomach to work. Men do not face this problem as they are usually served by their women folk. As women have excessive workload in the mornings they end up skipping their meals. They are the ones who end up tightening their belts. In fact in Nepali, there is a saying *potuka kasnu* i.e. to tighten one's *potuka*.¹⁰⁵ It means to kill one's hunger by fastening or tightening the *potuka*. The peak season is the time especially for the pluckers to earn extra through the overtime wages. The more they pluck the more they earn. Some of the workers like Jaymala Ghalay, reaches the *melo* after drinking 1/2 kg to one kg of *jaar*. For her this is the best way to kill one's hunger. Some carry *tiffin* consisting of *rotis* and some vegetables, which they share among friends at the *melo*.

For the male factory workers, during the peak season for e.g. Jai Kr. Pradhan, 32, eats his meal in the morning before he leaves for work. He does not carry *tiffin* like some workers, comes back home at around 3.30 p.m. and has rice with *sabji* (vegetables). Some workers get *rotis* or rice and vegetables as *tiffin* with them. The food invariably gets cold by the time they eat, as there is continuous work in the factory. They hardly get time to rest. It is worse

¹⁰⁴ Interview with Ambarkal Tamang on 13th November 2000, Phuguri T. E.

¹⁰⁵ *Potuka* is a long strip of cloth used by women to tie it around their waist above their *phariya* (*saree*)

during the peak season as there is a continuous supply of tea leaves. Work is rigorous. They end up working overtime till 9 p. m.

Rajiv Khawas, 21, works as a *marad*, eats *roti* with *nun-chia* in the morning. For *tiffin* he takes rice and vegetables or *roti* only. Buys one *pawa* of milk for preparing tea. He takes half kilogram of *jaar* daily. Sometimes he skips his meal after taking *jaar*. He has two children aged 6 and 3 years. They too eat rice with oil and salt. Dadang Lama, 30, another *marad* takes breakfast of fried rice with black tea. Once he completes the *tang* (*thika*) he comes back home to eat his meal of rice and vegetables. In winter they complete the *thika* quickly and come home by 2.30 p.m. They are invariably without food for over seven to eight hours. He drinks *kodo* (millet) and *makai* (maize) *ko jaar* two kilograms every day. He takes meal after drinking, consumes a packet of tobacco everyday.

Some of these workers who live in Chandura, (near Phuguri) have to walk down to Phuguri for work. It takes 45 minutes for men and one hour for women to walk one way. Most of them therefore set out early to reach the *melo* on time. They also end up reaching home late during the peak season. They usually walk back together in the night with friends sharing a torch light as the area is not electrified.

Dietary Consumption Pattern

The workers intake of meat depends on its availability in the tea garden. There are a few people who get buffalo's meat, beef from Dudhia, (which is an hour's ride from Phuguri) and sell it in the garden on Sundays. Some of the workers like Rajan Pradhan, Subhalaxmi Ghalay get their extra earnings from such sources. Some like Sajan Tamang, Manila Pradhan and Ganga Khawas earn Rs. 5000- Rs. 6000 annually.

There is no local market in this garden, so most of the workers make a trip to Dudhia *haat* (an open market). Also, a *madisia* (a plainsman) occasionally comes and sells fish in this garden. Some families, who can afford, also buy chicken or fish from Mirik, which is an hour's drive from Phuguri. Beef and buffalo meat costs them Rs. 35/40 per kg. Fish and chicken are very expensive for them. Geeta Subba, a daily-rated worker, buys one kilogram of chicken fortnightly for her family of four. She is the sole earner of the house. Shanti Thoker, feels beef gives her energy during

weakness.”¹⁰⁶ Likewise Premika and Laxmi Tamang eat beef in order to supplement energy.¹⁰⁷ Cost of beef meat is Rs. 35 per kg, buffalo’s meat or *bhaisi* costs Rs 40 per kg. Indu Moktan buys ½ kg of beef fortnightly. If they have money then they go for *masu* (chicken or mutton)”.¹⁰⁸ She has three children and is a widow. She earns Rs. 350 fortnightly. Mandip Khawas, 26, has a family of eight members, buys 2-2½ kilograms of meat a week. Many families even consume *ghinge macha* and *sukti maacha*. These are all fermented and dried fish and are available at the local *haat*.

The following table shows the frequency in the consumption of non-vegetarian diet among both male and female workers.

Table No: 5.16

Patterns of Non-vegetarian Consumption among Workers

	Weekly	Fortnightly	Monthly	Weekly/ Fortnightly	Fortnightly/ Monthly
Male n=113	47.79%	17.80%	4.42%	25.66%	2.65%
Female n=118	44.01%	25.42%	0.85%	29.66%	-

Source: Field Work, Phuguri Tea Estate , 2000

Thus the workers choice of meat depends upon their ability to purchase and their traditional values. Consumption of pork, buff and beef is highest among the workers in comparison to chicken, mutton and fish. Their intake of non-vegetarian is related to their religion for example the Hindus abstain from beef eating, while the Tamangs consume more of beef. The latter by religion are Buddhists.

¹⁰⁶ Interview with Shanti Thoker on 22nd October 2000, Phuguri tea estate

¹⁰⁷ In the Nepali community there are certain castes, like the BCKD (Brahmin, Chettri, Kami and Damai) who abstain from eating beef. The latter two castes take pork, which is avoided by the former two. There is a section of the Tagadharis who are purely vegetarians. As Sharma’s (2000) study shows low representation of the Tagadharis i.e. only 2.5% of the total strength of 52,913 workers with the rest being the Matwalis in Darjeeling tea gardens. Since work is arduous in the tea estates, many have taken to eating meat. Chicken, mutton, fish are common among the rest of the castes. The Newars consumption of buff meat (*bhaisi*) is common in Phuguri. Consumption of beef is more among the Tamangs too.

¹⁰⁸ Interview with Indu Moktan on 28th November 2000, Phuguri tea estate

Sarkar (1996) maintains that although the calorie intake may be same between non-vegetarian and vegetarian diet, non-vegetarian diet is expensive as compared to a vegetarian diet. Also, workers' consumption is relatively high in the hills due to the climatic conditions. He therefore argues for a need to increase the wages for the tea plantation workers. Consumption of milk is negligible among the workers. They buy milk for their children when they are ill. Some buy milk powder occasionally for preparing tea at home. Consumption of milk is not regular. Workers buy it in small quantity usually one *pawa* (250 millilitres) of milk whenever they feel like.

Shobhna Sinchewry says, "Dairy milk supply comes only at 8 a.m. I am never able to buy from it, as we have to reach work by 7 a.m. So at times I buy milk powder."¹⁰⁹ Some families buy cow's milk from within the garden @ Rs. 8-Rs. 8.50 from families who derive extra income by selling milk. Milk they say is a 'luxurious item'. Only those houses that have their extra earnings from selling their cow's milk can afford to drink daily. For Milan Thapa milk has become like medicine. It is difficult to get.

89.42% of the male workers do not drink milk at all. Of the remaining 10.58% who drink milk, only half drink daily. While among the women workers 87.29% do not drink milk at all. Only 12.71% drink milk of which a third drink daily. Some like Nirmala Puri drinks milk once or twice a week if pocket permits. It costs Rs. 8.50 per litre. Overall consumption of egg is negligible among the workers. It costs them Rs. 2.50 for two eggs. For one worker his children too want to eat *masu* (meat) and he manages somehow. Once they wanted to have *momo* (dumplings) and they were given.

The above mentioned cases provide useful insights into the dietary habits of the workers. Our earlier section has shown how the workers during the peak season even go to work on empty-stomach. With the drive to earn more makes them work overtime. The harsh working conditions coupled with chronic hunger have had adverse impact on their health. Consumption of cheap meat, lack of proteins in their diet and high consumption of black tea, *jaar* and *rakshi* are a sheer reflection of their earnings which is as low as Rs. 700 per month. The subsidised food provided both by the state and the management is inadequate to supplement their diet and is of poor quality. The following sections seek to gain insights into the larger factors of housing, water supply and sanitation, cooking fuel etc. In this section too an attempt

¹⁰⁹ Interview with Shobhna Sinchewry, op.cit.

has been made to draw out a distinction across work hierarchy vis-à-vis such factors.

Housing

In 1963, out of the 324 families surveyed by the Tea Board on the living conditions of workers in Darjeeling tea plantations, 90 (27.78%) families were found to be living in *pucca* houses, 108 (33.33%) in semi-*pucca* houses, and the remaining i.e. 126 (38.89%) in *kuchha* houses. (Tea Board, 1963) Broadly the house types were divided into three categories by the Tea Board:

1. *Pucca*- Brick-built walls, cemented floor and roof of C.I. sheets.
2. Semi-*pucca*- wooden plank walls, stone built floors and C.I. sheet roof
3. *Kuchha*- Thatched or stonewalls with mud plaster, earth or stone floors and roofing of thatch or planks.

According to the PLA 1951, 8% of the resident labour houses should be constructed annually. If this was followed then by 1969 all houses would have been constructed. But the picture is dismal. Das Gupta (1999) in his study of 273 tea estates shows the number of houses constructed in the tea estates of West Bengal in the following table.

Table No: 5.17

Construction of Houses in 273 Tea Estates in West Bengal up to 1991

Percentage of Construction of Total Requirement	Terai N= 57	Duars N=152	Darjeeling N=64	Total N= 273
Construction up to 10% only	3 (5.26)	7 (4.64)	2(3.13)	12(4.40)
.....11-20% only	1(1.75)	4(2.63)	1(1.56)	6(2.20)
.....21-30% only	5(8.77)	4(2.63)	3(4.69)	12(4.40)
.....31-40% only	5(8.77)	5(3.29)	2(3.13)	12(4.40)
.....41-50%only	2(3.50)	9(5.92)	1(1.56)	12(4.40)
.....51-60%only	7(12.28)	13(8.55)	2(3.13)	22(8.05)
.....61-70%only	5(8.77)	21(7.89)	8(12.5)	34(12.45)
.....71-80%only	10(17.54)	12(7.89)	7(10.62)	29(10.62)
.....81-90%only	4(7.03)	27(17.76)	11(17.94)	42(11.38)
..... 91-100%only	15(26.33)	50(32.90)	27(42.19)	92(33.69)
Total-----	57(100)	152(100)	64(100.00)	273(100)

Source: Manas Das Gupta: *Labour In Tea Gardens*, Gyan Sagar Publications, Delhi, 1999: 162

In terms of housing, Darjeeling is much better than the other areas like Terai and Duars of West Bengal. In Darjeeling 42.19% of the houses are 90-100% constructed. In a more recent study on Darjeeling plantations (Sharma 2000), 78.7% of the workers' houses are *pucca* and only 21.3% are *kuccha*. But his study ignores semi-*pucca* house type. In Phuguri Tea Estate, a considerable percentage of the workers' houses are semi-*pucca* in nature i.e. there are usually four rooms including a *verandah*. The walls are half cemented, half-wooden planked. Roofs are either tinned or C.I. sheets are used for roofing. In some houses the roofs are made of mud. Given the physical features of Phuguri there are no coolie lines as in the plains as the land is hilly. The labour quarters are mostly clustered along with a few scattered settlements. There are different areas in Phuguri: Daragoan, ward No 2, Ward No 9, 11 and Pallogaon, Ward No 4, Ward No 10, Lamatar, Subetang (which is at the lowest gradient) and Kargi (name given by the locals as it is at a considerable height). The first four areas have clustered houses while the latter have scattered ones. In fact Ward no 11 is located at the base of the spur where there are two *jhoras* or small springs flowing. This area does not have water crisis but during the rainy season it gets difficult to climb uphill for work and it is risky to cross the bamboo (*kuccha*) bridge.

The management usually gives half the money to construct a house and half is spent by the worker himself Geeta Subba says, "The money management paid half and we spent Rs. 10,000 more on house construction."¹¹⁰ The floor of her house is made of mud. Walls are half-cemented and half-wooden. There are three rooms but one wall is not yet constructed. The kitchen is *kuccha*. The roof is tinned. Various types of roofing materials are used for the labour quarters in Phuguri Tea Estate. For example light roof, R. M. sheet (plastic), Tinned (C.I. Sheet) and asbestos, which differ in quality.

Asha Syangbo says, "Whenever there is an earthquake the walls of my house shake. It has even cracked at some places. It has been two years since I got my house repaired."¹¹¹ Minu Tamang, a daily-rated worker whose house was getting constructed said, "For constructing a *pucca* house, the management gave us Rs. 15,000. We have already spent Rs. 11,000 on the construction. We have to pay daily *hazira* to the *Mistris* around Rs. 60-70 each for three people and for the two helpers we pay Rs. 50 each. We even

¹¹⁰ Interview with Geeta Subba op.cit.

¹¹¹ Interview with Asha Syangbo on 28th November 2000, Phuguri Tea Estate

provide them with tea and some snacks too. It becomes difficult for us to bear such costs. I have cried during the rains when our roofs would leak and we would be busy filling and emptying our utensils.”¹¹² Her husband adds, “It roughly takes 10-12 years to get a *kuccha* house converted to a *pucca* house.”¹¹³ The management provides a worker initially with *kuccha* house, and over a period of 8-10 years the management provides half of the cost for converting it into semi-*pucca*.

Given the climatic conditions, tinned or asbestos is suitable for the houses in the hilly areas. But these roofs leak during the rainy season and are cold and damp. Cold air seeps between the wooden planks and bamboo sticks of such houses making people extremely vulnerable to illnesses of the respiratory tracts. One blanket is given to each worker in two years, which the workers call *dhusa* (rug). Incidence of phthisis was common even during the earlier phase of labour settlements in Darjeeling. As the earlier section has described on the working conditions during the monsoons and the number of tuberculosis cases in Phuguri is a clear reflection that apart from their working conditions, food, housing and other basic amenities have a great degree of influence on the health of the workers.

Table No: 5.18
Percentage of workers living in different types of housing

<i>Work Category</i>	<i>House-Type</i>		
	<i>Kuccha</i>	<i>Semi-pucca</i>	<i>Pucca</i>
Daily-rated <i>marad</i> and <i>aurat</i> n=188	12.77	35.64	51.60
Sub-staff (male and female) n=32	12.50	28.13	59.38
Staff (male and female) n=11	--	18.18	81.82

Source: *Field Work, Phuguri Tea Estate, 2000*

Note: *Kuccha:* mud-houses with thatched bamboo as a roof-top. There is usually only one room.

Semi-pucca: floor is made of mud or wooden planks, walls too are made of wooden planks or are half cemented. C.I. sheets are used for roofing. There are usually four rooms including a verandah.

Pucca: houses are usually made of cement. Asbestos or C.I. sheet is used for roofing. The houses are with four rooms and a verandah.

¹¹² Interview with Minu Tamang on 25th October 2000, Phuguri Tea Estate

¹¹³ Ibid

The above table shows that the percentage of workers living in *pucca* houses is greater than those living in *kuccha* or semi-*pucca* even among the daily rated workers. The workers belonging to the second and third generation have *pucca* houses. Like the case of Tara Puri, who works as an *aurat* but lives in a *pucca* house. Her father-in-law worked as a factory-in-charge in the same tea garden. Her husband works as a teacher in Nepal. Her house is spacious having seven rooms with a well-furnished drawing room. The floors made of wooden planks are polished. The partition of two rooms is of wooden planks but it is painted to look bright. All the rooms are equipped with the necessities. They also have a black and white television which is the main source of recreation. They have their own private bathroom and toilet and also have their own private tap, use of which though is seasonal.

Proper maintenance and repair of the houses is of critical importance for the workers. The Office Staff are given 30 kilograms of *chuna* for whitewashing their houses annually. The workers are given 7 kilograms of *chuna* and two packets of *nir* (Robin blue powder) for whitewashing their houses. Repair work undertaken by the plantation is negligible. Most of the workers themselves repair their houses; construct *kuccha* toilets with their own personal savings or loans. Those who are vocal and can put forward their problems to the union are at an advantage. Shobhna Sinchewry whose house is still in a *kuccha* state since last 8 years is unable to put forth her problem to the union. Her husband works outside Phuguri, in Sikkim. She has given applications twice for the construction to the management but in vain. Her house is a small single *kuccha* room which she has divided into two smaller rooms. The first room just has a single bed and a bench. The second room is used as a kitchen and has a bed on which she keeps clothes and other items. She stays with her two children. She has used polythene sheets and plastic sheets cut from plastic bags to stop the roof from leaking.

Most of the houses haven't been repaired for the past 7-8 years. Some are in bad conditions, like that of Radhika Lohar's house. Though her house is semi *pucca*, most of the windowpanes were broken. There is no one to speak out for her. Her husband is an alcoholic and suffers from tuberculosis. She is the sole earner of the house. Ajeela Tamang got her *kuccha* house constructed in August 2000. The house has stone flooring, plastered with mud. The walls are also mud plastered and woven with bamboo sticks. The roof is made of C.I. sheet, which is supported by bamboo-sticks. She says that

there has been no leakage as yet (till December 2000). Asha Syangbo of Lamatar laments, "Earlier the Assistant Manager had come to see my house which needed repairing. It has already been 2-3 years, nothing happened. Now the manager is in Seeyok T. E. (another tea estate in the Mirik valley) I have to make a fresh application for it in the meeting or I have to speak directly to the manager."¹¹⁴ Nirmala Puri places utensils wherever there is a leakage. At times her kitchen which is *kuccha* gets badly damaged during the monsoons.

Tsering Syangbo has been staying in a *kuccha* house for the past 10 years. He hopes, "Maybe next year the house will become *pucca*."¹¹⁵ Adip Pradhan's house was constructed in 1969. Even after 20 years no repair work was done by the management. They have repaired with their own earnings. Deepak Lohar, a daily-rated worker, has spent Rs. 3000 to construct a two-roomed *kuccha* house. He has moved away from the main house. He is married. He has made the roof out of cardboard, leaks during the monsoons. Young married couples prefer to live separately i.e. break away from the main house due to financial strains and tensions and also in a few cases the daughter-in-law is the main earner and all her earnings are used up in maintaining the whole family. Sharma's (2000) study shows that 82.5% of the workers' have nuclear families. In Phuguri Tea Estate 56.28% of the workers have nuclear families and 42.42% are joint families. Rupa Sinchewry, a daily-rated worker and her husband have separated from their main house. They have made a *kuccha* house, costing Rs 5000 which has a single room. It is made of mud and bamboo sticks and has a tinned roof. A kitchen is in the same room. *Kuccha* houses usually have no windows. Workers' take loans from their Provident Fund account to repair and construct houses.

Loans Taken by Workers for Housing

The management of the plantation is primarily responsible for the maintenance of the houses. But due to negligence on their part the workers are forced to take out money from their Provident Fund Account to repair their damaged houses. Their hard earned money meant for their future is been used for house repairs, medical expenses, marriages, and for children's education. According to the Provident Fund clerk, almost 90% of the workers have taken Provident Fund loans. This has become a convenient source of money to meet financial crisis. This is possible only if the workers manage to get some money to repair their houses, otherwise they continue living in the

¹¹⁴ Interview with Asha Syangbo op.cit.

¹¹⁵ Interview with Tsering Syangbo on 20th October 2000, Phuguri tea estate

same manner. This is common among the lower strata of workers who are already living a hand to mouth existence, are single-earners with no extra-income. Another important source of loans is the various *samaj* or social organizations, which are caste-based and are intended to work as safety nets for their members. The details regarding the *samaj* are dealt with in the next section.

Sanitation

"The *bagan* (tea garden) had constructed a *kuccha* toilet but it got blown away by the wind!"¹¹⁶

Annually the management sanctions money for 8-10 latrines for the workers. The workers are given this money for construction according to seniority of work. Kalpana Tamang got a 'work order' of Rs. 5600. They have to construct the latrine themselves and then submit the bill detailing the costs incurred to the management. They have already spent Rs. 300 just to dig up the ground. During fieldwork both the husband and wife were seen working together to construct it. The wife has been working in the garden for the past fifteen years. Mani Kumar Pradhan, an office staff, informed that the garden annually constructs only 2-3 latrines.

The table below shows the type of sanitation used by the workers at different categories.

Table No: 5.19
Sanitation in Phuguri Tea Estate

Work Category	Sanitation					
	<i>Provided by management</i>	<i>Water Closet</i>	<i>Private pit-latrine</i>	<i>Open space</i>	<i>Use relative's toilet</i>	<i>Common pit-latrine with 2-3 houses</i>
Daily-rated <i>marad</i> and <i>aurat</i> n=188	4.79%	38.30%	19.68%	21.28%	5.32%	1.60%
Sub-staff (male and female) n=32	9.38%	68.75%	9.38%	3.13%	3.13%	6.25%
Staff (male and female) n=11	72.73%	18.18%	-	-	-	9.09%

Source: Field Work, Phuguri Tea Estate, 2000

¹¹⁶ Interview with Purnima Ghalay, 23rd September 2000, Phuguri Tea Estate

The most striking figure from the above table is the use of the open space for defecation, which is common among the daily rated workers with 21.28%. According to Prunima Ghalay, who works as a plucker says, "if we run for ablution, it takes us five minutes to reach the *kholchal*"¹¹⁷ A *kholcha* is a deep ravine especially between two ridges in the hilly terrain. It has become an area for dumping and defecating. Most of the workers and their families' defecate out in the open and especially use the *kholcha*. It is very inconvenient particularly during the monsoons as the roads are slippery and difficult during the night. It is worse for women and children. Younger children are afraid to go out in the night and women usually do not send them in the night but instead use any open area in the vicinity.

It is a common complaint of mothers that their children suffer from *siyah* (i.e. the children get caught with the bad and evil air or the *jungali* i.e. the evil spirit considered to loom around in the nearby forests (they say *siyah lagnu, jungali le samatnu*). Chelimaya Khati, a daily rated worker says, "*Tin phernu bhanda saheb pherencha* (Before we can even think of changing or requesting the manager to change the roofing sheet there is a new manager!). During the recent *Panchayat* elections I told them that whosoever gets a latrine constructed and my house repaired, I will vote only for that person."¹¹⁸ During the course of fieldwork she was planning to get a latrine constructed. This urgency has emerged as her daughter one night got caught by the *jungali* (evil spirit that is considered to loom around the forests in the night) when she went out for ablutions. Her daughter was studying for her exams late at night. And the first thing she saw early morning was her body lying outside. It was purple in colour. She was very scared; called the *jhānkri* immediately. It was said that the evil spirit had caught her. Tsering Syangbo says, "For a *kuccha* toilet we just dig a pit, surround it with sack and use plastic as a roof top."¹¹⁹

The following table shows the percentage break-up of the type of sanitation used by the workers.

¹¹⁷ Interview with Prunima Ghalay, op.cit.

¹¹⁸ Interview Chelimaya Khati, op.cit.

¹¹⁹ Interview with Tsering Syangbo, op.cit.

Table No: 5.20

Percentage of workers' houses with different types of sanitation

Toilets provided By the management	5.19
Water - Closet	47.19
Private pit latrine	19.91
Out in the open	19.48
Use relatives toilet	5.63
Common <i>kuccha</i> toilet for two- three houses	2.60

Source: Field Work, Phuguri Tea Estate, 2000

Even while at work the workers face this problem. Those working in the field go out in the open. Women factory workers too defecate out in the open. Recently the management had constructed a toilet within the factory premises but it has only one common door for both the male and female workers. The latter found it inconvenient to use and therefore still go out in the open. They have requested the manager to make a separate door for them. We have already seen how lack of proper sanitation was directly linked to the high prevalence of hookworm in the tea plantations for which sanitary measures and treatment of thymol was administered annually. Hookworm prevalence is high in the plantation. Leaches are found especially around the *kholcha* during the monsoons and children are quite prone to such parasites as they are usually barefoot.

Most of the workers do not have *pucca* bathrooms, so they bathe in the *dhara* (spring). A few use their relatives' bathrooms for bathing purposes. There are about 5-6 *dharas* in this area. The area being divided, as mentioned earlier, has at least one *dhara* in each area. *Dhara* is mainly used for bathing and washing. They even fetch water for cooking and drinking purposes. There is also a river below the ridge, where most women go to bathe and wash their clothes on Sundays, which is their holiday. A proper bath, according to many workers who do not have private bathrooms is usually taken on Sundays, the day they get *chutti* (holiday). During winters they use warm water for their children but in order to heat the water, firewood is essential for them. Household work of fetching water, collecting firewood, washing clothes and utensils, bathing their children and cooking meals mainly rest on the woman workers. Only on Sundays the women have some time for themselves and to visit friends, relatives and even walk down to watch a football match!

Drinking Water, Electricity, Cooking Fuel

Drinking Water

The main source of drinking water in the hills is the *dhara* or the natural spring water. There are a number of *धारas* in Phuguri; Hitti, Baas Ghari, Kothidhura, Gaheri and Amardhap *धारas*. Water is scarce during the dry season beginning December till April. At times they even have to queue up for long hours. Some workers start queuing up from 3 a.m. and some wait up to 11 p.m. in the night. Since the area is hilly, it needs strength to carry water uphill. Some like Sita Singar, a widow, who works as a plucker, and has children studying, hires a person to carry water. It is especially difficult for those who do not have a helping hand in the house.

The problem in Phuguri is the source of water is much below the *gaon* (main village) at a place called Subetang, which has two streams. There is a need felt by them that this river water could be pumped at the village. In monsoons there is plenty and in winters it dries up. It adds to the burden of workers. Houses that can afford to fix pipes and draw water from the tanks do not suffer so much. In Chandura a number of houses have joined together and solved the problem. Some openly told me that they at times resort to stealing water from their neighbour's pipe! During dry season in the months of *Chait-Baishakh* (March-May), the workers residing in Chandhura go to Toklang to fetch water. It takes them one hour to walk both ways on foot. The following table shows the type of water supply facility that the workers in each category have in Phuguri.

Table No: 5.21

Type of Water Supply Facility across Different Work Categories

Work Category	Percentage of Workers' who use		
	<i>Private tap</i>	<i>Dhara</i>	<i>Water Tank</i>
Daily-rated <i>marad</i> and <i>aurat</i> n=188	39.36	60.12	10.53
Sub-staff (male and female) n=32	59.38	34.38	6.25
Staff (male and female) n=11	54.55	45.45	----

Source: Field Work, Phuguri Tea Estate, 2000

The above table shows that private taps were used more by sub-staff than others. Use of *dharas* for drinking water purposes was higher even among the staff but within which the office staff had mainly private taps while those in the technical department were dependent on the *dharas*. But overall the daily rated workers *dharas* are the only source of water.

The *dhara* water is fresh and is cold. Earlier, according to some workers, the *dhara* water of Kothidhura was contaminated with chemicals used for spraying. This area was later cemented. *Dhara* water being fresh most of the workers drink it without boiling. Water in the higher altitude is 'hard water', which has high mineral content and is harmful for drinking.

Electricity

In order to apply for electricity connection a sum of Rs. 770 has to be paid along with the application form after which there is an additional expense of Rs. 300. Most of the workers are unable to afford such an amount. Certain houses draw a wire from their neighbour's or relatives place and pay them a certain amount in order to avoid the expenses of a new connection. Sita Singar is a single earner. She cannot afford the connection therefore she has drawn from her neighbour's house and uses a bulb to light the entire house. Some households pay Rs. 240- 265, some Rs. 420 for three months for electricity. Sanchita Pradhan says, "Earlier in 1988-1989, the electricity bill would amount to only Rs. 50-55 but now it is Rs. 177 for three months. For cable connection for T. V. we pay Rs. 70 monthly."¹²⁰ In Phuguri, Vikas Chhetri's family has a dish antenna and provides to the houses cable connection at Rs. 70 per month. This is also an important source of his family's income.

The following table gives the break up of houses with electricity.

Table No: 5.22
Title: Percentage of Workers Houses with Electricity

Work Category	Percentage of workers' houses with electricity	
	Yes	No
Daily-rated <i>marad</i> and <i>aurat</i> n=188	73.94	26.06
Sub-staff (male and female) n=32	68.75	31.25
Staff (male and female) n=11	100	---

Source: Field Work, Phuguri Tea Estate , 2000

¹²⁰ Interview with Sanchita Pradhan, op.cit.

There is a considerable percentage of the workers whose houses are not electrified like the sub-staff who are mainly from Chandhura. 75.32% of the workers' houses have electricity and 24.68% houses do not have electricity. In Chandhura, the area is yet to be electrified by the Darjeeling Gorkha Hill Council (DGHC). It was said that by January-February 2002, the area would be completely electrified. Most of the families there use batteries that costs between Rs. 500-Rs. 1600. They also have to spend Rs. 45 for recharging it every month.

Cooking Fuel

In Phuguri the cooking fuel commonly used is firewood. The management provides the workers a sum of Rs. 180 for 8 quintals of firewood per annum, which is given only at the end of the year. Earlier the labourers got money for 10 quintals of firewood annually; the *dafadars* got for 20 quintals but now get only for 15 quintals while the technical staff gets Rs. 480 for 12 quintal of firewood annually. The office staff gets 10 gas cylinders annually @ Rs. 190 per cylinder.

Most of the workers virtually end up buying firewood. It costs them Rs. 700 per *thack* (a pile) of firewood. A *thack* of firewood is roughly 5 feet in height and 4 feet in width. A *thack* lasts a family of four for about 3-4 months. Some families buy four *thack* of firewood annually. Availability of firewood has increasingly become difficult due to large-scale deforestation in this region. Some households buy firewood from the nearby forest areas of Kharibari, Soureni, Ghayabari and other areas. According to Saran Tamang, "before 1990 the company provided the workers with firewood from areas like Ram jungle, Bahun Pokhari, and Dudhia jungle. These areas are all close to Phuguri. At present firewood from Mechi, Chandhura, Dhuseni Palangbari, is fetched at Rs. 600 per *thack*".¹²¹

The workers who live in Chandhura collect firewood by crossing the Mechi River, which is on the border between India and Nepal. They leave at around 7 a.m. and return only at 1 p.m. The people do have some cultivable land locally called *bhasme* from where they derive their extra income. Some grow vegetables like squash, ginger, *kucho* (broomsticks) and cardamom. Since there is some forest cover too, the people do not face difficulties in collecting firewood.

¹²¹ Interview with Saran Tamang, on 26th October, 2000, Phuguri Tea Estate

We manage with firewood only which we gather ourselves. In one year we use two *thacks* of firewood. During the rainy season firewood is scarce says one worker. Asha Singar, a female worker says, "We have to steal firewood as there is no other option. In the *kaman* during the *huido* (winter season) when they are pruning the bushes, we collect the cuttings of the bushes that are thrown around them. We heard that they are going to reduce the money they give us for firewood."¹²²

The workers mainly resort to gathering twigs locally called *jhikra*, which lie around the tea bushes after pruning. Often women and children steal from the *melo* and are rebuked by the *kamdaris*. They carry *jhikra* in their *dokos* up and down the hills. Earlier there was a lot of misuse of electricity with the surreptitious use of the electric heater. All this was done illegally until it came to the notice of the management and electricity board. Kerosene is rarely used. It is expensive costing them Rs. 9 per litre at the control shops and in the open market it is Rs. 11. The following table gives the percentage break-up of the various types of cooking fuel used by workers of different categories.

Table No: 5.23 a.

Title: Types of Cooking Fuel used by the Workers

Work Category	Percentage of workers using different types of Cooking Fuel				
	Gas	Gas and Firewood	Gas, Kerosene and Firewood	Gas and Heater	Gas and Kerosene
Daily-rated <i>marad</i> and <i>aurat</i> n=188	2.66	20.74	5.85	0.53	3.72
Sub-staff (male and female) n=32	6.25	28.13	6.25	-	6.25
Staff (male and female) n=11	45.45	36.36	18.18	-	-

Source: Field Work, Phuguri Tea Estate, 2000

¹²² Interview with Asha Singar, on 16th October, 2000, Phuguri Tea Estate

Table No: 5.23 b.

Work Category	Percentage of workers using different types of Cooking Fuel					
	<i>Kerosene</i>	<i>Kerosene and Firewood</i>	<i>Kerosene, Firewood and Heater</i>	<i>Kerosene and Coal</i>	<i>Firewood</i>	<i>Firewood and Heater</i>
Daily-rated <i>marad</i> and <i>aurat</i> n=188	1.06	18.09	1.06	-	44.15	1.60
Sub-staff (male and female) n=32	-	18.75	-	3.13	31.25	-
Staff (male and female) n=11	-	-	-	-	-	-

Source: *Field Work, Phuguri Tea Estate, 2000*

Firewood is used mostly by the daily-rated workers whereas the sub-staff use both gas cylinder and firewood. It is only the staff who use gas cylinders only. Workers living conditions are a clear reflection of their total income. During winter earnings are relatively less and expenses go up. They need fuel to heat drinking water, warm water for bath, warming cooked food. But this is a luxury for them as there is less money to buy fuel. The meagre earnings and fringe benefits force workers force to live life at a level that Sarkar (in Lama and Sarkar op. cit.) terms as 'survival threshold'.

Wages, dearness allowance, food and firewood subsidies, income of other members in the family make their total income. One can also add social welfare benefits e.g. educational scholarships by Tea Board, medical, sickness and maternity benefits, rent-free housing etc. Sarkar stresses that the sum total family earnings derived from all these components enable the

tea plantation workers and their dependents to live a life just above the subsistence level i.e. they are on the survival threshold (ibid: 477).

The other term that he explains is the 'optimising level'. At this level "efforts are made in the household to optimise the living standard" (ibid). The income goes up with annual bonus of all the workers in the family. Income from agricultural holding and incentives earned at times also enhance their income. Sarkar confirms that total family earnings are based on the factors mentioned above. These endogenous factors along with the price level as an exogenous factor determine their living standard.

Income, Expenditure Indebtedness and Coping Mechanisms

Workers' diet and living conditions depend upon total income of the household and the number of dependents in the family. It is very difficult for a worker earning as low as Rs. 700 to manage his or her family. Only some families have two earning members in the tea garden, while a few derive their income through other sources. With increasing consumerism and growing demands of children, workers are helpless. Earlier loans were taken from the *mahajans* and *sahus* (businessmen) at exorbitant interest rates which the simple uneducated workers could not calculate. This process is going on even in Phuguri Tea Estate by being indebted mainly to the shopkeeper.

Workers Extra Household Income

The extra household income of the workers can be categorised as follows:

- i. Working in the tea garden
- ii. Working as *thika bigha* i.e. seasonal employment as carpenters, blacksmiths etc.
- iii. Teaching in private and public schools
- iv. Growing cash crops like ginger, cardamom, oranges, broom sticks, and vegetables like *iskush* (squash) etc.
- v. Selling *jaar*, *rakshi*, milk and meat
- vi. Running small grocery or provisional stores

The table below shows the amount of extra household income that workers of different categories have.

Table No: 5.24

Distribution of workers in relation to their extra household income

Work Category	Percentage of workers with Monthly Household Income (excluding the workers own income) in Rupees								
	No income	<1000	1000-2000	2000-3000	3000-4000	4000-5000	5000-6000	6000-7000	7000+
Daily-rated <i>marad</i> (male) n=76	39.47	36.84	15.59	1.32	1.32	1.32	2.63	-	-
Daily-rated <i>aurat</i> (female) n=112	20.54	31.25	33.93	5.36	2.68	4.46	0.89	0.89	-
Sub-staff (male) n=28	32.14	42.86	14.29	7.14	-	-	3.57	-	-
Sub-staff (female) n=4	50.00	-	25.00	-	-	-	25.00	-	-
Staff (male) n=9	66.67	-	-	-	-	-	33.33	-	-
Staff (female) n=2	-	-	-	-	-	-	-	-	100.00
Total n=231	29.0	31.6	24.24	4.76	1.73	2.60	3.03	0.43	0.87

Source: Field Work, Phuguri Tea Estate, 2000

From the above table the highest percentage is among the less than Rs. 1000 extra income-group with 31.6%. Within this 80% of the workers extra income comes from working in Phuguri T.E as daily-rated workers with a monthly income of Rs. 700-750. The rest earn from working as *thika bigha*. Second largest percentage of workers (29%) has no extra income. So the

burden is heaviest on these groups of workers. And almost a fourth of the total workers have extra earnings between Rs. 1000-2000 per month. This is mainly derived from selling vegetables, cash crops, profits from shops etc. 13.42% of the workers have an extra household income of Rs.3000. Income above Rs. 6000 are from those families whose members work as school teachers. Thus there are some exceptions like Kumari Khati, a daily rated worker and Tara Sinchewry, a Provident Fund clerk whose husbands work as government school teachers and therefore have a higher total income.

Land as a Source of Income

In the last three categories of extra household income, only 28 i.e. 12.12% of the workers' families have such form of extra earnings. Their income varies from as low as Rs. 280 to around Rs. 25,000 per annum. Most of the families have either a small piece of land in front of their quarters or a sizeable amount of cultivable land to grow some seasonal vegetables like beans, peas, squash, tuberous roots, ginger, oranges, cardamom, *kucho* (broom) etc. Workers like Usha Tamang have a small plot of land where she can grow only leafy vegetables which too gets stolen during the night!

In Phuguri some families own land called *bhasme*.¹²³ Cash crops like cardamom, ginger, oranges, broomsticks etc and vegetables like *iskush* are grown. The workers who live in Chandhura, which is geographically located between Phuguri and Soureni tea estates, mainly own such cultivable land and also derive extra income from such cultivation. Their annual earnings vary from household to household. But for some like Chandra Pradhan, the earnings are as low as Rs. 280 per annum by selling broomsticks @ RS 7 per kg. They earn between Rs. 3000- Rs. 6500 per annum from the sale of cardamom and oranges.

Some families are in business. They sell meat, milk apart from cash crops and earn as high as Rs. 15,000-Rs. 20,000 per annum. Salim Khawas rears 2-3 pigs, sells about 200 kilograms of pork, and annually earns Rs. 9,000- Rs. 10,000. He owns about one acre of land, employs labourers, to grow ginger and broom sticks and earns about Rs. 5000- Rs. 6000 more in a year.

¹²³ Jungle clearance and where shifting cultivation is mainly practised. These like *khas mahal* are government lands initially given to settlers who pay a certain amount of tax.

Premika Thapa's family has *bhasme* land in Chandhura. They have employed men on the basis of *adiya* system (sharecropping) for cultivating ginger. They get an annual output of 16-17 quintals. Her family also has a shop the earnings from which are Rs. 2000 per month and her son teaches in a private school and her sister works as a plucker. Rajiv Khawas lives in Chandhura, has enough land to grow ginger, cardamom and squash. His gain is almost Rs. 10,000, earns Rs. 500-Rs. 600 per month by selling milk. Kushal Khawas's family has about 2 acres of cultivable land. His annual earnings from ginger, broomsticks and vegetables are Rs. 4000, Rs. 4000, and Rs. 6000 respectively. Also Raj Kumar Ghalay, earns around Rs. 14,000-Rs. 15,000 per annum from oranges and Rs. 8000 from selling one and half to two quintals of cardamom. But the size or the percentage of workers having such cultivable land is considerably less. For most of them it is a joint property where the earnings get divided or are either used for the overall expenditure of the family. In the case of the women workers the percentage having some area of cultivable land is only 23.58% and among the men it is 32.8%. Broomsticks sell @ Rs. 7 per kg, milk-Rs. 10 per litre, ginger-Rs. 22 per kg, cardamom at Rs. 180-190 while oranges are Rs 200 per quintal.

Another source of income is by selling *jaar* and *rakshi*. The women workers are mainly involved in selling it. It is sold at Rs. 10 per litre in the village. As we have already seen that the consumption of these are very high especially in winter. In Phuguri it was observed and from talking to the senior residents that the Tamang women were mainly engaged in preparing and selling these local drinks. The lower caste families are not in this business. Tamangs and other higher castes groups will not purchase drinks from these lower castes. The latter instead buy and drink from these Tamang households. The concept of purity and pollution still exists. It is either due to lack of resources or being stigmatised that the lower castes do not associate in this occupation. Earnings for them are limited to blacksmithy, carpentry and *thika bigha*. A certain degree of commensality is observed among this tea garden community.

Our earlier study has exemplified the triple burden of work that the women workers face and the two tables on *badli* clearly show that women take up employment more than the male members for fear of losing a steady income and also the rate at which women work during the peak season to earn the extra leaf price (e. l. p.).¹²⁴ It does not mean that those who have no extra household income pluck the maximum because to pluck more, requires more energy when the women are already exhausted working during the

¹²⁴ See tables no. 5.6, p 10 and 5.12 p 23.

monsoon. The following table shows the relation between the workers household income and the number of kilograms of leaves plucked during the overtime period.

Table No: 5.25

Distribution of workers in relation to their income and the average number of kilograms of leaves they pluck during overtime

Work Category	Total Household Income (excluding the workers own income) in Rs.							
	No income	0-1000	1000-2000	2000-3000	3000-4000	4000-5000	5000-6000	6000+
Average number of kilograms of tea leaves plucked during overtime by the women workers								
0-5	-	1	2	1	-	-	-	-
6-10	5	6	4	2	1	2	-	1
11-15	9	8	7	1	1	1	1	-
16-20	3	8	5	1	-	1	-	-
21-25	1	6	10	-	-	-	-	-
26-30	0	3	3	-	-	-	-	-
31-35	2	2	-	-	-	-	-	-

Source: Field Work, Phuguri Tea Estate, 2000

Workers are unable to pluck more as they get exhausted once their long working hours are over. The manner in which their overtime rate is determined clearly reflects the rate at which these workers are exploited. The pluckers are paid only Rs. 0.50 for each kilogram of leaves plucked beyond six kilograms during the stipulated working hours but during overtime i.e. after eight hours of work they are paid Rs. 3 per kilogram. Only those who are 'physically' capable can pluck the highest.

In Phuguri Tea Estate, during winter (*huido*) or the dry season there is no form of extra earnings. The tasks in the garden entail only pruning, hoeing etc. There are no overtime tasks unlike the peak season when the workers get extra money. For women, winter is a period of slack season and a large number of families solely depend on their monthly wages of Rs. 700 only. Unlike the male workers who earn extra money by engaging in jobs like whitewashing the houses, constructing walls, running errands for some better-off families, patron-client relationship persists in Phuguri. Favours,

loans, help during ill health, work like cultivating, painting and construction of houses, driving their personal vehicles and various small errands are common. Women too conduct small favours like doing some household chores in few of the well-established houses in Phuguri.

Another increasing trend is the migration of youngsters for jobs such as domestic work, housekeeping, to learn driving and then work in other areas. About 13.4% of the workers have some family member working outside Phuguri in nearby places like Mirik, Siliguri and far-off cities like Delhi, Gujarat and Pune. Their earnings vary from Rs.1000-Rs. 5000. Only a few manage to send some money home once every 2-3 months. In the hill areas, there is an increasing trend of middlemen recruiting women, especially to work as maids on a contractual basis. Lack of alternative employment and resources have forced these people to migrate. Certain psychological factors with increasing consumerism and the stagnation in the tea garden work have made the youngsters migrate to seek greener pasture.

When people talk about household expenditure they mean only the normal day to day needs and exclude festivals, marriage ceremonies, period of illness where they mainly resort to taking or buying on credit or by taking loans. Such extra expenditure is not included in the total household expenditure. Thus average household income is greater in all categories as compared to the average household expenditure as shown in the following table.

Table No: 5.26

Workers Average monthly Income and Expenditure

Work Category	Average Monthly Income (in rupees)	Average Monthly Expenditure (in rupees)
Daily Rated worker (male and female)	1799.323	955.585
Sub-staff (male and female)	2369.719	1192.188
Staff (male and female)	6686.818	1945.455

Source: Field Work, Phuguri Tea Estate, 2000

Ashok Ghalay, a *marad*, explains that the monthly wages that he makes are not enough to look after the household expenses. It is only due to their extra earnings of Rs. 2000- Rs. 2500 per annum by selling oranges from his *bari* i. e. private cultivable plot that he is able to meet the expenses. Roughly, for groceries he spends Rs. 600, cable- Rs. 70 for milk- Rs. 70 monthly.

Visit to the faith healers and visits by relatives and friends become expensive for the workers in their daily lives. Educating children in private schools are becoming very costly. A person spends for a child's private education Rs. 40 on stockings, Rs. 160-170 for a sweater, Rs. 5 on ribbon, dot pen, Rs. 15-20 on notebooks, Rs. 150-160 for shoes, and for annual admission fee Rs. 90 respectively. All such expenses force the workers to either earn more or to be entrapped into long-term borrowings.

A study conducted by the Tea Board in 1963 on the living conditions of the 324 labour families of plantation workers of Darjeeling hills shows the level and type of indebtedness among the workers through the following table. (Tea Board: Survey of the Living Conditions of Tea Plantation Labour in Darjeeling Hills. Calcutta. 1963)

This study shows that 140 families out of 324 families i.e. 43.21% are indebted. Out of which 61 got involved into debt due to the reason of performance of religious or social rites such as pujas, marriages or funeral. This was followed by loans taken due to sickness. The most common source of taking loan was from the shopkeeper and the labourers became indebted to them by purchasing on credit basis. The shopkeeper sometimes 'charged interest but most often instead of charging interest he sold the article at a higher price'. For large loans the workers preferred to approach their relatives or co-workers, 'perhaps because loans from such sources were generally obtained free of interest' (Tea Board 1963).

On inquiring the *modi* said there is a high degree of buying on credit among the workers in Phuguri. There are seven shops on the main road itself. Two in Kothidhura, four in *Pallo Gaon*, one in village number 2. All these shops are localized and apart from the Modis who are originally from Bihar the rest are run by the locals themselves. Mahendra Shah, owns a shop named '*Kirana* (General) Store' at Kothidhura for 30 years, says that people mostly buy on credit. About 10-15 houses buy from his shop and the amount

of credit ranges from Rs. 1000- Rs. 10,000. A person from Singbulli Tea Estate owes him a sum of Rs. 10,000. He persuades the ones with larger amounts to clear their debts but they do not listen. He himself owes a *Mahajan* (money lender) in Siliguri a sum of Rs. one lakh. "My daughter is a heart patient. The treatment is expensive. It is very difficult to manage. Maybe I'll leave this place sometime, soon" says he.¹²⁵

The *modi* for his shop purchases everything from Purana bazaar in Siliguri on a monthly basis. His shop has items ranging from rice, spices, biscuits, soaps, oils, slippers, books, copies, face creams and so on. Earlier his father would sell fried eatables, groundnuts etc. His hometown is in Muzzafarpur, Bihar. He has three children. He doesn't wish to stay here anymore. He sees no future for his children in the tea gardens.

The afore-mentioned instances of doing business on credit were common with Mohan Bharati, Alka Rai and among the other shop owners of Phuguri. Most of the workers owe money to these shop owners. According to Upendra Darzi, a tea maker, whose is the sole earner of his house says, "every month around Rs. 150-Rs. 200 is always indebted in the shop. Our earnings are so low one has to buy on credit."¹²⁶

The main road of Phuguri connecting Siliguri and Mirik has a number of shops. There is a chemist, hardware and a ration shop run by the same person, D. Lama. There is another shop run by the Khapangis; two smaller shops are around the same area. Another shop between the factory and Kothidhura is that of the Bharatis. This family even has taken the contract of providing subsidized rice and wheat to the plantation workers. Also their parents run a private primary school within the garden.

The workers of Phuguri are reeling in the debts of such shop owners. Out of the 231 workers interviewed almost 100% of the workers owe money. The workers were reluctant to open up. Most of them were only willing to concede that their debts were limited to the nearby shopkeepers. Prasan Tamang, owes Khapangi's shop Rs. 450- Rs. 500 every fortnight. Roshan Pradhan deposits Rs. 250-Rs. 300 at Pawan's shop fortnightly. On the process he is just left with Rs. 50 from his wages. I.K. Rana's dues between Rs. 150 -

¹²⁵ Interview with Mahendra Shah 28th September 2000, Phuguri Tea Estate

¹²⁶ Interview with Upendra Darzi 25th September 2000, Phuguri Tea Estate

Rs. 200 are always there in the shop from where he buys household items. One worker confides that he mostly buys medicines on credit.

A small *haat* (open market) is held outside the factory premises every fortnight on Fridays. The workers on this day receive their wages, which is surprisingly termed *kharcha*, which actually means to spend! Most of the sellers are Nepali women from the *basti* (village) and there are a few *Madesias*, or plainsmen who are mainly from Bihar. Interestingly, this *haat* holds a number of items. The Nepali women mostly get vegetables like *raya ko sag*, *chepte* (flat) beans, turmeric, groundnuts, *supari*, *churpi* (made out of yak's milk), *beedi* packets and so on. The *Madasias* sells sweaters, children's outfits, bed and pillow covers, hankies, accessories for women like *bindies*, nail polish, vermilion, hairpins, earrings, creams and various other items. They also sell biscuits, dry chillies, garlic, and chilli powder and other spices.

A *nai* (barber) again a plainsman visits this *haat*. There are around twelve-fifteen people who come and set up this *haat*. Eventually once the workers come out of the office after getting their wages, they get caught up in this *haat* and end up spending most of their money. Especially for women it becomes difficult to resist all these various attractions and the *madesias* offer credit.

To quote Chelimaya Khati, "Out of Rs. 380 that I get, by the time I reach the house I am hardly left with fifty rupees! All this happens since I have to pay the *modi* (local shop from where most of the workers buy their household items) for all the fortnightly purchases. In fact I always owe to him Rs. 200-Rs. 250 which is written in his *khata* (notebook). Also as I have a black and white T.V., I find the cable guy waiting for me in front of my house to take the cable rent! We pay monthly Rs. 60 for the cable connection."¹²⁷ Sita Singar from her fortnightly wages spends Rs. 100 on *ghummori*, Rs. 200 on *modi* and Rs. 20 on vegetables respectively. She says, "All the dues keep pending."¹²⁸ Majority of the workers earnings are spent on purchase of food items. Also money is spent on *sarahaya*, which means support to the bereaved family or for marriage within the *samaj*. Rupees 20-30 along with ½ kg of sugar are given to families especially the Chettri/Bahun caste. For some other families *rakshi* or rum is also given as help especially during marriage.

¹²⁷ Interview with Chelimaya Khati 24th October 2000, Phuguri Tea Estate

¹²⁸ Interview with Sita Singar 24th November 2000, Phuguri Tea Estate

As we shall see in the section on *samaj*, as a social support, has only added to their expenditure.

Despite their limited resources they strive to give their families the best that they can. It is around 20th-22nd September that the workers get their bonus which depends upon the number of days worked. It amounts to around Rs. 2000- Rs. 2400. They spend this money in clearing their debts, purchasing clothes for their children, household necessities, festivals etc. This year (2000) they got their bonus on 19th September. Nirmala Puri got a bonus of Rs. 1860 but used this money to clear all her debts. *Bhara wala* (one who sells utensils/vessels), *seerak wala* (one who sells quilts) come around this time to clear their dues. The *madisia* (plainsman) comes to sell quilts. It costs around Rs. 600 for each while in the plains it is only Rs. 250. She further says, "*seerak uurera, suteko pani hudaina*" (the quilt gets spoilt, even before sleeping properly). Manoj Thapa, has studied till high school is a *marad* and a trade union member says, "Minimum earnings needed is Rs 3000 per month."¹²⁹

Low wages, lack of extra earnings compel the workers to seek other means to cope with crisis during sickness, social ceremonies and for their own survival. To face such crises workers formed social support systems called the *Samaj* and through chit fund. The other formal arrangement organised by the workers themselves is the trade union organisation. These are some of the aspects dealt in the following sections.

Coping with Economic Insecurity

According to Jean Dreze and Amartya Sen (1991), there are two types of social security a) protective b) promotive. "Protective refers to protection of living standards from serious decline for e.g. by preventing famines and by promotion of these standards to permanently higher levels e.g. eliminating hunger, chronic hardship and rampant morbidity. The objective of social security as being the preventive, by social means, of very low standards of living irrespective of whether they are the results of chronic deprivation or temporary adversity. While public action at the household, community and state level is to remove or reduce deprivation and vulnerability. It involves a)

¹²⁹ Interview with Manoj Thapa, op.cit.

for the public and b) by the public which can be further divided into a) formal and b) informal. It is because of the recognition of the important fact that the very idea of poverty has got associated with a shortfall of income rather than with a failure to have the ability to achieve certain basic functioning e. g. being adequately nourished, minimally sheltered etc (Dreze & Sen 1991: 9).

In the case of Phuguri, all the fringe benefits provided by the management mainly medical, food subsidy, and others can be included within the formal category. Social security provided by the *Samaj* or organizations like the *Bada Samaj* where all the workers are its members and *ghummori* or chit fund can be included under the informal category. There are numerous other *Samaj* which are based on castes, like *Kami Samaj*, *Newar Samaj*, *Mangar Samaj*, *Tamang Samaj*, *Singar Samaj* etc. The Hindu caste system is deeply rooted in the Nepali society. These organizations are based strictly on this caste hierarchy. Likewise there are *Samaj* based on locality, religion etc. for example, *Bhai Samaj*, *Gaon Samaj* and *Bodh Samaj*. The informal safety nets include kinship networks, the patron-client relationship, dependence on relatives, friends etc. Family and kinship networks help in building such social security networks within the plantation. In Phuguri Tea Estate the caste members too have their own *Samaj*. One of the elder members' acts as the head and in the monthly meetings decisions are taken jointly. These *Samaj* act as safety nets for the workers during marriages, deaths, and severe illness and provide small interest-free loans from the monthly fee collected from its members. They are offered loans up to Rs. 5000.

The *Bada Samaj* in Phuguri has the plantation workers as its members. From their wages and subsidised food grains a monthly sum of Rs. 8 and half kilogram each of wheat and rice are fortnightly deducted, irrespective of their caste background. It helps them during marriage and death by providing 50 kilograms of rice, 50 kilograms of wheat, and a sum of Rs. 400, utensils, benches etc. It is customary among the Nepali society in the Darjeeling hills that during *marau* (death) and *beah* (marriage) the entire community comes to help i.e. *sagau* to the concerned family.

Around 18-19 families of the Tamangs have formed their own *samaj* called the *Dukh Niwarak Sangh* (an organization that takes care of their hardships). Each house contributes Rs. 30 during crisis. This is being practiced for the past six years. When the garden was established the

settlement was localized in a manner where majority of the Tamangs and Kamis lived within their own groups and thus they cooperated during family crises. It was the Kami community, which started the concept of *Samaj* as a social support in Phuguri and when this became successful, other groups followed suit. There are 48 houses belonging to the Kami or the Biswakarma *Samaj*. The members of this *Samaj* pay a monthly fee of Rs. 20 from each house. This *Samaj* even provides loans to its members. For example Muna and Radhika Lohar, received Rs. 400 and Rs. 500 respectively from the *Samaj* for medical expenditure. During marriages also the *Samaj* provides a loan of Rs. 3000 of which Rs. 400 is given as *choot* i.e. discount.

While the Pradhan or the Newar *Samaj* has around 33 families and they collect Rs. 30 each during a death in the family. According to Tara Subba on all her three daughters' marriages, each member gave Rs. 50 and 1/2 kilogram of sugar. She collected Rs. 1100 in their marriages. When there is death in the family each member contributes Rs. 40 and 1/2 kilogram of sugar. According to Bishnu Pradhan there are two Newari *Samajs*, one the Phuguri Newari Sangathan and the other the Soureni Newari *Sangathan*. Rs. 20 and Rs. 10 are membership fees per month. The former is only 4 months old.

Another body called the Jan Sahayak Samiti gives the bereaved family a sum of Rs. 300 and 25 kilogram of rice and 50 kilogram of wheat and some utensils. While for a marriage ceremony a sum of Rs. 400 and 25 kilogram of rice and 50 kilogram of wheat is given. The members can take these facilities only once a year. Members of this and the *Bada Samaj* contribute a same amount of Rs. 8 per month. All these amounts are directly deducted from the workers wages in the office itself. Triveni *Samaj* too provides a loan of Rs. 3000 of which only Rs. 2600 is to be returned. This *Samaj* provides utensils, shade cloth, and chairs during *sagau* for use only.

There are also other *Samaj* like the Singar *Samaj* and the Mangar *Samaj*. There are 38 houses belonging to the Mangar *Samaj*. There is also a Mahila Samiti at Phuguri according to Tara Sinchewry, a clerical staff. The Bodh Sangh has a monthly membership fee of Rs. 8 and 65-66 houses are its members. Unlike other *Samaj* there are no facilities from this Sangh. There is a Sai temple at Phuguri. Most of the Nepalis in North Bengal are strong followers of Sri Satya Sai Baba of Puttarparti, Andhra Pradesh. In this temple

they have formed a Sai *Samaj* and its members contribute each month, a sum of Rs. 10 and from this collection they purchase musical instruments, *prasads*, and other items required for the temple. *Bhajans* (devotional songs) are held everyday in this temple.

In Chandura, there are no caste based *Samaj* but instead there are three *Samaja*) Shiv *Samaj* where monthly fee is Rs. 40 and b) Bhai *Samaj* is Rs. 15 c) Gaon *Samaj* the fee Rs. 20 each. The reason that there is no caste based organizations may perhaps be attributed to a negligible number of lower caste families in Chandura as compared to Phuguri where Biswakarma *Samaj* was the first such organisation to be established. The following table shows the high percentage in such *Samaj*.

Table No: 5.27

Percentage of workers' having membership of *Samaj*

Work Category	Percentage of members in Bada <i>Samaj</i>	Percentage of members of other <i>Samaj</i>
Daily Rated male and female workers n=188	96.28	84.04
Sub-Staff n=32	100	93.75
Staff n=11	100	90.90

Source: *Fieldwork, Phuguri Tea Estate , 2000*

Note: n=231

39.89% of daily rated male and female workers have not taken help from any *Samaj* either the *Bada Samaj* or any other caste based *samaj*. 12.50% of the sub-staff and 18.18% of the staff workers too have not taken any help. Such payments for social security for some workers only costs on their wages as their monthly contribution of Rs. 8 is deducted from their wages and they have to contribute varied sums to other *Samaj* too. Thus some women workers feel this contribution is a waste for them but maybe later be of help.

The *Samaj* encourages mutual corporation in time of crisis or needs. But here too caste taboos have an important bearing on the lives of the people. For instance if there is a *marau* or a *beah* in the house of a lower caste then two separate *bhancha ghar* (kitchens) and *pandal* (shade) are made, one for the higher castes and the other for the rest.

Commensality does exist among the Nepali community and is more prevalent among the higher castes. The workers still strictly observe such customs of barring entry into their kitchens, prayer rooms, common dining and so on for the lower castes. Inter-caste marriages are also strictly prohibited and in some cases especially in *bastis* (villages) social ostracism and penalty is a common. Such marriage among the Nepali community is possible through *Bhagaune pratha* (marriage by elopement). The table below reflects the number of workers who have had an inter-caste marriage.

Table No: 5.28

Workers' marital Status and level of inter-caste marriage

Work Category	Unmarried	Mangni biah (Arranged marriage)	Chori biah (Love marriage)	Similar caste	
				Yes	No
Daily Rated male workers (<i>marad</i>) n=76	22.37	9.21	60.53	40.79	35.53
Daily Rated female workers (<i>aurat</i>) n=112	7.14	11.61	81.25	65.18	27.68
Sub-Staff (male) N=28	-	10.71	89.29	64.29	35.71
Sub-Staff (female) N=4	50.00	25.0	25.0	50.0	50.0
Staff (male) N=9	-	22.22	77.78	77.78	22.22
Staff (female) N=2	-	50.0	50.0	50.0	50.0

Source: Fieldwork, Phuguri Tea Estate , 2000

The above table shows the level of inter-caste marriage among the tea plantation workers across categories of work. There is a high level of inter-

caste marriage among the workers irrespective of their work position. Among the *aurat* it is 29.8% and among the *marad* it is 45.7%. *Chori biah* is a common practice among the Nepali caste groups. Inter-caste marriages are especially conducted this way.

In Phuguri social ostracism is not practised but acceptance by the community in case the bride is of a lower caste is rare. There have been such cases in Phuguri like Subhalaxmi Ghalay who belongs to the Kami caste. Her maternal surname is Ramudamu. She eloped with Rakesh Ghalay who is a Mangar. She has been accepted by his family but not by the Mangar society. Her mother-in-law earlier did not even want to see her face. The marriage was conducted by her family and not from her husband's side. She is not allowed to enter the kitchen of a Mangar household. Rupa belongs to the Mangar *Samaj*. She eloped with a Biswakarma (a Scheduled caste). The Biswakarma *Samaj* conducted her marriage by changing her maternal surname from Thapa to Mangrati, a *jat* i.e. sub-caste of a Nepali Scheduled caste called Sarki. A Mangrati family conducted her *kanyadaan*, which means to give away one's daughter. She says, "Although there was no ceremony from her maternal home they have accepted her decision."¹³⁰ In such cases the *Samaj* comes of help to the people. This is an important social institution that the locals are dependent upon.

Commensality in the strict sense of the term is not practiced among the tea garden workers. The lower castes themselves, abstain from entering the kitchen and prayer rooms of the higher castes like the Bahuns, Chettris, Tamangs and others. Caste rigidity is greatest in the *bastis* than in the tea gardens. It can be attributed to the fact that despite caste heterogeneity there is class homogeneity. Historically, it has been seen that workers of different ethnic groups were settled in the plantations in Darjeeling hills which are still reflected by the dominance of such ethnic groups like the Rais, Mangars, Tamangs, Kamis and so on.¹³¹ Rather than caste differences it is the economic differences that presently concerns the workers. *Ghummori* or chit fund is an important form of networking that operates in Phuguri. It acts as a safety net for the workers and provides them funds whenever they need.

***Ghummori* or Chit fund**

A person joins a group of 10, 12, 25 or 42 people and contributes a sum on a fortnightly or a monthly basis. This amount varies from Rs. 50 to

¹³⁰ Interview with Subhalaxmi Ghalay 7th September 2000, Phuguri Tea Estate

¹³¹ See table no. 5.1 in p. 5.

Rs. 100. It is fortnightly as the workers receive their wages on a fortnightly basis in Phuguri. Once entire circulation is complete, depending upon the person's turn he or she receives the full amount of money once. According to Kiran Lama, such a practice of *Ghummori* has been prevalent over a long period of time. She remembers her mother playing with an amount of Rs. two. Sixteen years back she herself had played with an amount of Rs. five. The workers usually invest this money in purchasing household items like gas oven, television and to meet extra expenses during key festivals. To quote Chelimaya Khati, "my son once demanded a pair of shoes. He threatened that he would run away if he does not get it."¹³² She also used *ghummori* money to buy a colour television after selling the Black and White one, as the children were insistent for the former.

Ghummori is played during the peak season where the workers can earn extra by working overtime. For some workers it is expensive to play *Ghummori*, to make such investments of Rs. 50- Rs. 100 is difficult. This is especially so for families with a single earner. It is higher among women workers, 44.07% women play, while only 15.04% of the men invest in *Ghummori*. *Ghummori* money is mainly spent on *dasai*, buying bed, *almirah* (cupboard), and some livestock on. The following table shows the distribution of the percentage of workers across categories on savings and *ghummori*.

Table No: 5.29

Percentage of workers participating in savings and *ghummori*

Work Category	Savings	Ghummori
Daily Rated male workers (<i>marad</i>) n=76	53.94	10.52
Daily Rated female workers (<i>aurat</i>) n=112	50.0	49.10
Sub-Staff (male) N=28	78.57	10.71
Sub-Staff (female) n=4	75.0	25.0
Staff (male) n=9	100.0	22.22
Staff (female) n=2	100.0	---

Source: Field Work, Phuguri Tea Estate , 2000

¹³² Interview with Chelimaya Khati, op. cit.

The above table shows that savings were highest among the staff and the sub-staff. Among the daily-rated, the women workers mainly resort to playing *ghummori*. Managing the household rests solely on the women workers. The earlier study reflected that from the 33 women workers interviewed almost half were primary earners. Their husbands were either engaged in seasonal employment or practiced traditional occupation with no steady source of income. Besides, children's education has become costly for the workers. The school admission begins from April which is also the peak season. Consequently, around this time they require cash to pay the fees so savings are required to meet such costs. There has been a growing trend among the workers to send their children to private English medium primary schools.

There was a unanimous feeling among the workers that their children should get basic education in English medium though it is expensive for these workers. Purnima Ghalay spends annually Rs. 2500 which includes Rs. 1200 as admission fees, monthly fees-Rs. 80; books-Rs. 360 for primary level, and uniforms stitched once in two years costs her Rs. 650. Monthly fees in other private primary schools range from Rs. 65-75.

Savings in the banks are almost nil. Only retirement benefits are kept as 'fixed deposit'. The nearest bank is the State Bank of India at Soureni. One more is in Mirik. Some of the workers hold an account at the post office although they say: *khata bigarnu matai ho* (we just spoil the passbook, as there is no saving)]. Most of the workers prefer *Ghummori* as in case of emergency they can take the money. Recurring Deposit is difficult for them to maintain in the banks.

Loans

A loan from their Provident Fund Account is another source for the workers to meet unforeseen expenditure. According to the garden manager, "the workers can take a loan of 25% once any year after a period of ten years of service. The company gives its required share of 12.5 % and another 12.5% is deducted from their wages. This is a government programme; we have nothing to do with it. We simply deposit the money at the office". 21.89% of the women workers have taken loans of which 84% have taken from their Provident Fund and 3.39% from the bank. 21.24% of men have taken loans within which 91.67% from their Provident Fund and 8.33% from relatives.

Thus Provident Fund is the major source of money for the workers. The following table shows the percentage of workers accessing loans.

Table No: 5.30
Percentage of workers accessing loans

<i>Work Category</i>	<i>Loan</i>	
	<i>Yes</i>	<i>No</i>
Daily Rated male workers (<i>marad</i>) n=76	15.79	84.21
Daily Rated female workers (<i>aurat</i>) n=112	20.54	79.46
Sub-Staff (male) N=28	42.86	57.14
Sub-Staff (female) N=4	-	100
Staff (male) N=9	11.11	88.89
Staff (female) N=2	100%	-

Source: *Field Work, Phuguri Tea Estate , 2000*

The following are some of the cases of workers who have taken loans from their Provident Fund Account. Chandrakala Kami had taken a loan of Rs. 9000, spent Rs. 4000 to construct a *kuccha* kitchen and Rs. 5000 for her son's training to learn driving and auto mechanism at Sikkim. He is unemployed now. Sita Ramudamu took a loan of Rs. 3000 to get an electricity connection. For quotation it costs Rs. 1500 and for the wires and filling charges Rs. 500 roughly.

Lakpa Syangbo had taken a loan of Rs. 5000 to purchase goats but instead spent the whole amount unnecessarily. Some of the workers have taken loans for marriages and it ranges from Rs. 4000 to Rs. 10,000. Tshering Domjan had taken a loan of Rs. 15,000 for his brother's marriage. Others like Sanjana Pradhan's family took a loan of Rs. 4500 to purchase a cow. A cow costs between Rs. 8000 to 11000 depending on its breed. They have a small poultry farm too. Premika Tamang has applied for a loan of Rs. 15,000 to invest in a fixed deposit. Kamala Ramudamu, another worker relates

My son was very ill. He was suffering from an inflammation in his ear ('otitis media', *kan paktheo*). Pus was formed and it hit his head badly. His entire face was swollen up. He is a student. I didn't want his studies to be affected at any cost. He got referred to Mirik Block PHC but since I had relatives in Calcutta I took him there to P.G. Hospital (a government hospital). I took a loan of Rs. 8100 in order to meet the expenses there. I have already taken him twice to Calcutta. He is better now. The medicines are also quite expensive.¹³³

But according to the junior clerk at the office almost 90% of the workers have taken loans against their Provident Fund Account. They have taken loans for constructing and repairing of house (*kuccha, pucca or semi-pucca*) and kitchen. Marriage expenses of children or other family members are also handled through such loans. Medical expenses in the event of illness, children's education including other vocational courses like driving in Siliguri and Sikkim are some of the reasons for taking loans. A few also invest in domestic animals like goats and cows.

In Darjeeling hills, there was no form of seasonal migration as whole families had migrated to work in the plantations and other areas. Unlike other areas of mines and jute mills of Bengal, the workers would go to their villages during the harvesting season, marriages and to fulfil other responsibilities. There existed familial bonds and therefore there was a place for the workers to go in times of crises of any form. But in the context of the labouring Nepalese population the conditions were such that going back to their native land was only in some cases during the festivals of *Dasai* and *Tiwar* when younger relatives take the blessings from their elders. This was probably one of the remaining forms of linkages with their ancestry. All ties were severed way back when the entire families had moved to work in plantations and other sectors. As shown earlier it was due to economic crisis, food shortages, soaring debts, caste oppressions that led to such a large-scale movement of labour from the neighbouring border of Nepal. The border is porous where there were no laws enacted for the recruitment and movement of populations between the two regions. In fact according to the Indo-Nepal Treaty of 1950, citizens of either country can establish their business, professions and can have citizenship.

¹³³ Interview with Kamala Ramudamu 4th October 2000, Phuguri Tea Estate

Social security here does not exist in the form of income through agricultural lands at the native place but instead there are various *Samaj* that exist in Phuguri and the existence of various social relations in the plantation system. There is a strong dependence on caste members who are financially better off. Taking small loans, help for purchasing medicines, buying milk, vegetables on credit are a common feature in Phuguri. These can be termed as non-formal arrangements in a plantation social system. Bina Agarwal's (in Dreze and Sen 1990) study shows that although the inputs of all family members are critical in tiding over the troughs the burden of coping in terms of work and consumption adjustments appears to fall disproportionately on women. In this study women depend more on *ghummori* (chit fund) and therefore have to work harder to earn more. They also strongly depend on the larger social support through the *Samaj*. These *Samaj* have enabled their members to surpass various crises in everyday life. The intricacies of the various informal arrangements operating in a plantation system are not addressed in detail but on the ways they cope within a plantation society.

Therefore given the workers low wages and lack of extra income such safety nets come to their rescue. Despite such hardships these workers are cheerful and happy-go lucky. One of the workers had even commented that had it been for the plainsmen they would not have been able to survive such hardships and crisis! In Phuguri although the lives of the workers is tough they know how to live their life both in sorrow and happiness. Their coping mechanism for all kinds of unhappiness is unbelievable. Their lives as one worker puts, "we have been rolled along with the tea leaves."¹³⁴ They forget all the pain and sorrow as they celebrate their festivals of *Dasai* (*Dusshera*) and *Tiwar* (*Diwali*) with great fervour. Baburam Singar, 66, after working for 40 years received Rs. 11,000 as Gratuity and Rs. 35,000 as Provident Fund. Kala Pradhan's husband received Provident Fund of Rs. one lakh and a Gratuity of Rs. 42,000. He had worked for 33 years as a *marad* and then as a driver.

According to Birmaya Mangar, "Darjeeling town is more expensive than Siliguri. We hardly have money to go to Darjeeling." Since the worker has no savings, even a visit to Darjeeling proves expensive. There was a case of a worker, who spent his Gratuity of Rs. 10,000 by taking his entire family for a trip to Darjeeling! It is amazing to see how the workers enjoy even under such adversity. To quote an ex-assistant manager of Phuguri, "one feels very sad for them. It is amazing how they cope with their lives. These days there is a fad to

¹³⁴ Interview with Chelimaya Khati, op. cit.

celebrate children's birthdays. I wonder at times how they manage to feel so happy."¹³⁵

Future Aspirations of the Workers

For parents with children in schools, hope that they are employed elsewhere. Asha Singar says, "We have to educate our children despite the strains. We cannot depend on the *kaman* completely. Our wages are not sufficient enough to buy a week's food. After all we live in a society we have to attend marriages and mishaps too. How can we manage?"¹³⁶ Among the workers there are two strong views regarding their children's education. Some hope that their children will be better placed than them and some still strongly feel that even after educating them they have to work here only.

Despite state sponsored educational institutions like primary and higher secondary schools; there is a high drop out rate. Therefore there is a heavy loss of state expenditure on education. From the table below on education, there are a considerable percentage of school dropouts with a few specific reasons. Most common was the disinterest in study and early marriage. Apart from these other factors was that it was becoming expensive for the workers to provide education and the need to add family income by joining plantation work.

Table No: 5.31

Reasons for drop-outs among workers children

Reasons	Percentage of workers whose children were drop-outs
Disinterest in studies	12.99
Marriage	8.23
Examination failure	5.63
Illness	1.73
Bad associations	0.43

Source: *Field Work, Phuguri Tea Estate, 2000*

¹³⁵ Interview with Birmaya Mangar 4th November, 2000, Phuguri T. E.

¹³⁶ Interview with Asha Singar, op.cit.

In the case of Phuguri even the better-off families with capacity to provide higher education, it is rarely seen that their children settle down well. Reasons attributed were bad association, disinterest in studies, and a high proportion of elopement among youngsters especially during the adolescent years. All these reasons have resulted in a sizable dropout of school children among the Nepali population.

In Phuguri Tea Estate vertical mobility is restricted with a certain section of the hierarchy. Only up to the level of a *dafadar* or *kamdari* or a *chaprasi* who is the senior most among the supervisors can a worker from the level of a *marad* or *aurat* can move up. This mobility again is very much restricted for men only. Here it was for the first time that one senior women worker was given the post of a *kamdari*. She too has retired now. The women member of the HPWU and others are being assertive that there should be more posts for women *kamdaris*. As Sarkar (in Lama and Sarkar op. cit.) clearly illustrates:

Occupational and Sociological Classifications

1. Managerial
2. Supervisory-high
3. Supervisory-low
4. Routine non-manual
5. Partly skilled manual
6. Unskilled manual

He opines, "60% of the labour force are women mainly concentrated in the plantation sector concerning last three categories. For both men and women in categories 4 to 6 above have practically no vertical mobility to 3, 2 or 1. About 5% of workers engaged in 5 became workers in the manufacturing sector thereby moving up to 4. About 15% of those in 3 have gone up to 2, 25% in 2 had mobility to managerial category in 1" (ibid: 472).

Sashi Kumar Pradhan, 37, working for the past fifteen years, started working as a *marad* for the first seven years then was promoted to a temporary *chowkidaar* and after another six years he became permanent. Likewise Raj Kumar Ghalay, 40, worked as a *marad* for 16 years, as a temporary *dafadar* for four years and only then became a permanent staff. The only *chaprasi* in Phuguri Tea Estate worked as a *marad* for 12 years and

then as a *kamdari* for 19 years, and it's been only one year since he got the post of a *chaprasi*. Among the office staff members, apart from two employees, who worked earlier as a *marad*, all are directly employed.

An argument can always be made that the workers are not educated therefore they are unable to work in 'offices', as clerks etc but the root of the problem lies in the very nature of the plantation system itself where despite education as seen among some workers they had to opt for work in plantation either due to hardship or compulsion to work on *badli*. With lack of alternative employment such employment cycle continues and the proportion of dependents increases.

The workers here argue that they do not want any of the fringe benefits but instead would prefer a wage increase while the management argues that the workers are provided with subsidised ration, medical benefits etc. But then the very conditions in which they work and live are deplorable. The dispensary is not enough to take care of their needs. A larger set of issues needs to be addressed. As Rachael Kurian (1982) had argued that the management understanding of the workers 'wants' is different from the workers 'perceived needs'. This has been amply corroborated by the data on Phuguri. The inputs by the management do not address the multiple and complex needs of the workers.

An important body that is considered to be on the side of the workers is the trade union. The historical overview on the formation of trade unionism in Darjeeling shows the dominance of the Himalayan Plantation Workers Union (HPWU) with the formation of Gorkha National Liberation Front Movement (GNLF).

Trade Unionism in Phuguri Tea Estate

In the wake of the Gorkha National Liberation Front Movement (GNLF) the Himalayan Plantation Workers Union (HPWU) a wing of the GNLF was formed. In Phuguri Tea Estate it has two units, one at Chandura and the other at Phuguri. The executive body of HPWU Chandura unit comprises of President, Biren Khawas (who works as a *kamdari* in Phuguri Tea Estate), Secretary, Satish Pradhan. Other members are M.K. Pradhan, Atul Khawas, Suresh Pradhan and Bimal Pradhan. All of them meet the manager once every two to three months. They have never talked regarding the absence of a doctor

in the tea estate. In the meeting held in August, 2000 the issues discussed were mostly about repairing of houses, construction of new kitchen, latrines etc. In the meeting of December 2000 they demanded an increase in the money for firewood from Rs. 18 to Rs. 19.50 per quintal and converting *kuccha* houses into *pucca* houses.

According to Deo Bahadur Khawas (195) member of the Executive Board of HPWU, the last meeting was held on July 18th 2000. The main issues discussed were a) up-gradation from temporary to permanent posts for the *dafadars*, b) the *chowkidars* should get the facilities of a staff member, c) conversion of *kuccha* to *pucca* houses. Since last four years there has been no conversion. The management's response for up-gradation of the workers will be effective from 1st of August. But till now only four cases are upgraded.

C. B. Ghalay, 54, a member of another union, Darjeeling *Chia Kaman Majdoor* Union (DCKMU) says, "I have been working in this garden as a *marad* since 1975. Given my experience I can easily be promoted as a *kamdari*. But as I belong to another union, my case is not referred by HPWU."¹³⁷ He is a member of Darjeeling *Chia Kaman Majdoor* Union a wing of the Democratic Youth Federation of India of Communist Party of India (Marxist).

Ashok Ghising, Secretary at the HPWU Phuguri unit provided the list of annual demands of the year 2000 and what the garden has implemented.

1. Four *pucca* houses (quarters) to be constructed.
2. Two remodelling of old *pucca* houses (quarters).
3. Three kitchens to be constructed.
4. Five toilets for workers to be constructed.
5. Minor repairing of labour house as per verification of manager. The manager will decide whether it is required.
6. The extra leaf price for the worker.
7. All the remaining facilities of worker should be implemented as per previous practise.

As per the above demand chart the garden has implemented the following demands:

1. Only one *pucca* house has been completed by the management. The other three have not been completed.
2. The remodelling of two houses has been completed.

¹³⁷ Interview with C. B. Ghalay 16 October 2000, Phuguri Tea Estate

3. Three new kitchens has been constructed.
4. Five new toilets have been constructed.
5. Minor repairing of labour house has been done but according to him the workers are not satisfied.
6. In the year 2000 e. l. p. rate was Rs. 1.50 but at present the e. l. p. rate has increased up to Rs. 3.25 only up to the year 2003. Next year it will be fixed before March 2003.

Regarding implementation of other facilities the union always forces the management to implement as per previous practice.

Mohan Bharati is the Joint Secretary of the HPWU of the Phuguri wing. He says "mostly the non-workers get the portfolio as union members since this would avoid arguments and confrontations with the manager."¹³⁸ He works as a daily rated employee in Phuguri Tea Estate. He also owns a shop and has taken the contract with the management to supply subsidized food grains to the workers.

Ruma Pradhan, a trade union activist of the HPWU women's wing says,

We have a Working Committee. We meet once in a year with the management. This is around the month of April. We take forth all the problems of the labourers over the year and discuss with the management. On that day we get *chutti* (leave) after 1 p.m. Two representatives each from the pluckers, the *marad*, (male daily rated workers), factory, medical, technical etc attend the Working Committee with the President and the Secretary of the union. We take our list of demands with us. We have a dialogue with them. Some of our demands they cut off and some they don't agree. Earlier we were the ones to ask for 'lady *kamdaris*' (supervisors). This was four to five years back. I was the first one to demand and write for a female *kamdari*. We have two decks so there should be at least two women as *kamdaris*. Now we have one, Mena Tamang. She is the first woman to work as a *kamdari*. As a *kamdari*, a woman can understand the problem of the labourers, a worker can tell her problems to the *kamdari* as she assigns the tasks.

We representatives sit together and discuss whatever problems we have. The facilities that we don't have and the issues that need to be discussed are taken into consideration. We then approach the union members, the Secretary and the President with the set of grievances that we have. For example if in my house there is not a single earner and our economic conditions are really bad, then the union speaks for us. The question of doctor, medical facilities like ambulance that we have been

¹³⁸ Interview with Mohan Bharati, op. cit.

demanding for the past eight to nine years has been raised. There is only one jeep; it is not available all the time. It takes the patients to different places. At times of emergency it is very difficult for us. We have this problem for a long time. Once when my daughter was one and half year old, we had to take her to hospital as she had loose motion and vomiting (cholera) while here in the garden there was a *sutkeri* (delivery case) and they were waiting for the vehicle. Now that vehicle which we had taken took time, as we had to look for the doctor, purchase the medicines; give saline water, injections. By the time we reached here it was late. She (the expecting person) had bled profusely. We were late in saving her life. Even now I feel terrible thinking about it. Had there been a vehicle in the village then she would have been saved. We have cited such cases to the managers who came here and have always insisted for an ambulance but to no avail.

Earlier for housing we would get wood and everything else for house construction. We could decide whom to take as a contractor whether the *bagan* (garden) or others. But now they tell us to construct the house by investing ourselves, which means looking for a contractor, building materials and so on. Then a month after giving the bills the management will inspect the house and check the costs incurred and after the complete enquiry reimburse the bills.

We have been asking for a doctor. We have even written an application for it. They keep telling us that they will provide one. We had a doctor earlier. He would come from Longview Tea Estate weekly. But at times the workers would be unaware about his timings and therefore miss his visits. This was almost four five years back.¹³⁹

There are two 'decks' in plucking. From deck 1 the women representatives are Kiran Lama, Ruma Pradhan, Nirmala Pradhan and from deck 2 are Mipsang Lama, Sujala Ghatani. The male labour force is represented by Manoj Thapa, Ganga Tamang. These representatives talk to the Secretary and the President of the HPWU who in turn sits with the manager. Ruma Pradhan further adds,

"During the first flush there is a Working Committee, which sits with the management to decide upon the extra leaf price (e. l. p.). Last year we kept insisting for an e. l. p. of Rs. five, then we demanded for Rs. four and we ultimately settled for Rs. three after two days of heated arguments with the management. They always talk of losses incurred by the Company but then what about us? We are always the losers."¹⁴⁰

The management has a different response. As one of them said,

¹³⁹ Interview with Ruma Pradhan op. cit.

¹⁴⁰ Ibid.

The local people are incorporative for planting shade trees. They fell trees for firewood and don't let it grow. The political influence is high here. The political leaders want to take advantage of the management. They give false assurance to the people for their own self esteem. There are different political parties. One has to please the ruling party. There is a need to tactfully avoid other parties and issues are mainly dealt through letters with them. It's been one year since I joined this garden. This year (2000) the meeting on the Annual Demands with the union lasted for 16 hours. In a year there are around 3-4 meetings. The Director comes and we point out the problems and the expenses involved. The owner of this garden is Bagaria Steel Company with its headquarters at Calcutta. Another problem is that there is no central committee of the HPWU. We have to meet all the three units Mechi, Chandhura and Phuguri separately. Also the proper time to discuss with these unions is during the off season (winter) and not during the peak season. There should also be a third party i.e. the Darjeeling Planter's Association and the Central leader of the HPWU Darjeeling. The secretary of the DPA should be present on behalf of the tea planters' body.

Among some of the labour problems, in the month of August plucking up to 3.30 p.m. is @ 0.50 paisa per kg and overtime after 3.30 p. m. is Rs 3 per kg. We argued that there should be two weighments. Up to 3.30 p. m. the leaves should be weighed @ 0.50 paisa per kg and only the extra leaf plucked should be paid @ Rs. 3 per kg. The calculations should be separate for these particular set of tea leaves. I inquired that since the last 8-10 years they was no double weighment-only up to 4.30-5 p.m. the whole amount plucked minus six kilograms was calculated @ Rs. 3 per kg. This season the workers did the 'go slow' tactics. For the whole day they plucked only 4-5 kg though there was abundant leaf. Then we circulated a notice for a meeting and we convinced the workers to realise their mistake. The workers said that we took advantage of the season because if they were adamant then they would be the losers. The go-slow tactics lasted for a week from 7th July. Another important issue is that the company houses are occupied by the non-workers. People have to vacate."¹⁴¹

Another member says,

"The annual demands comprise of filling up of vacancies, construction or repairing of houses, latrines. The main labour problem is the housing. Depending on the profits the company spends on repairing etc. right now the company is going at par. There is nominal profit. We either send the tea for auction or sell it privately to German buyers mostly."¹⁴²

¹⁴¹ Interview with a management official, 21st December 2000, Phuguri Tea Estate.

¹⁴² Ibid.

According to Ganga Tamang, a union representative “the last meeting was held before *Dasai* (Dusserah) in the month of October to discuss a) the construction of pitch road connecting the villages through the factory b) construction of public latrines c) setting up of knitting training centre at the local library for women.”¹⁴³ Though the membership of the workers in different unions especially the HPWU is high but there is discontent among the workers regarding the performance of the unions. The workers feel that those who do not maintain lip-service are unable to get their work done. Salim Khawas says, “From outside it seems that we get various facilities but these are not enough at all for us.”¹⁴⁴ As Chelimaya Khati rightly said: “*basera bhane bhane kolepani sundaina, ubera bhane bhane hawa le urai dincha*” (if we sit and speak no one hears us, if we stand and speak, the wind blows it all).¹⁴⁵ The following table shows the level of participation of the workers in trade unions in Phuguri Tea Estate.

Table No: 5.32

Title: Percentage of Workers membership in Different Trade Unions

Work Category	HPWU	Others	None 2
Daily Rated male workers (<i>marad</i>) n=76	73.68	14.47	11.84
Daily Rated female workers (<i>aurat</i>) n=112	66.96	14.29	18.75
Sub-Staff (male) n=28	89.29	7.14	3.57
Sub-Staff (female) n=4	50.0	---	50.0

Source: *Field Work, Phuguri Tea Estate , 2000*

Note: Here others include the Darjeeling District Chia Kaman Mazdoor Union (DDCKMU under Central Indian Trade Union (CITU) and Darjeeling, Terai and Doars Chia Kaman Mazdoor Union (DTDCKMU under Communist Party of Revolutionist Marxist (CPRM)]

¹⁴³ Interview with Ganga Tamang, 15th November 2000, Phuguri T. E.

¹⁴⁴ Interview with Salim Khaws , 18th November, 2000, Phuguri Tea Estate

¹⁴⁵ Interview with Chelimaya Khati, op.cit.

Membership of the HPWU is highest among the workers since the formation of the GNLF in Darjeeling. Membership of women is also high in Phuguri Tea Estate. Women are found to be more vocal and forthcoming and their participation in the Gorkhaland movement in Darjeeling in 1987-89 bear evidence of such representation. Tea gardens were among the worst affected areas during the movement as mobilisation was easier in the tea estates. Demand for a separate statehood 'Gorkhaland' brought about solidarity among the people of the hills but conditions did not improve or change much after the formation of the Darjeeling Gorkha Hill Council (DGHC) an autonomous body formed under the chairmanship of Subhas Ghising (president of GNLF) on January 18th, 1989 (Subba: 1992). Studies on the Gorkhaland movement, ethnicity and development have been undertaken by certain scholars and much work needs to be done on the aftermath of the Gorkhaland agitation and are beyond the scope of the present study.

The following chapter will look specifically into the self reported morbidity of the workers and the differences across the work hierarchy. Morbidity and mortality data from the dispensary and the Primary Health Centre will corroborate the reported morbidity of the plantation labour of Phuguri Tea Estate. The workers health service utilisation pattern is another aspect dealt in this chapter.

CHAPTER VI

Health And Remedies In Phuguri Tea Estate

HEALTH AND REMEDIES IN PHUGURI TEA ESTATE

The previous chapter had presented data on the determinants in health status among the workers in the tea estate. It had illustrated the relationships between conditions of work, living and health of the plantation workers. Strong associations based on the workers' perceptions are hereby exemplified. Wages, lack of proper housing, poor diet and intake of cold food, chronic hunger, inclemency of the weather, are conditions that lead to a specific disease pattern. This chapter examines the pattern of diseases or common complaints of the workers, the structure of health service provisioning and its utilisation among the workers.

The health infra structural facilities for workers are also examined in this chapter. There exists a plurality of health services that ranges from home remedies, *jhānkri*, and private practitioner to services provided by the management and government. This structure of provisioning determines the health seeking behaviour of a population and any analysis on health service utilisation will depend on this structure. The treatment given in the dispensary is symptomatic while workers perceptions show various sets of conditions that cause ill-health. This chapter relies on self-reported morbidity of the workers and did not undertake any clinical assessment of the same. Whatever institutional data was available for mortality and morbidity at the health centres were used to get some insights into the disease pattern.

Self-Reported Illnesses across Categories of Workers

As our earlier chapter on working conditions has shown that there is a strong association between the working conditions and the type of health complaints among workers. It is also related to the geographical climate, terrain and income. Even the historical chapter on the conditions of work and health in plantations of Bengal and Assam have shown such associations. Through the field study we are reemphasising these relations that still persist in plantations today. The workers response to illness, patterns of seeking cure are some of the issues highlighted in this section. Seasonal complaints like diarrhoea, dysentery, fever; cold are some important outcomes of the working and living conditions as

shown in the previous chapters. The following reports from the workers interviewed further confirm the health hazards they face in the tea gardens.

Kumari Khati, a daily-rated worker says, "Seasonal fever, cough is very common during the months of June, July-August. My throat also pains a lot. During the months of March and April I suffer from vomiting and also lose my appetite."¹ To quote Milan Thapa, "During the months of April-May (*Chait-Baishak*) diarrhoea, vomiting and loose motion are very common. In the months of June-July there are mosquitoes these days. In the months of November to January we get body aches."² His wife Purnima Thapa says, "*juga* (intestinal worms) are higher in colder places like Mirik. In Phuguri it is not so high. But in ward numbers 10 and 12 that is near the *kholcha*, the infection rate is greater. Snakes of smaller size, scorpions (*bicho*) are found especially during summer in these areas".³ Chandrakala Sinchewry says, "During the months of *mansir-posh* (November-January) I get infected with intestinal worms for about 6 months."⁴ Indu Moktan, 33, reported that during the month of *sawan-bhadaw*, (July-September) she threw 200-250 worms out of her mouth. Likewise Sandhya Pradhan, 25, had the same four to five years back. She was referred to the Siliguri Hospital and was on rest for 1½ months. She now does light work only.

From among the female workers interviewed, Reena Ramudamu, 24, was very unwell during fieldwork. She suffers from acute gastric pain. She laments and says, "I feel breathless, I vomit every time. My stomach burns and white discharge is also very high. I haven't taken any medicines for white discharge. I cannot digest meat or fish."⁵ Kali Prasad *Baje*, a *jhānkri*, suggested that it is the evil spirit, which is responsible for her illness. She was extremely weak during the interview. Her husband Karun Ramudamu works as a *marad* in spraying. He had even taken her to Delhi, when he was working initially, for treatment. People blame her for her own ill-health.

Shanti Dhutraj, 50, with 18 years experience as a plucker had acute bronchitis in 1990. She had to take private treatment and was on leave for three

¹ Interview with Kumari Khati, op. cit.

² Interview with Manoj Thapa, op. cit.

³ Interview with Purnima Thapa, op. cit.

⁴ Interview with Chandrakala Sinchewry, op. cit.

⁵ Interview with Reena Ramudamu, 14th December, 2000, Phuguri T.E.

months. She consumes tobacco daily. Purnima Ghalay, 29, works as a plucker, is a tuberculosis patient. She stayed at Kurseong T. B. hospital in 1994 for a period of five months. She took medicines for three years and now is not under medication. She would earlier pluck 18-20 kg of tea leaves with overtime but after this illness she only does light work thereby reducing her income. She says, "We get drenched while working during the monsoons. It is very dangerous for our health."⁶ For extra income she now sells buffalo meat in the village though she is a Brahmin.

Leucorrhoea or 'white discharge' is the most common complaint reported by the women workers. This has important association with their improper and inadequate diet, arduous work coupled with stress and strains in their daily lives. A gynaecological study by Bang and Bang (1994), 90.4% of the 645 women surveyed affirmed that white discharge was a disease and felt that it was serious (Bang and Bang 1994: 84). The women regard Most women workers in Phuguri too confirmed the commonness of leucorrhoea.

Usha kala Thapa, 45, says, "I get white discharge almost daily".⁷ She hesitates visiting a doctor. Radhika Lohar, 40, says, "Occurrence of leucorrhoea is very high. I get dizziness and headaches too. I haven't been to a doctor for this."⁸ Jaymala Ghalay, 28, (though she is working in the garden for 17 years and has children aged 14 and 17)⁹ says, "This is very high before menstruation."¹⁰ Meena Mangar, 42, suffers from it too. Due to excessive discharge and continuous itching she suffered a lot during this rainy season. She used an applicant bought privately from Mirik. She gets dizziness, has no appetite, and eats only the afternoon meal. She says, "Only if food is good I eat during the night."¹¹ Kiran Lama, 42, too gets it with backaches, weakness and dizziness. Calf muscles pain disturbs her sleep. She is asthmatic too.

Women working for over 15-20 years earlier too suffered from chronic leucorrhoea. Saily Ghalay, 65, earlier had it and she could not even stand.

⁶ Interview with Purnima Ghalay, op. cit.

⁷ Interview with Usha Kala Thapa, 13th December, 2000, Phuguri T.E.

⁸ Interview with Radhika Lohar, 23rd December, 2000, Phuguri T.E.

⁹ There was discrepancy in the reported age of the workers especially after calculating the number of years worked and the age of children.

¹⁰ Interview with Jayamala Ghalay, op. cit.

¹¹ Interview with Meena Mangar, 22nd October, 2000, Phuguri T. E.

Kamala Mangar, 48, says the same. Earlier she had high white discharge and had to take rest for five months. She avoids food items like ginger, tea, garlic, onion, *musur dal* fearing they increase the body heat. Tara Subba, 48, says, "Earlier I had heavy white discharge and before menopause I had heavy bleeding. Now I do not suffer from bleeding. I did not go to any doctor because I feel very embarrassed".¹² Ganga Tamang, 26, until last year she too suffered from it but now she is better for she took medicines from the dispensary.

Some women have consulted the dispensary and one or two have even consulted private doctors, but such treatments rest very much on their diet and on minimizing their burden of work. Many hesitate to consult a doctor. There is no gynaecologist at the MBPHC for these women to talk frankly about their health. Another important factor could be the time constraint that they have of visiting the Mirik Block Primary Health Centre MBPHC. Unless suffering is acute these women workers seek no immediate medical care.

Thus a high percentage of such cases go unreported and without a female gynaecologist at the MBPHC, women are mainly hesitant to speak about their ailments. The pharmacist at the dispensary too confirmed such cases among women and that the best treatment according to him was traditional medicine.

Most of the women workers also complained of headache, dizziness (vertigo) and pain in their back-neck. A few have undergone eye-check ups. Some cannot afford to buy glasses and they also feel shy to wear glasses and pluck tea leaves. The health centre or the dispensary does not provide them with glasses. Thus, they end up not wearing glasses since they do not have the money to buy. Anila Tamang, 30, gets acute headaches. She says, "The doctor advised spectacles. It is difficult to wear glasses and pluck and it is also embarrassing."¹³ Likewise Sandhya Pradhan, 25, says, "My eyeballs pain when I bend down and pluck and my back aches a lot."¹⁴ Ruma Pradhan, 38, says, "My head, back and neck pains. I wore spectacles for a year."¹⁵ One worker said, "Even when we are unwell we have to work. When leaves are more we do not bother about heat or

¹² Interview with Tara Subba, 6th October, 2000, Phuguri T. E.

¹³ Interview with Anila Tamang, 22nd October, 2000, Phuguri T. E.

¹⁴ Interview with Sandhya Pradhan, 24th October, 2000, Phuguri T. E.

¹⁵ Interview with Ruma Pradhan, op. cit.

cold. *Jyan jatee chia nai hunu atyo* (the tea leaves have become as precious as our own lives).¹⁶

The factory women workers get sore throat, cough and fever. Palmo Tamang, 52, is working for the last two years. Initially for two months she was spitting brownish sputum. She gets sore throat. She has high pressure, headaches, vertigo and pain in back and neck. She feels heavy in her back-neck (*ghicchhook*). Kalyani Tamang, too has been working only since the last three years. She coughs and suffers from bronchitis. Mendho Tamang, 52, was earlier working as a plucker for 20 years and it has been four years since she is working in the factory. She says, "While sorting, due to dust, I get sore throat. It gets cured on its own."¹⁷ Muna Thapa, 35, has been working for the past 14 years suffered from jaundice in the month of October, 2000. She went to MBPHC but then later consulted a private doctor.

The male factory workers' major complaints were body aches and untimely meals. As discussed earlier untimely meals and that too cold meals were important in aggravating problems of acidity (gastritis) among these workers. Continuous work during the peak season resulted in some common complaints like body aches, fever and cold. Lack of fresh air caused suffocation and chest congestions which are symptoms of respiratory diseases like asthma, tuberculosis, and even heart problems. The sprayers, as discussed in detail in the previous chapter, suffer from nausea, breathlessness, chest pain and body aches. Three of them are tuberculosis patients.

At the supervisory level of *kamdaris*, factory *sardars*, *baidars*, etc the complaints were mainly of pain in their legs and body. This was mainly due to working on foot for a long period in the tea garden. For example both Nima Lama and Rudra Pradhan suffer from severe body aches especially due to overwork in the peak season. While Sushil Sashankar says that his legs pain during the peak season as he has to walk a lot as a *dafadar* in the field. Among the office staff complaints differed. Like Kumar Khapangi, 40, suffers from constipation. He himself says, "It is because of food habits".¹⁸ Bimal Pradhan, 34, opines a sitting

¹⁶ Fieldwork, Phuguri T. E., 2000.

¹⁷ Interview with Mendho Tamang, 25th October, 2000, Phuguri T. E.

¹⁸ Interview with Kumar Khapangi, 23rd November, 2000, Phuguri T.E.

job leads to gastritis. The pharmacist and the mid wife at the dispensary too suffer from gastritis. Madan Pradhan, 46, has liver problem. According to him it is due to alcohol consumption. He has stopped consuming now. K.B. Tamang, 54, is diabetic. These set of employees work in the office and their set of complaints differ from the large bulk of workers. The table below shows certain set of symptoms as perceived by the workers specific to their nature of work.

Table No: 6.1

Common complaints at various work categories

Work Category	Common sets of complaints
Women pluckers	Body aches, calf muscles ache, vertigo, leucorrhoea
Women factory workers	Itching, throat congestion, brownish sputum
Male factory workers	Seasonal fever, gastric pains, body aches
Male sprayers	Nausea, chest pain, shoulder pain, backaches
Supervisory staff	Back and leg aches
Office staff	Constipation, diabetes, gastritis

Source: Fieldwork, Phuguri T.E., 2000

The set of illnesses differed as one moved up the work hierarchy. The bulk of the workers complaints apart from being specific to their nature of work were body aches, headaches, fever, general weakness and lethargy. The supervisory staff complaints were mostly due to the long years of work, for example some of them have been working for 22 years and initially began as a *marad*. Their work is comparatively less arduous than that of the daily rated workers. And as we move up there is a change in the disease pattern, for example among the office staff who reported that they suffer from constipation and diabetes that are mainly due to their sedentary lifestyle. One of the office staff said, "we have to sit and do desk job, we have no form of exercise, therefore we suffer from complaints

like constipation, gastritis etc.”¹⁹ Thus we see an epidemiological polarity across classes in a plantation with the bulk of the workers suffering from some symptoms indicative of communicable diseases while chronic and non-communicable disease are suffered by the higher end of the work hierarchy (see table no. 6.1).

Therefore for the context of plantation workers given their arduous working conditions, poor food intake, their overall ill- health does not get manifested as specific diseases because they hardly get clinically diagnosed.²⁰ Therefore for them their daily complaints are more due to excessive burden of work, high nutritional deficiency. Complaints like backaches, headaches, dizziness, body aches are part of the daily lives of the workers. These get aggravated due inadequate income and food security. According to an elderly resident in Phuguri T.E., earlier in Manju T.E., Paldhura (near Tingling T.E.) there were a number of goitre cases among the locals. They had low growth and had enlarged thyroid glands (goitre) till iodised salt came in the market. In the Himalayan region goitre cases are usually common. Malley (1907) in the Darjeeling district gazetteer had stated that among other diseases goitre was prevalent in Darjeeling hills.

The self-reported morbidity of the workers gets reflected in the cases treated in the MBPHC. Reported morbidity data collected from the Mirik Block Primary Health Centre shows the seasonal trend of diseases prevalent in the Mirik valley. The following two tables give the break up of male and female patients who visited the OPD during this period.

¹⁹ Interview with the office staff, Phuguri T.E., 2000.

²⁰ A gynaecological study would maybe further reveal those diseases associated with thee specific complaints of women. There is a need for a clinical diagnosis also of other problems of vertigo, body aches, which would show a disease pattern that is not listed in the tables (Tables Nos. 6.2 and 6.3).

Table No: 6.2
Number of Male OPD patients, January -December 2002

Name of the Disease	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Diarrhoeal Diseases	6	12	11	15	23	35	44	21	26	22	25	22
Gastro Enteritis	2	2	4	10	17	36	40	13	25	18	25	16
Other Diarrhoeal Diseases	7	8	4	7	5	1	18	8	0	4	0	6
Pneumonia	0	0	0	1	2	0	0	2	1	0	1	1
Enteric Fever	0	0	0	0	0	0	0	0	0	0	0	1
Viral Hepatitis	0	0	0	0	0	0	0	1	0	0	0	0
Tuberculosis	30	31	31	18	18	17	29	40	34	24	34	27
ARI (including Influenza and excluding Pneumonia)	93	210	519	356	291	282	322	258	169	189	169	127
Chicken Pox	1	0	2	0	0	0	3	0	0	0	0	1
Dog Bite	5	2	2	1	3	0	0	2	3	2	0	2
Snake Bite	0	0	0	0	0	1	0	0	0	0	0	0
Others (Scabies, Chest Pain, Hookworm ²¹)	481	351	484	613	629	488	799	527	426	284	245	352

Source: Mirik Block Primary Health Centre, 2002

Note: Diseases where the number of patients wasnil has been removed from both the tables. These include malaria, kala azar, anthrax, STD, other animal bite, etc.

²¹ As informed by the pharmacist, MBPHC, Mirik, 2002.

Table No: 6.3
Number of Female OPD patients January -December 2002

Name of the Disease	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Diarrhoeal Diseases	3	11	10	35	23	54	52	24	12	30	37	20
Gastroenteritis (GE)	2	4	5	24	16	47	32	10	34	28	34	18
Other Diarrhoeal Diseases	7	8	7	9	8	5	6	14	3	2	3	2
Measles	0	0	0	0	2	0	0	0	0	0	0	0
Pneumonia	0	0	0	7	7	0	0	4	1	0	1	0
Enteric Fever	0	0	0	0	0	0	0	0	0	1	0	0
Tuberculosis	20	29	36	36	36	33	32	47	46	34	46	30
ARI (including Influenza and excluding Pneumonia)	86	201	133	519	451	291	315	329	251	279	251	173
Chicken Pox	0	0	0	2	0	0	1	0	0	0	0	0
Dog Bite	0	1	2	4	2	2	0	0	0	1	2	0
Others (Scabies, Chest Pain, Hookworm)	281	317	418	619	749	592	634	728	693	504	526	409

Source: Mirik Block Primary Health Centre, 2002

From the above tables it is clear that a large number of patients are in the group of 'other diseases', which according to the pharmacist at the MBPHC were scabies, chest pain and hookworm. These diseases reflect the conditions to which these people are exposed to in the tea gardens. Mirik Block encompasses a large percentage of tea gardens like Okayti, Thurbo, Murmah, Singbulli, Tingling, Soureni, Gayabaree, Pootong, Lohagar and Phuguri.

The main diseases are scabies, chest pain and hookworm. The second major group is ARI (Associated Respiratory Infections) followed by tuberculosis and gastroenteritis. ARI and tuberculosis is a clear reflection of the geographical conditions that include altitude, damp and cold climate, heavy rainfall as well as poor nutritional status and overwork. The second and fourth categories present

seasonal variation. There is a peak of gastroenteritis during the rainy season. ARI including influenza and excluding pneumonia; 'other diseases' like scabies, chest pain and hookworm; diarrhoeal diseases and tuberculosis are the highest in number. There is a clear absence of malaria, kala azar, filaria, dengue, STD, tetanus neo-natal, tetanus other than neo-natal, meningitis, encephalitis, whooping cough etc in these areas.

Sarkar's (1986) study based on a sample survey states that 2/5th of the sales of second hand clothes are concerned with plantation labourers in the hill areas. Skin disease could be related to the use of second-hand clothing. And Kar (in Bhadra and Bhadra 1997: 294) notes that the frequent use of cheaper variety of synthetic garments was also a major cause of skin disease among plantation workers in Assam. Above all the factors improper sanitation as high as 21% of the daily rated workers use the *kholcha* for defecation and take baths at the *dhara* where there is lack of privacy especially for women for bathing, washing and drying of clothes given the weather conditions and thus problems of hygiene. This can be strongly related to high prevalence of white discharge and can further lead to Urinary Tract Infection (UTI), STD and HIV AIDS.

An ILO (1987) study mentions the use of *choolah* (hearth) apart from the number of rooms, size, number of occupants, type of cooking facilities to be associated with high risk of respiratory problems. Lack of ventilation also aggravates such conditions. Workers in Phuguri too associate such illness with their work, poor housing, lack of proper food and rest. This has effectively been demonstrated in our previous chapter. Using the Report of the Survey on the Causes of Death (Rural) India (1997)²², dispensary death record book, and interviews with the workers, this section the following section looks into the causes of mortality.

²² Survey of Causes of Death (Rural) India, 1997. Annual Report, Office of the Registrar General of India, New Delhi, 1997.

Causes of Mortality

This Survey has no data on West Bengal so based on the national figures at the all-India level the top ten killer diseases of infants in rural India, 1996-97 are prematurity, pneumonia, respiratory infection of the newborn, congenital malformations, anaemia, diarrhoea of the new born followed by birth injury, tetanus neonatorum, typhoid and paratyphoid, bronchitis and asthma (Report on Causes of Death 1997:27). For children 1-4 years, the causes are pneumonia, anaemia, typhoid and paratyphoid, diarrhoea and gastroenteritis, dysentery, malaria, acute abdomen, drowning, jaundice, meningitis (ibid: 30). For 5-14 years, the causes of death are pneumonia, drowning, vehicular accidents, acute abdomen, typhoid and paratyphoid, anaemia, snake bite, diarrhoea and gastroenteritis, convulsion and dysentery (ibid: 32).

The data on the death records from 1974 to 2000 provided by the dispensary offers the extent and causes of mortality in Phuguri. This book contains a list of the causes of death, age, sex and name of the person. This mortality data was analysed and was categorised according to infant, child and adult mortality. In the last category, the age was divided into 15-45 years and 45+ age groups. Such a classification was made to distinguish the causes of deaths. As the figures were scattered a table was not drawn but instead a brief analysis of causes of death was done. Also figures for some months in between 1975-2000 were not available and in some cases the cause of death was not listed.

From the dispensary record, tuberculosis accounted for the maximum number of deaths across both males and females from the age group of 15-45 years but only till the year 1980. Among women in this age group post-natal deaths were a few along with deaths due to anaemia. Heart diseases have lately become an important cause of death especially among men of this age group. Whereas in the category of 45+ years asthma accounts for maximum number of deaths although the number of deaths over time has declined. It is followed by tuberculosis and cancer. Tuberculosis was more until 1980 but these days cancer has become more common. The top ten killer diseases among women in the reproductive age group (15-44 years) from an all India average was suicide,

tuberculosis of the lungs, cancer, heart attack, burns, anaemia, vehicular accident, acute abdomen, bronchitis and asthma, puerperium (ibid: 35).

Causes of Infant and Child Mortality in Phuguri Tea Estate

Infantile deaths were mainly due to anaemia, pneumonia, bronchitis and dysentery. The incidence of anaemia is highest due to lack of proper food and ill health of the mother during pregnancy. Moreover, the size of the stomach is small making it necessary for increased frequency of meals. But the mothers, who are themselves working in the plantations, find it impossible to take time out to feed the children so many times. In the case of children too anaemia is an important cause of death. There were three deaths due to measles. Tuberculosis was one of the causes prior to 1980. The cold weather and lack of warm clothes, poor housing and nutrition leave the children exposed making them susceptible to respiratory diseases. This is proved by the fact that many children have died due to pneumonia and bronchitis apart from tuberculosis.

From our own field interviews with women workers on infant and child mortality show a high rate of child wastage.²³ Palmo Tamang's son died at age four in 1970 within a day due to high fever. The *jhānkri* opined "*chot byatha lageko theyo hola*" (i.e. the child must have been hurt somewhere) but she feels it could be pneumonia. Anila Tamang, 30, lost her twins. They died inside the womb 24 hours before delivery. They were big in size and were stillborn, she says. She has two daughters and a son. Being a Christian she doesn't believe in family planning. Shanti Dhutraj, 30, lost her second child, a son, immediately after delivery. She was told that during delivery they used forceps and injured the head of her child. Saily Ghalay, 65, had seven sons and one daughter. One son died at 25 due to cardiac problem. Another at age three due to *jungali le bhetaera* (got caught by the evil jungle spirit) as stated by a *jhakri*. She lost another son (5) and daughter (5) with *kalo masi* (black dysentery). Thus she lost four out of her eight children.

Sunita Lohar, 57, lost her first child, a son. He was stillborn and another son too was a stillborn after the birth of a daughter. She has three married daughters. Indu Moktan, 33, "My first son died immediately after birth at

²³ Deaths before 15 years

Tingling hospital and my fourth child again a son died at one and half years of age because of measles” she says.²⁴ She now has a seven year old daughter. Ganga Tamang, 26, narrates that her first child a son was caught by a *jungal* spirit. He just had some glucose water and spat out a large worm. He died when he was one and half years of age. She has only a six year old daughter. Kamala Mangar, 48, says, “I have two daughters and a son. My fourth child died of measles when he was 17 months old.”²⁵ Pabitra Ruchal, 40, says, “One of my twin sons died few hours before delivery. The other twin son a class VIII student died in 1991 of leukaemia. I have three daughters. I wish all my children were alive.”²⁶

Asha Singar, 51, lost her four-month-old son when she was 26. She says “*usko kanchet khapai pareko theyo, akha paltoundei theyo, aai aai hunthyo.* (His temples were sunken; his eyes were twirling and he was breathless.) I think maybe he suffered from *margi* (convulsion)”.²⁷ Babul Ramudamu, 37, says, “Both my children died of pneumonia. One was one and half year old and the other two and half months old.”²⁸ K.B. Khawas, 46, says, “I lost two of my sons both at the prime age of 19 years. One died due to heart problem and the other was hypertensive and a fall caused brain haemorrhage. He was working in Bangalore. I have a daughter and a son aged 17 and 11. In our immediate family we have already lost four members. One of my brothers had married for the second time. His first wife died when she was carrying a child. I think it is her evil spirit that is hovering around us and is harming us”.²⁹ Workers attribute disease and especially deaths to the evil eye or spirit. The disease pattern persists as seen from our historical chapters.

Earlier in Assam plantations, dysentery, diarrhoea, cholera, malaria, respiratory diseases, anaemia and hookworm were the main causes of death. In the Doars tea gardens, deaths were highest due to dysentery, diarrhoea, respiratory diseases, including phythisis, cholera and a high percentage were

²⁴ Interview with Indu Moktan, op. cit.

²⁵ Interview with Kamala Mangar, op. cit.

²⁶ Interview with Pabitra Ruchal, 12th November, 2000, Phuguri T.E.

²⁷ Interview with Asha Singar, op. cit.

²⁸ Interview with Babul Ramudamu, 14th November, 2000, Phuguri T.E.

²⁹ Interview with K.B. Khawas, 24th November, 2000, Phuguri T.E.

categorised as 'fevers'. In Darjeeling plantations it was the same set of disease excluding malaria and other fevers.

What we see is a continuum of the disease pattern from the late 19th and early 20th century (till 1931) to be similar with the data from MBPHC. The 2002 data shows the highest reported morbidity from ARI, hookworm, T.B., diarrhoea, dysentery and other gastroenteritis. This shows that the epidemiological profiles of these two periods haven't changed. Working and living conditions have improved over the period with welfare interventions and labour organisations, but the epidemiological pattern shows that they are still conducive to such diseases which are strongly linked to their work and living environment.

With such health conditions, it is important to map out the welfare and health services that are specifically provided to the plantation workers of Phuguri T.E. There is a plurality of services that range from home remedies, *jhānkris*, to the private practitioner. These are the services provided by the management and the government. These structures of provisioning determine the health seeking behaviour of a population and any analysis of utilisation will depend on this structure. The following section provides the type of provisioning and the utilisation pattern and experiences with the services.

Structure of Provisioning

Health Service Providers

<p>Private (Informal)</p> <ul style="list-style-type: none"> • Home Remedies • Traditional Healers (<i>jhānkri/vaid</i>) • Local Private Practitioner • <i>Dai</i> (Traditional Birth Attendants) 	<p>Private (Formal) Provided by the management</p> <ul style="list-style-type: none"> • Dispensary • Crèche Services <p>Other Services</p> <ul style="list-style-type: none"> • Garden Hospital • Social Worker (NGO) 	<p>Public (Formal)</p> <p>West Bengal State Government: Two administrative services:</p> <p>Department of Health</p> <ul style="list-style-type: none"> • Primary Health Centre (PHC) • Sub-Centre (SC) <p>Department of Women and Child Welfare</p> <ul style="list-style-type: none"> • Integrated Child Development Services (ICDS)
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Welfare and health services in Phuguri Tea Estate can be divided into a) formal b) informal. In the former, there are two sub-divisions: i) those provided by the management, ii) those provided by the government. Our earlier section based on the narratives of the workers of Phuguri tea estate shows that health interventions during the colonial period was piece-meal and mainly concentrated to administering 'thymol' for treating hookworm. Under the PLA, 1951, health and welfare services are in favour of the workers, but the problem lies in the implementation and monitoring of such services. The following section examines the structure of provisioning as well as the utilisation of such services. Binod Bagdas, 22, a daily-rated worker, informed that a routine medical check-up is conducted for all new entrants in Phuguri Tea Estate. This medical check up is conducted by the garden dispensary, which is run by a compounder, who is working for the past 16 years. A Health Assistant and a Trained Midwife are also employed in this dispensary.

Private (informal) Health Services

A range of treatment is taken by the workers starting from remedies at home and traditional healers to private care. The workers unabatedly face the expenses. Fear of ill befalling on the patient or family makes them believe strongly on the traditional healers. Some research has been undertaken by foreign scholars on the traditional systems of treatment and those of medicinal plants and herbs. In Phuguri some of the workers shared their knowledge of treatment.

***Gharelu nuskha* (Home Remedies)**

Garelu nuskha or home remedies are very common among the plantation workers as it provides 'temporary relief'. Almost all the workers prefer home remedies for immediate relief. The following section gives an idea about the kind of traditional medication or home remedies used in the houses of the main bulk of the workers. Depending upon the nature of the complaint different types of treatment are undertaken by the workers. These are some of the home remedies taken by the workers.

- a) For persistent cough the most common remedies used are ginger, *methi*

- b) (fenugreek), *marich* (pepper).
- c) For throat pain they take *tulsi*³⁰ (a sacred plant) leaves. Some take *methi*, milk and turmeric all cooked together. Some take a root called *50 paise ko jara* (root) literally named since it looks like a 50 paise coin. Some chew *tetepati*³¹ (a green thorny leaf).
- d) For throat ulcers, to take seeds of a hill shrub (*jhar ko patta ma baigune rang ko dana huncha*).
- e) For curing leucorrhoea, *dubo*³² *ko jara pesera khanu* (a kind of grass, the root of which is taken after grinding it). Asha Singar, who also practices as a *dai* says, *Dubo ra aluwa chamal, betko laoro le peseko khanu are seto ko lagi*³. (A kind of green grass and *aluwa*, (a variety of rice) grinded with a bamboo stick is good for healing white discharge).
- f) Also for those who suffer from excessive bleeding before menopause to take a fistful of *sauf* with egg.
- g) For deworming (*juga ko lagi*): give *neem* leaves³³(a green leaf with medicinal properties) leaves to children on a fortnightly basis.
- h) During *masi* (dysentery) to eat the cover of guava fruit and also to take *amala*³⁴ (gooseberry) is also found useful. *pakhala ma* (diarrhoea) to boil the guava cover and swallow it.
- i) To eat *neem* leaves is a cure for diabetes.
- j) For problem of gastritis to consume more water, also to take ginger and garlic in food.
- k) For back pain to eat crushed *buro okhati* (medicinal root).
- l) For bruises or cuts like Adip Pradhan, a carpenter, informed; "we have our own cure when we hurt ourselves while nailing the boxes. We apply spider's cobweb around the injured area. It works fast."³⁵

³⁰ The botanical name is *Ocimum sanctum*.

³¹ The botanical name is *Artemisia vulgaris*.

³² The botanical name is *Cynodon dactylon*.

³³ The botanical name is *Azadirachta indica*.

³⁴ The botanical name is *Phyllanthus emblica*

³⁵ Interview with Adip Pradhan op. cit. All these home remedies are as told by the workers themselves.

m) To treat a leg fracture to apply a mixture of *harsu*, *phachang* (herbs) *kacho hardi* (raw turmeric) and *chuna* (lime). Jayamala Ghalay, a daily rated female worker, says that for a pain in the inner leg she took the following cure. "I bought an inch of tiger's tongue from the hill people for Rs. 60. I had to crush it into powder and then cooked it in oil. I applied it continuously for 22 days. I am completely cured. Earlier I had visited a number of places like Tingling, Mirik but it didn't help. I have strong faith in indigenous medicines."³⁶

Lack of access to health services, low wages compels people to create such systems of cure in their daily lives. There is thus a rationale for the workers taking recourse to home remedies especially for minor ailments which are reflected strongly in their health-seeking behaviour. Traditional healers (*jhānkri*) have a strong role to play in their lives.

Traditional Healers (*Jhānkri*)

According to Mac Donald, a *jhānkri* is considered as,

".....a being who goes into trance and at that time voices speak through his body which allow him to diagnose illnesses and sometimes to cure them, to give advice concerning the future and to clarify present facts in the light of events which took place in the past. He is therefore at the same time a privileged intermediary between the past, present and the future; between life and death and in another perspective, between the individual and a certain social mythology. He can it seems be of any *jat* (caste, class, community, tribe) and he can take as pupil, in order to transmit to him his knowledge and his techniques, a person of any other caste...." (MacDonald 1993: 115).

The *jhānkri* plays an important role in the lives of the workers of Phuguri Tea Estate. The magico-religious beliefs are still a dominant practice treating any illness. Certain illnesses are attributed to the 'evil eye' or the 'spirit' that roams around the nearby jungle or the *naramro hawa* (bad air) that strikes the children usually after sunset. In the evening the child gets exposed to the surroundings of darkness and dense bamboo grooves or forests. Then, there is a natural tendency

³⁶ Interview with Jayamala Ghalay op. cit.

among the workers to rush to a *jhānkri* instead of dispensary. The reason, apart from belief, could be attributed to the non-availability of medical services beyond the plantation working hours. There is an inexplicable belief towards the faith healers. By taking recourse to such treatment it is said that the patient not only is cured but it would free the entire family from the affects of the 'evil spirit'.

Mani Raj Thapa, a *jhānkri*, 66, had started working in Phuguri Tea Estate since 1965 as a *marad*. Both his parents worked as garden labourers. He was born in Toklang (near Phuguri and is under Phuguri Tea Estate). He says,

At the age of five I was taken by a *ban jhānkri*³⁷. I returned home only after seven days. I started practicing my knowledge of medicines immediately after this. It is said a *jhānkri* whose *guru* (teacher) is a *ban jhānkri* is considered as a *jhānkri* par excellence. At the outset I take the name of my *Guru*, who has given me *dev-kala* (i.e. skills from God) and then I get the power to conduct the magico-religious functions. I see the *jokhana* (horoscope) with the help of few grains of rice and based on certain calculations I check the condition of the patient if it is an illness or some external source is responsible for their problem. Based on this, I select the medicines. Apart from common complaints like high fever, convulsions, I cure women with menstrual disorder, for *seto pani* (white discharge), *moch* i.e. if a woman has a miscarriage then for the next pregnancy or next child born I conduct certain rituals (*puja- aaja, char-chira*). I have helped my own sister-in-law who earlier could not conceive. Her menstrual cycle was disrupted. I gave her medicines for three consecutive Tuesdays. She gave birth to a son. Men mostly come for treatment of leg and back aches and at times with partial paralysis. They also have some urinal problems; some have more flow, for some it stops. It is called '*niranjan*'. I treat these complaints with different medications. I treat people with jaundice, gastric problems, frequent fevers, children with sores, boils, etc. with medicines and amulets. Medicines are mostly made from various medicinal plants and roots found in the mountainous region. Earlier certain roots and plants could be found in Phuguri itself but now I have to go higher up in the forests as there is hardly any vegetation here. I cannot tell you the name of the herbs or roots. I do not have any disciple either. Earlier I would visit Longview, Singbulli and other tea gardens and now people come from places like Manju Tea Estate, Lapche *khola* and adjoining areas too.³⁸

³⁷ Ban (forest) i.e. a *ban jhānkri* is one who lives in the forest.

³⁸ Interview with Mani Raj Thapa, 13th December, 2000, Phuguri T.E.

Kul Bahadur Lamgaday, 65, is a blacksmith for the past 50 years, a *vaidhya* (*ayurvedic*) and a *bahun* (priest). He holds a licence to practice blacksmithy. He is a Kami by caste, which is an occupational caste of the blacksmiths. He supplies knives, sickles, (*kata*, *pharuwa*) about 1000 pieces annually with two assistants to the tea gardens of Phuguri and Singbulli. As a *vaidhya* he treats eye infection like conjunctivitis and also toothache and stomach-ache. He treats children suffering from *moso*. The usage *moso* means when an evil eye of a mother who had given still-birth falls on another pregnant mother during the latter's delivery. He does *jhar-phuk* (chants *mantras*) and uses traditional Himalayan herbal medicines. He even visits distant places like Mirik, Bagdogra, Kurseong, Ghayabari for treating their illnesses. He's been practicing as a priest since the age of 16 for occasions like marriage, naming ceremony, funeral and conduct prayers. He also visits places like Siliguri, Pokherbung, Darjeeling, Janakpur for conducting such rituals. He did not disclose the names of the traditional medicines.

There are some among the workers who practice such systems of healing health problems. Like Salim Khawas, 36, has studied Lamaism. He says, "I read mantras in my area (Chandhura) only in cases of emergency. By reading mantras and based on calculations I drive away the evil spirit surrounding the patient. I have not pursued it as a profession." Lalin Khawas, 38, also a daily rated *marad*, practices as a *jhānkri* too. He says, "I sprinkle water (*pani phokchu*) and chant mantras and cure patients. Usually I cure problems of the stomach for all ages." In and around Phuguri there are a number of *jhānkris* like Mani Raj Thapa, Ramudamu, Sinchewry Kancha, Kali Prasad Baje and Lamgadey.

Local Private Practitioner

In our earlier study we observed a lot of faith among most of the residents in Phuguri on the 'doctor' who actually is a Community Health Service Officer at the Primary Health Centre at Mirik Block. During the course of fieldwork he was away in Calcutta for training. This has caused a lot of inconvenience to the people. From our earlier fieldwork it was found that he does not charge fees for the local people and that he treats his patients well. He practices in his own house and interestingly his wife is the ANM/MPW. Most of the patients get

treatment from him and the medicines get reimbursed only sometimes. It was observed in the earlier study that those who could afford to buy medicines had faith on his diagnosis while those whose earnings were at the bare minimum depended mostly on the dispensary and the *jhānkri* for treatment.

While the Trained Midwife is attached to the dispensary, women also go to a local *dai* (Traditional Birth Attendant). Asha Singar, a tea garden worker who practices as a *dai* in Phuguri T.E. says,

Home deliveries are usually conducted at a sitting posture which makes delivery easy. Certain techniques are used for example when the *sathi* placenta does not come out they put hair into the pregnant woman's mouth so that the placenta is removed easily. Also if the placenta is small, chances are that while breathing it might come up and therefore we tie a *potuka* around and above the belly of the pregnant mother. Also during labour pain the foetus hardens up so it is important to heat oil and massage gently. For smoother delivery there are certain beliefs. For example, to place a train ticket (onward journey) on the naval of the expectant mother and also to place water in a *nanglo* (a winnowing tray) and make the expectant mother drink it.

Apart from such private non-formal services, there is another set of private formal and public-formal services.

Private (Formal) Services

Services provided by the Management

Dispensary

According to the WBSPLR 1956, plantations having 350 or less workers should have dispensaries as per the specification given by the Inspector of Plantations having five detention beds under the full time care of a qualified compounder to be supervised by regular doctor from the nearest garden. The management has provided the workers with a dispensary. It is located in a two-room house next to the factory. It is staffed with a compounder, a trained midwife and a health assistant (male) who is responsible for providing the day-to-day medicines to the workers. Santosh Khawas, the compounder has been working at the dispensary since 1983. He passed his group D-Pharmacy in 1979. He lists the seasonal complaints as under:

During the months of November to February:

- i. Influenza due to change of weather
- ii. Fever, cough are very high during this period
- iii. Asthma, depending upon its severity, in the first stage Decadron, Deriphylin etc is given. For serious cases give Ampycillin antibiotic, Deriphylin injection etc.

During the months of March to June:

- i. Cholera, diarrhoea, dysentery
- ii. Diarrhoea, dysentery, vomiting tendency
- iii. Gastroenteritis
- iv. Common cold (due to dust)

During the months of July-August:

- i. Influenza is high during these months when the weather is hot and wet with high humidity.

According to him,

Even jaundice, stomach and sugar cases are quite high due to the food habits of the workers. There are also 4-5 cases of cancer of the stomach and 6-7 confirmed tuberculosis cases in Phuguri T.E. The factory workers suffer a lot from gastritis as they take their lunch late and their food gets cold and they invariably sit on the cold floor. Leucorrhoea is very high among the female workers." For these conditions the traditional medicines are more effective than the allopathic ones. The traditional medicine is *gurju*, a creeper, found in the jungle. One has to grind it and take it. Also, *gangeta* (a small crab) is available in Dudhia, which has to be crushed and taken as a soup.

Apart from gastritis others are mostly seasonal complaints. During heavy plucking, cholera, dysentery, gastroenteritis cases are quite high. The incurable cases get referred to the BPHC. For cholera at times we get 20-25 cases each year. Despite vaccination I wonder why there has been an outbreak of measles. (During fieldwork there was an outbreak of measles in the month of December. About twenty children were affected and a few had to be rushed to Mirik BPHC.) I have written a letter to the CMO (Chief Medical Officer) at the BPHC Mirik to investigate the cause of outbreak more specifically in the winter months. I am yet to get a reply. Measles have taken an endemic form. My data (month of November) shows that more than twenty patients (children) are suffering from measles. Treatment for measles is expensive. Costs are as much as Rs 700- Rs. 1400 per month per patient. I have to increase the budget for December.³⁹

He mentioned a list of food items that could be harmful for patients suffering from different illnesses. He says, For acidity *sag*, *iskush ko*

³⁹ Interview with Santosh Khawas, 10th December, 2000, Phuguri T.E.

jaar, are harmful during winter. Buffalo meat is harmful during tuberculosis, which is very high in Phuguri T.E. For sugar patients, rice, sweet, alcohol are harmful. For sugar patients a traditional cure to be taken is *tamreko ko dhan* crushed with *methi* (fenugreek), roasted, powdered and taken with water. High-pressure symptoms are dizziness; head aches and pain in the back of the neck while weak eyesight indicates low blood pressure. Anaemia is very high. *Jaar* especially *bhate jaar* and *kodo jaar* lead to high pressure and asthma. Earlier Dr. Bhadury (who worked in this garden till 1987) would recommend *kodo ko jaar* for low pressure patients as it has high iron content. The ingredient *marcha* used for making *jaar* is harmful. To make the *jaar* thicker plastics, battery, slippers, rubber are added making local liquor very harmful.⁴⁰

In the dispensary medicines are rare. Apart from Pulse Polio and Family Planning Programmes, there were no other programmes like Maternal and Child Health (MCH) or nutritional interventions. Phuguri area does have a sub-centre and there were also talks earlier of attaching the dispensary with the sub-centre but has never materialized. The compounder shows his helplessness in these issues and only hopes for an improvement. According to him, there is a certain fixed amount of medical budget for the dispensary within which he has to manage the expenses including the cost of medicines. Defaulters are high in Phuguri as people lie about their check-up. During outbreaks of any disease he has to seek help of the manager for an increase in the medical budget.

Apart from the general health services, the dispensary also provides Maternity and Child Health. Nir Kumari Tamang, 56, is a Trained Midwife (TMW). She did her training at the Darjeeling *Sadar* Hospital in 1965. She has been working at Phuguri dispensary for the past 18 years. The Health Assistant (male), 30, simply assists in the work of dispensing medicines. According to her, first child deliveries usually take longer. She feels that lying down position is easier during delivery. She uses Dettol water and clean gloves and checks if the delivery is going to be normal. If there is excessive bleeding during post-delivery she gives Methodin tablets and injection. She informed that only abnormal cases are sent to the hospital. Women mostly complain of high white discharge and are mainly anaemic. She attributes leucorrhoea and anaemia to poor food and excessive work. Women she says, also suffer from high blood pressure. Apart from the medical services provided by the management, provisions for the women women's children are made i.e. the crèche services. Earlier children only above

⁴⁰ Ibid.

six months of age were allowed to be left in the crèche in Phuguri that started in 1955.

Crèche Services

This is a support system for women workers. The Plantation Labour Act (1951) states that the management should provide a crèche in every plantation where there are fifty or more female workers or where number of working children is twenty, or more. The rooms should have i) adequate accommodation ii) adequately lighted and ventilated iii) maintained in a clean and sanitary condition iv) under the charge of a female trained in the care of children and infants.

In Phuguri Tea Estate, the crèche is a *pucca* house. It has a room where there are four cradles hanging with wooden planks placed on the cemented floor for the children to play. The adjoining small room is used as a kitchen. There are two female attendants who have been working in the crèche for over fifteen years. They are paid a monthly salary of Rs. 1020-1026. They get overtime wages of Rs. 8 per hour during the peak season. The management provides them with three kilograms of milk daily for the children. The number of children varies from four to eight and within the age group of six months to seven years.

Since the crèche is located on the way to the *melo* it is easy for the female workers to leave their children. From our earlier study it was found that the utilization of crèche services was dependent on the family structure of the workers. For example women of nuclear families kept their children in the crèche, as no one was there to look after them in the house and women living in joint families left their children home and were usually looked after by their in-laws.

Other Services

Garden Hospital at Tingling Tea Estate

In plantations there are two types of hospitals garden and group hospitals. The garden hospitals "deal with out-patients, in-patients not requiring any elaborate diagnosis and treatment; infectious cases; midwifery; simple prenatal and post-natal care; care of infants and children and periodical inspection of workers. While, a group hospital shall be capable of dealing with efficiently with all types of cases normally encountered but will not be used for routine

treatment. Admission to group hospitals shall be only on the recommendation of a garden hospital doctor” (WBSPLR 1956: 59).

There is a garden hospital at Tingling tea estate. This is one of the neighbouring tea estates of Phuguri and has a beautiful landscape. This 16 bedded hospital comprise of 7 each in male and female wards and two for maternity. The hospital staff consists of:

- i. One Resident Doctor (MBBS)
- ii. One Sister (Nurse)
- iii. Two Midwife: (one local girl is under training, and the other is from Lucknow, Uttar Pradesh)
- iv. Medicine Carrier⁴¹- two male workers, their job is like that of a compounder.
- v. Other workers include one clerk, two cooks and one sweeper. (Food is supplied in this hospital, they use firewood fetched from Singbulli T.E. for cooking).

The Sister, M. Walsalam, 54, has been working in this hospital for the past 23 years gave an overview of the disease pattern of the tea estates in that area. She says,

“Seasonal diseases like fever, malaria, diarrhoea, vomiting (cholera) are common. Typhoid cases are rare. During summer months, there is an increase in cases of dysentery, diarrhoea and vomiting, cholera etc. If the cases are serious we refer it to the Mirik BPHC. For fever we mainly give Amoxicillin, Ciprofloxacin and Paracetamol. For diarrhoea we give Norflox, Lomotil and an injection ‘Amicacininj’ for dysentery. These medicines are usually in short supply. Blood dysentery is also high in summers. We refer such cases to MBPHC.

During a year we get 8-10 old cases of tuberculosis. There are 4-5 old cases of tuberculosis from Tingling and 6-7 old cases from Singbulli. Cough, asthma, bronchitis, pneumonia are also common among 6-7 months old children. This is high during the rainy and the winter season. After getting infected with measles, children mostly suffer from pneumonia. White discharge is very high among the women labourers here. Mostly labourers stay dirty and do not change their under-garments. The medicine given for white discharge is Metronidazol 400mg and multi-vitamin tablets. A vaginal tablet or applicant is

⁴¹ Maybe the name ‘medicine carrier’ is translated from the local term *dabaiwala*, who would earlier carry medicines and dispense it to the workers in the tea estates.

also given along with a medicine called Candid-V6. There is no Family Planning Programme in this hospital except in Mirik Block PHC. Maternity cases are usually normal. There are no caesarean cases. There are a few cases of Cervix Prolapse and Hysterectomy conducted in Medical College and Kurseong Hospital. Earlier we had referred three cases during Dr. Bhadury's time. He was a very good doctor. He was here till 1987. Now the present doctor separates the worker, non-worker, retired worker. The latter two do not get medicines. The workers get bills reimbursed for Rs. 500-600 only. If the bills exceed then they have to speak to the manager. The medical Budget is around Rs. 15000-20,000 monthly."⁴²

The tea estates initially covered under this hospital were Phuguri, Milingthong, Ghayabari, No.1, Karibari, Mechi, Soureni, Singbulli, Marma, Balasan, Manju and Tingling tea estates. At present only the last five tea estates are covered under this group hospital. The Darjeeling Tea Consolidated Company, owners of Tingling T.E. decided that as the companies of these five tea estates were unable to bear the costs in terms of bed charges, medicine costs etc. so the former decided to stop access to these specific tea estates. Till the year 1987, Phuguri tea estate was a part of this hospital.

The above account of the Tingling hospital shows that there is a possibility of improving the infrastructure and therefore better access if there was a joint cooperation between the different managements. This would in fact cut down costs of transport for both the companies and the workers and would be extremely useful in case of emergency. The management had promised an ambulance and a doctor from this hospital (Tingling T.E.) which is nearby, but the union wanted to get their own doctor or the one who earlier visited from Longview T.E. As far as other areas of intervention are concerned, one is the Non Government Organisation (NGO).

Shiela Pradhan is a social worker appointed by the tea estate with the help of the Institute for Plantation and Agricultural Rural Workers (IPARW) a Non-Government Organisation based in Jalpaiguri district of West Bengal. She is among the ten social workers who have formally been appointed in the ten tea gardens of Darjeeling district of West Bengal. She has studied till Higher Secondary level (10+2) and gets a monthly salary of Rs. 700. She needs to be assisted by ten volunteers. As the latter are not paid she rarely gets support.

⁴² Interview with the sister, M. Walsalam, on 14th December, 2000, Phuguri T.E.

Only two to three active women trade union representatives are of some assistance to her.

Her duties involve a) providing pre-school education to the children. She conducts the classes in the evening between 4 p.m. to 6 p.m. and in winters classes start from 3.30 p.m. to 5 p.m. in her own house. According to her the children come with their respective books and she teaches them. From the institute (IPARW) she has not been provided with any reading materials. b) She is to visit door-to-door encouraging people to adopt Family Planning measures. According to her the employees at the sub-centre and the dispensary do so every three to four months. She does it only when she is asked to do so. c) She is also supposed to participate in the Pulse Polio programme but it is the *Anganwadi* /Multi Purpose Worker who does this.

The health education materials provided to her are designed in a manner applicable to the plains (Terai region of West Bengal) only. The effectiveness of this kind of material is clearly questionable and Shiela expressed her frustration with this material in her programme. Two different programmes according to her are in the pipeline a) adult education with the help of the local schoolteachers b) provision of clothes to about twenty children who belong to the lowest income group. The main objective of IPARW is the abolition of child labour which is not applicable for the area studied. Shiela expressed disinterest in actively doing anything and it was observed that the elders of the tea garden were unaware of her appointment.

Public (Formal) Services

Under the West Bengal State Government

There are two administrative services provided by the government

- a) Primary Health Centre (PHC) and the Sub-Centre (SC) fall under the Department of Health
- b) Integrated Child Development Services (ICDS) is under the Department of Women and Child Welfare

Mirik Block Primary Health Centre (MBPHC)

The workers get referred from the dispensary to the Block Primary Health Centre located at Mirik. This hospital too is 15 bedded, seven for women and eight for men. The table below shows the strength of the health personnel at the MBPHC.

Table No.: 6.4

Sanctioned Strength and Vacancy position of Mirik Block Primary Health Centre Main Centre

<i>Name of the post</i>	<i>Sanctioned Strength</i>	<i>In Position</i>	<i>Vacant</i>	<i>Remarks</i>
BMOH & Mos (Block Medical Officer of Health)	3	3	-	
Pharmacist	1	1	-	
Nurse	4+3	7	-	
U.D. Clerk	1	1	-	Absent since 11/97 without pay
L. D. Clerk	1	2	-	One in contract basis
GDA (Male) General Duty Attendant				5 GDA on contract basis, one permanent
GDA (Female)	6	13		GDA posted in Dental OPD, since its opening
Cook				
M.T. Lab. (Medical Technologist)	1	1		On contract basis
Sweeper	3	2	1	Two on daily wages
Stretcher Bearer cum Cleaner	2	2	-	
C.H.S.O. (Community Health Social Officer)	1	1	-	On training from January '01 at Kolkata
Driver	3	3	-	One on contract basis
<i>Pani Chowkidar</i>	-	1	-	On contract basis
Store Keeper	-	1	-	On contract basis
Typist	-	1	-	On contract basis
Security Guard Group D	-	4	-	On contract basis
S.W.O. (Social Welfare Officer)	1	-	-	

Dental Section

Medical Officer	1	1	-	
G.D.A.	-	-	-	
Sweeper	-	-	-	

Homeo Clinic

H.M.O.	1	-	1	
Pharmacist	1	-	1	
G.D.A.	1	1	-	F.G.D.A. is present

M.C.H. & Field Staff (F.W.)

B.S.I. (Block Sanitary Inspector)	1	1	-	
B.P.H.N. (Block Public Health Nurse)	1	1	-	
P.H.N. (Public Health Nurse)	1	1	-	
Malaria Inspector	1	1	-	
Sanitary Inspector	1	1	-	
Staff Nurse	1	1	-	
Health Supervisor (male)	2	1	1	Due to retirement
Health Supervisor (female)	2	1	1	Due to retirement
M.P.H.A. (Multi Purpose Health Assistant)	12	12	-	On contract basis
M.P.H.A. (F)	11	11	-	
GDA, (General Duty Attendant) BSI, Office	1	1	-	
GDA, MCH (Maternity and Child Health) (Female)	-	-	-	
Computer	1	1	-	
G.D.A. Office	1	1	-	

Source: Mirik Block Primary Health Centre, Mirik.

Note: As on December 2002.

This table suggests an overstaffing at the MBPHC at the lower level of Group D category, especially on a contractual basis under the Darjeeling Gorkha Hill Council (DGHC). This is becoming a common nature of employment under the DGHC. From the MBPHC, depending upon the cases the patients get referred to either the Darjeeling Sadar Hospital, or the North Bengal Medical College and Hospital, Siliguri and tuberculosis patients get referred or admitted to the Tuberculosis hospital at Kurseong, called the S. B. Dey Sanatorium.

Sub-Centre (SC)

The Sub-Centre at Phuguri is in an extremely dilapidated condition. There is a single room with a bench and a table, few posters (of UNICEF) hanging on the walls. The ANM (Auxiliary Nurse Midwife) and a Female Health Assistant manage the Sub-Centre. It opens usually on Mondays but there is hardly anyone seeking treatment from the Centre. The ANM has to report weekly to the PHC at Mirik Block and then submit a monthly report after compiling all the previous four weekly reports.

According to the ANM, who is working since 1987, the sub-centre covers a population of 3000-5000. The Phuguri sub-centre covers Tingling, Milingthong, Kharbani and Phuguri. The total population of these areas is approximately 4720.

She has a helper (female) and a Health Assistant (male). The ANM also acts as the Multi Purpose Worker (MPW) and does not have any assistance (according to the ANM/MPW) to conduct the programmes. According to her, malaria detection is not undertaken. Therefore the cases go unreported. The duties of the ANM at the sub-centre as told by the ANM are as follows.

Services under the Sub-Centre

i.Registration- of Ante-Natal, Immunisation, Family Planning, Vitamin A oil. We register pregnant women in the reproductive period and children.

ii.Conduct home deliveries, abnormal cases are referred to the MBPHC

iii.Follow-up post natal cases like bleeding, tear cases, check stitches

iv.Conduct ECCR- Eligible Child and Couple Registration. Within the reproductive age group of 14-45 years couples are registered. Maintain the number of children both male and female of this group and to families with children below six years. Inform them about immunisation.

v.Undertake complete immunisation with the Universal Immunisation Programme under which, BCG, DPT, Polio, Measles, at two years of age triple booster dose, DT at five years of age.

vi.Family Planning Programme: temporary methods like use of spacing method, use of oral pills like Mala D, Nirodh for men, loop, C.T. and permanent methods like laparoscopy or tubectomy for women and vasectomy for men. Less than 25% have undergone vasectomy in Phuguri.

vii.Register new couples; give them ante-natal care during the pregnancy period. To the mothers give MF-Mothers' Folifer (iron tablets), TT two doses at a monthly interval. And during delivery one dose of TT. And after two children inform them about the family planning methods.

viii.During epidemics like measles, diarrhoea, dysentery, poliomyelitis, fever inform door to door about precaution and prevention. Isolation of cases, minor medication and treatment or refer to the MBPHC.

ix.During the months of March-April give de-worming medicines of six tablets of Mabex for three days.

x.Report once weekly at the Ghumaunetar PHC and monthly meetings at the MBPHC. There are two PHC's under MBPHC: Ghumaunetar and Duptin

xi.Go and extend help at camps (government programmes) of Laparoscopy and Eye Operation (cataract)

Source: Interview with the ANM, Phuguri Sub Centre, 22nd December, 2000.

Integrated Child Development Services (ICDS)

Anganwadi Worker

The principle worker in the ICDS projects is the *Anganwadi* worker. In one ICDS project there are about 100 Anganwadi workers who are providing a package of basic health services (e.g. supplementary nutrition, immunization and

health education, and non-formal education services) to mothers and children. This programme was initiated in 1975.

Prabha Lohar, 30, is an *Anganwadi* worker at Phuguri Centre for last five years. She has studied up to Higher Secondary. A helper washing plates etc. she faces space shortage. They are not provided with a room even on rental basis. So she uses the storeroom of her house. It is a separate room near the pigsty, ill ventilated and without electricity. The room is cold and the children are made to sit on sacks on the floor.

She gets a salary of Rs. 500 per month. She works from 9.30 a.m. to 12 noon, six days a week. Only five to six children attend the pre-school classes and eat the porridge made by her. It is a blended cereal product called the Corn Soya Blend (CSB) supplied by the UNICEF. The children are fed at 11.30 a.m. There is no 'take-home meal' system. Prabha is supposed to monitor the growth charts of these children (with regard to the intake of such porridge). A Supervisor visits her *Anganwadi* once in six months and checks the growth records, which Prabha carefully maintains.

Given the working hours of the mothers it is difficult to drop the children at the *Anganwadi* by 9.30 a.m. Neither is it possible for a two or three year old to go to the *Anganwadi* on his/her own. Women therefore leave their children at the crèche. Also all are unaware of such programmes and those who know, are not in favour of the cereal, i.e. the CSB that is provided. An important observation to be made is the duplication of services, between the crèche and the ICDS. A Welfare Centre under the aegis of the Ministry of Labour Welfare, Government of West Bengal was burnt during the GNLf agitation in 1989. It was located at Soureni, which is near Phuguri. Such a centre has not been replaced in this area yet.⁴³

Patterns of Utilisation of Health Services by the Workers

The in depth interviews with workers brought forth their perceptions of disease causation. They associate disease with overwork, poor housing, lack of proper sanitation, untimely meals etc. The above sections showed the structure of the health services available for them. These are some of the services that are available but what is accessible and utilised depends on the workers experiences of accessing these services. The following tables provide the utilisation pattern of health services of the workers for ailments classified as major and minor.

⁴³ Interview with Usha Tamang, a daily-rated worker, 5th November, 2000, Phuguri T.E.

Table No: 6.5
Utilisation of Health Services for Minor Ailments

Work Category	Dispensary	Traditional	Dispensary and Traditional Healers	Dispensary and MBPHC	MBPHC	Private	Self-Treatment
Daily Rated male workers (<i>marad</i>) n=76	50%	-	39.47%	3.94%	2.63%	1.32%	-
Daily Rated female workers (<i>aurat</i>) n=112	23.21%	-	76.79%	-	-	-	-
Sub-Staff (male) n=28	39.29%	-	53.57%	-	7.14%	-	-
Sub-Staff (female) n=4	50%	-	25%	-	25%	-	-
Staff (male) n=9	22.22%	-	22.22%	11.11%	44.44%	-	11.11%
Staff (female) n=2	-	-	-	50%	50%	-	-

Source: Field Work, Phuguri T.E., 2000

Table No: 6.6
Utilisation of Health Services for Major Ailments

Work Category	MBPHC	Private	MBPHC and Private	Traditional Healers, MBPHC and Private	Traditional healer and MBPHC	No major ailment
Daily Rated male workers (<i>marad</i>) n=76	73.68%	3.95%	17.11%	---	3.95%	1.32%
Daily Rated female workers (<i>aurat</i>) n=112	58.93%	8.93%	31.25%	0.89%	--	
Sub-Staff (male) n=28	46.43%	10.71%	39.29%	----	3.57%	
Sub-Staff (female) n=4	25%	50%	25%	----	---	
Staff (male) n=9	11.11%	55.55%	33.33%	-----	-----	
Staff (female) n=2	----	100%	-----	-----	-----	

Source: Field Work, Phuguri T.E., 2000

Dependence on traditional healers and the dispensary are the highest for minor ailments and are more common among the women workers. Seeking private treatment for minor ailments has just one daily-rated worker as an exception. As far as the major ailments are concerned seeking private cure is more pronounced among the staff and the sub-staff workers. While the daily-rated male and female workers are more dependent on the MBPHC. There are some workers who go first to the MBPHC and then seek private treatment if needed.

For the past four years there has been no visiting doctor in Phuguri T.E. Earlier a doctor would make a weekly visit from Longview Tea Estate where he was a residential doctor. He would come for two hours and check the patients. The doctor stopped visiting Phuguri because some workers misbehaved with him and had even threatened him. The manager said that the doctor was ill treated by the workers. The compounder feels that the doctors are not paid government pay-scales and are paid low salaries. Thus they do not want to work here in the tea gardens sincerely.

An official at the Labour Department, Siliguri further elaborates,

There was a visiting doctor (every Sunday) in Phuguri for a few months last year (1999) but then the manager asked him not to come from the next Sunday. They pay a doctor Rs. 500 per visit otherwise they have to pay Rs. 13,000-15,000 per month for a permanent doctor. In any case they are saving money but we from the department had sent a doctor. The management has to provide all the facilities. This doctor did not get his salary for two months. He did not get reimbursement for the chair and the notice board that he bought himself. The Darjeeling Planters Association (DPA) escapes all by saying that the government should bear the costs of welfare facilities.⁴⁴ The management wants productivity to increase with the amenities given. But it is also important that with an increase in productivity the welfare amenities should also increase.⁴⁵

One worker said, "*Kaman ma kam garnu pir lagcha*. (I feel distressed working in the garden). *Behan uthunu garo lagcha* (at times in the morning I don't feel like getting up, find it very arduous). Especially when it rains heavily,

⁴⁴ See Chapter V, p 1.

⁴⁵ Interview with a government official at the Labour Department, 5th December, 2000, Siliguri.

we don't feel like going to work. Get completely drenched while plucking the tea leaves. Although our hearts ache we have to work. We try to forget our sorrows working with *sathi-bhai* (friends). We all have to work together."⁴⁶ Some female workers said, "*hami lai ta khata ma lekhdai jati huncha*(we get cured immediately as they enter our names in the dispensary register)."⁴⁷ According to Leela Sinchewry, a daily rated worker, "The dispensary gives us only Brufen and Paracetamol."⁴⁸

Workers staying in Chandhura face problems of walking longer distances to work and to the health centres. Deo Bahadur Khawas, 33, says, "It takes us 15 minutes on foot to reach the dispensary from Chandhura. Women take about 20-25 minutes."⁴⁹ A road has been constructed $\frac{3}{4}$ th by the DGHC and $\frac{1}{4}$ th by the management in 1991. Most of the workers prefer to go to the MBPHC instead of coming backwards to the dispensary (as Chandhura is located between Phuguri and Mirik). C. B. Khawas, 49, says, "Earlier we would get medicines for a week from the dispensary. Nowadays only two doses for a day are given. We have to come daily to Phuguri from Chandhura to collect the medicines. During emergency also as Chandhura is located downhill we spend 4-5 hours searching for a vehicle or someone to carry the patient uphill. To ask for a vehicle we have to walk back to Phuguri, and then go back and pick up the patient and then go up to the Mirik hospital. It is very difficult especially during emergency."⁵⁰

A total annual and sick leave of 14 days each are given to the workers. The daily rated workers are paid @ Rs. 25 per day during sick leave. During this period the subsidized food grains are also given. Beyond 14 days of leave none of the facilities are given. De-worming medicines are given to the workers' children. Sanchita Ghatani, a daily-rated worker finds the medicines not effective on her children while Ambarkala Tamang says, "De-worming is done in the month of May. A small bottle of medicine is given which has to be taken in a day. This medicine was effective on my children."⁵¹

⁴⁶ Fieldwork, Phuguri T.E.

⁴⁷ Ibid.

⁴⁸ Interview with Leela Sinchewry, 27th November, 2000, Phuguri T.E.

⁴⁹ Interview with Deo Bahadur Khawas op. cit.

⁵⁰ Interview with C.B. Khawas, 29th November, 2000, Phuguri T.E.

⁵¹ Interview with Ambarkala Tamang, op. cit.

Manoj Thapa says, "Those workers called 'sick' are home there are no visits by the doctors. The workers face language problem in North Bengal Medical College and Hospital in Siliguri where Bengali is mainly spoken. Most of the workers are sent for referral treatment at this hospital."⁵² The workers are allowed to get reimbursement of medicines prescribed either from the dispensary or the Primary Health Centre. When medicines are either not-available in the dispensary or the patients are referred to MBPHC or elsewhere, the medicines purchased are reimbursed up to a sum of Rs 500. But this process usually takes a long time and is a common problem for most of the workers in Phuguri Tea Estate. For example a person spent Rs. 290 for blood and urine test at the Mirik Block Primary Health Centre (MBPHC) in August, 2000 but wasn't reimbursed until November 2000. Usually reimbursement of medical bills takes nearly 2-3 months.

According to the compounder,

Reimbursement has always been a problem as the medical budget is extremely limited. I am always told by the management to cut down costs. How is it possible if there is an outbreak? Recently there was a measles outbreak. The medicines are expensive. It has to be supplied. As for the patients getting reimbursement, it works this way. The patient at first purchases the medicines on his own and then submits the bill to the office with my endorsement. This whole process at times takes two to three months. People buy medicines privately and then get the stamp of the PHC. There has been a lot of false reporting of cases and many have taken medicines for others. Thus there are a large number of defaulters. This shakes up the entire budget and makes it difficult. The management discourages to increase the budget, which is roughly around Rs. 10,000 per month."⁵³

For instance the management said that Nargima Tamang, a daily rated worker has been taking medicines and getting medical tests like M.R.I. done both through the garden since the last two years and also through her husband who works in the army. Nargima is a representative of the HPWU unit in Phuguri and is also an active member of the trade union.

Upendra Darzi says, "Reimbursement of bills becomes a problem as many people get their private bills stamped from the MBPHC. Thus those who can

⁵² Interview with Manoj Thapa, op. cit..

⁵³ Interview with Santosh Khawas, op. cit.

manipulate, do it in this manner while the others suffer. The workers are of the opinion that the management must stop these fringe benefits and instead raise the wages.”⁵⁴ Earlier the management would give advance payment for medical bills. According to some workers reimbursement of the medical bill depends on the rapport with the office clerks. Padma Kumar Pradhan says, “Medical bills are reimbursed on time during the peak season. The management needs to keep the workers happy. During the dry season, however it becomes a problem. It takes roughly 1½ to 3 months.”⁵⁵ Due to this factor it is impossible for some workers to even spend a small amount of money on their medicines. Therefore they cannot afford to go beyond the dispensary to the MBPHC. The *jhānkri* is the common recourse that most workers especially women take.

One of the patients of a *jhānkri*, Mani Raj Thapa, Mena Tamang, 62, an ex-tea worker says:

“I was having continuous headache for few days. None of the allopathic medicines worked. I visited the *jhānkri* at 5 p.m. and then I came back home, took the medicines given by him and slept for an hour. Then I started sweating and after sometime my headache vanished. ‘*Bigar*’ i.e. if there is an evil eye on you then even by taking any amount of medicines will not help you at all. As I had the medicines from the *jhānkri* I felt better. There are hardly any medicines at the dispensary. Neither is there a doctor or sufficient medicines. There is nothing. Earlier there used to be a visiting doctor. He was from Longview (earlier a main branch of Phuguri Tea Estate). It seems that the labourers gave him trouble. He too must have been annoyed with them so he stopped visiting. We go to the chemist shop and get our medicines sometimes on credit also.”⁵⁶

Manila Pradhan, another worker, says that her children are small; whenever they fall sick she calls the *Bahun* (priest) and conduct *graha shanti puja* (prayers to please the *grahas* i.e. ruling stars). From our study the following was the percentage break up for the belief in the traditional healers across workers in different categories.

⁵⁴ Interview with Upendra Darzi, op. cit.

⁵⁵ Interview with Padma Kumar Pradhan 13th October, 2000, Phuguri T.E.

⁵⁶ Interview with Mena Tamang, op. cit.

Table No: 6.7
Belief in Traditional Healers

Work Category	Yes	No
Daily Rated male workers (<i>marad</i>) N=76	72.37%	27.63%
Daily Rated female workers (<i>aurat</i>) n=112	90.18%	9.82%
Sub-Staff (male) n=28	85.71%	14.29%
Sub-Staff (female)n=4	50%	50%
Staff (male) n=9	77.78%	22.22%
Staff (female) n=2	50%	50%

Source: Field Work, Phuguri T.E., 2000

All the faith healers belong to a particular religion, the *jhānkri* with Hinduism, the lama with Buddhism and the pastor with Christianity. The workers mainly go for treating their children, self and other family members. The daily rated women workers belong to the highest percentage of believers in faith healers.

Some workers like Meenu Tamang, regarding these traditional healers feel,

‘Barah laphara bhancha jahkri lai na dekahko ramro are’. [There are ‘twelve’ (signifying unnecessary) hassles, its better not to visit a *jhānkri* for treatment.⁵⁷ For some like Shobhana Sinchewry the treatment is expensive. She says, “we have to give him one *pawa* (250 grams) of rice, a quarter i.e. a bottle of *rakshi* and Rs. 10-12 in cash. At times we have to give him few eggs too. Two eggs cost Rs. 2.50. We end up spending around Rs. 20-25 for *jari-butti*.”⁵⁸

Taking treatment from a *jhānkri* proves to be expensive for the workers. For some *jhānkris* they have to take *rakshi* which costs Rs. 12 per bottle, or even rum (alcohol) of two pegs which costs Rs. 20, some ask for a hen, which costs Rs. 30-40 some ask for eggs. A round betel nut, *pan patta* (betel leaf) are some other requirements. It sometimes costs Rs. 100 per visit to the *jhānkri*. Taking recourse to such services purely depends upon the costs incurred. In fact Shobhana Sinchewry says, “if you pay the *jhānkri* well then he treats you better.”⁵⁹ Among these services it is also important to assess the degree or the impact of the Family Planning Programmes in the tea estates taking a case of Phuguri. The following table shows thus followed by certain experiences of infertility by the women workers.

⁵⁷ Interview with Meenu Tamang, op. cit.

⁵⁸ Interview with Shobhna Sinchewry, op. cit.

⁵⁹ Ibid.

Table No: 6.8
Level of Family Planning among the workers

Work Category	Not Married	15-25 years			25-35 years			35-45 years			45+years		
		Self	Spouse	No	Self	Spouse	No	Self	Spouse	No	Self	Spouse	No
Daily Rated male workers (marad) n=76	22.37	-	2.63	7.89	-	23.68	10.53	3.95	13.16	3.95	3.95	5.26	3.95
Daily Rated female workers (aurat) n=112	7.14	2.68	-	1.79	28.57	0.89	8.04	24.11	8.04	4.46	7.14	-	0.65
Sub-Staff (male) N=28	-	-	-	-	-	14.29	3.57	10.71	32.14	3.57	14.29	17.86	3.57
Sub-Staff (female) N=4	50.0	-	-	-	-	-	-	-	-	-	-	50.0	-
Staff (male) N=9	-	-	-	-	-	-	-	-	55.56	-	11.11	33.33	-
Staff (female) N=2	-	-	-	-	-	-	-	50.0	-	50.0	-	-	-

Source: Fieldwork, Phuguri T.E. 2000

The above table clearly illustrates the impact of the Family Welfare Programme among the workers of Phuguri T.E. and the utilisation of the services. The table has been divided in different age groups with the reproductive age i.e. less than 45. Though the workers at Phuguri were aware of Family Planning and the services rendered by the government agencies my fieldwork discovered that more female workers adopted family planning than their counterparts. And interestingly during the Emergency more men underwent vasectomy as depicted in the above table of those workers belonging to the 45+ age group.

One of the workers Usha Tamang, 46, a daily rated worker said, "Earlier when vasectomy was conducted, there had been a few cases that even after sterilization few couples had children. It is believed that if both husband and wife consume *jaar/rakshi* then this is what happens."⁶⁰

Some of the workers like Reena Ramudamu, 26, faced problems after sterilisation. She says, "After sterilisation, the stitch was infected (*ghau pakeko*), and then I had to put the tape."⁶¹ We observed that there were some cases of infant and child mortality in Phuguri T.E. There were also some women workers who reported infertility. Nilima Tamang, 25, married for five years is unable to conceive. She consulted a private doctor. He said that there was no problem with her. She has visited a *jhānkri* in Nepal who told her that her *kokh mareko cha* i.e. her womb is dead. She doesn't believe him. Her husband has not visited a doctor as yet. Kavita Ghalay, 24, is married since five years. She could not conceive. She visited a number of doctors and even took an injection for conceiving. Even after five years of marriage she has no children. She spent a lot of money on treatment. People would always blame her. For seven months she had severe stomach pain and even developed a knot in her stomach. She was admitted to Darjeeling government hospital and after the first bottle of saline water she felt better. She would feel miserable on being unable to conceive. Later medical tests proved that it was her husband who was impotent. Doctors recommended medicines but he refused to take. Now everything has come to a standstill. She says that he is non-alcoholic but consumes a lot of sugar. She considers herself to be ill always. She fears for the future with the thought that she is barren/ doesn't have a child.

⁶⁰ Interview with Usha Tamang, 3rd October, 2000, Phuguri T.E.

⁶¹ Interview with Reena Ramudamu, op. cit.

Apart from other services as discussed in different sections, maternity benefit is also given to the women workers in Phuguri T.E. Women workers get for a period of 84 days @ Rs. 34.80 per day. 42 days before and after childbirth. They get paid fortnightly on three instalments @ Rs. 487.20. This amounts to Rs. 1461.60. Therefore for two periods pre and post natal it amounts to Rs. 2923.20.⁶² But Ganga Tamang, 26, a female worker says “We have to work immediately after delivery. We are allowed rest for only 1½ month. A lactating mother should get good care and rest for at least 2-3 months after delivery.”⁶³

Spiralling costs, low wages and arduous work have made the workers so disheartened that even the so-called fringe-benefits do not compensate such conditions.

This chapter presented data on perceptions of causation, complaints and reported illnesses across different categories of workers. In addition it examined the different providers of health services and analysed utilisation of services for both minor and major illnesses in relation to the available structures of provisioning. In the perception of workers the patterns of illnesses are related to the climate, arduous nature of work and poor food intake. The previous chapter has shown the evidence of lack of basic amenities among the lower rung of the work hierarchy. It is interesting to note that there is no appreciable difference in the patterns of illness and living conditions of workers from the early 20th century and the present.

The services provided by both the management and government do not adequately address the ‘felt needs’ of the worker shown by the emphasis on Family Planning that these institutions have. Dispensary provide for a certain set of conditions. The range of services is better in the Primary Health Centre but the question of accessibility arises. Therefore there is reliance on the informal sector which includes home remedies and *jhānkris*. The previous chapter has shown that the cost incurred for treatment of illness is one of the main causes of indebtedness. This basically shows that out pocket expenditure for treatment are high exacerbated by the inadequacy of effective health services.

⁶² This information and calculation was provided by Bimal Pradhan, office staff, Phuguri T.E., 2000.

⁶³ Interview with Ganga Tamang, 12th September, 2000, Phuguri T.E.

CONCLUSION

DISCUSSION AND CONCLUSION

This thesis examines the interrelationship between the working, living and health conditions through a case study of Phuguri Tea Estate in Darjeeling. It locates the present study within a historical perspective by drawing on relevant data from the Assam and Bengal tea plantations. The analysis of this data and available secondary sources shows that there was a migratory labour from a) the United and Central Provinces, the Chotanagpur Plateau to the tea districts of Assam and Bengal (Terai and Doars) region. The population was mainly tribal and some low caste groups and b) in Darjeeling tea plantations, it was mainly Nepalis who migrated from eastern Nepal. They were the Kirantis, Tamangs, other middle castes and service castes like Kamis and the Damais. Various socio-economic and political factors in Nepal and British India created a plantation labour force in Darjeeling hills.

For both these two regions a number of factors broadly classified into push and pull factors were mainly responsible for the movement of labour. The push factors towards Darjeeling include the poor economic condition like fragmentation of land holdings, pressure of population on land, heavy taxation, wage-labour, and even slavery. Famines, debts apart from other socio-political factors added to this movement. The pull factors were mainly growth of tea plantations, need for new settlers and labour. Army recruitment was going on simultaneously into the British army. Denial in recruitment in the army was an important reason for the highest number of Tamangs and lower caste groups in tea gardens. Such conditions made them scapegoats to the recruiting agents called *sardars*.

Deceit, treachery were used to recruit the already marginalised and enslaved population. On reaching the tea gardens they were faced with diseases and even death. Many for example in the journey to Assam plantations succumbed to unfortunate deaths especially during the late 19th century. Cholera, hookworm, diarrhoea, dysentery, malaria and other fevers were the main causes of death. These were largely attributed to the insanitary depots, unhygienic, living conditions, poor quality of drinking water, and low quality of food apart from being already weak and sickly.

In the case of Darjeeling plantations due to a major dearth of documents, reports and studies on the health history, the narratives of workers from the present study have recalled how workers lived in temporary, thatched wattle huts with no basic amenities. As far as conditions of work was concerned the system of *hatta bahira* existed where workers could be out of work leading to their economic insecurity. There was a great deal of food insecurity among the workers since they consumed mostly tuberous roots, maize, millet or rice, which were also inadequate. They were thus thrown into a situation of starvation and hunger. Diseases like cholera, hookworm, diarrhoea and dysentery were rife. Tuberculosis, asthma and pneumonia were another set of diseases mainly attributed to the climatic conditions and inadequate clothing. Mortality was not as staggering as in the case of Assam as documented in various reports and studies but chronic morbidity coupled with food insecurity was predominant.

Compared to Assam plantations of indentured labour there was a less stringent recruitment system in Darjeeling plantations but the work regime and living conditions were equally pitiable. The narratives with the ex-tea garden workers from the present study clearly illustrate the environment under which they had to work and live. Their lives were solely at the mercy of the *sahibs* and *sardars*. The system of *hatta bahira* might have thrown them into a more precarious condition. Darjeeling plantations were not characterised with indentured labour but there existed to some extent, coerced labour.

The British planters saw the Nepali labour as a 'race' that could be easily coerced to work and also able to adapt well to the rigors of plantation work. Such large-scale movements of labour resulted in the continuation of kinship ties and caste relations further within the plantations. These relationships got entrenched in to their work situation which the planters themselves were aware but never really interfered with the social norms and customs of these workers.¹

Such conditions by no means was restricted to the plantation sector but was seen in other industries like textile, jute etc (Morris 1965, Chakraborty 1989, Curjel 1923). The conditions of labour as described in the Reports are similar or even worse than that of the English working class during the 19th

¹ See chapter III for further details.

century. The early epidemiological studies showed the association between the poor working conditions and prevalence of a range of communicable disease during the mid 19th century. It is these studies that resulted in the sanitary awakening during this period that included sanitation, water supply etc. This classical epidemiological approach has been furthered by scholars like Turshen (1989) who restated this understanding of disease as a 'socially produced phenomenon'.

During the late 19th and early 20th century, health of the military in India was of prime importance. Curative rather than preventive medicine like thymol for hookworm was administered as we see in the case of Darjeeling. With India's independence came in various welfare interventions, and the conditions of these workers did improve as they had at least access to wages and labour quarters. Plantation industry came under a whole range of legal interventions specifically the Plantation Labour Act (PLA) 1951. Government machineries like the Tea Board, Department of Labour Welfare were specifically created to look into the welfare of plantation labour as well as the working of the tea industry.

Studies [CEC 1999, Bhowmik et al 1996, Rai 1996, Bhadra (ed.) 1996] have examined into the state of tea gardens after India's independence and have shown a dismal picture. Our field study of Phuguri T.E. in Darjeeling corroborates these studies by capturing the poor conditions of workers even though being entitled to a gamut of benefits. For example the wages of workers are calculated keeping in view other fringe benefits like subsidised food grains, firewood, medical facilities, and other fringe benefits. As a result the workers get very minimal that does not build upon inflation.

The wages of the workers in Darjeeling are still so low as compared to that of Assam and South Indian tea plantations. According to Prof. Manas Das Gupta, "wages for some historic reason there has been a wage decline in Darjeeling."² The overall monthly wages of a daily rated worker is Rs. 700 and the highest received is by the Head Clerk with Rs. 4000 per month. The calculations of wages based on the need-based minimum wages works in favour of the management.

² Discussion with Prof. Manas Das Gupta, North Bengal University, Shivmandir/ Bagdogra, Siliguri, October, 2001.

What is important or needs to be highlighted is the increasing cost of living as argued by Sarkar (in Lama and Sarkar 1986) which makes it difficult for the workers to meet their daily requirements and to save with their monthly wages of Rs. 700 only. Rai (1996) also argues on the same length where he calculates the fringe benefits with the needs of the entire family. Our study clearly shows that families whose total income was more were able to mitigate their crisis but for the largest bulk of workers the cycle of indebtedness continues with the shopkeepers etc. Therefore if one examines the wages and fringe benefits historically one can best describe it as a shift from 'total deprivation' to 'mere subsistence' from the colonial to the post-colonial period.

Education is very important for vertical mobility, better standard of living and health. In the case of Phuguri itself we see that the staff employees have comparatively better education than the bulk of the daily rated workers. With no alternative employment for the workers, they have to take recourse to the garden work, which is created by the system of *badli* or replacement. 84% of the workers are employed on this basis. The management argument is that they provide employment within the worker's family and is therefore providing them with a steady income. Our study has shown a relationship between education and position of work but it also revealed that despite education, compulsion to join work on *badli* or hardship basis forces students to discontinue studies and take up garden employment. There is no vertical mobility for these workers as seen from the occupational classification by Sarkar (see Chapter V).

A significant association based on the workers' perceptions is the influence of work on health. For instance complaints of back ache, dizziness, head and body aches are associated with plucking the tea leaves continuously, by holding the weight of the tea leaves on their head. Likewise while pruning, their chest and hands pain due to continuous bending posture while pruning the tea bushes. The male factory workers related their poor health due to overwork. Continuous work inside the factory for over 10 hours with untimely food and no rest leads to body aches, extreme fatigue and lethargy and the workers looked pale as though they suffered from jaundice. Lack of proper ventilation, working under the temperature that is higher than outside air due to the various processes like fermentation, drying etc. is only conducive to their ill health.

The sprayers using the chemicals suffer from nausea, dizziness; chest and shoulder pain, and tiredness. Few of these sprayers are suffering from tuberculosis and are undergoing treatment. Direct contact with the harmful chemicals cause them long term harm about which they are aware but are not able to change their conditions. Spraying of such pesticides does cause direct and indirect poisoning. There is an urgent need to examine this nature of work which has serious health hazards not just for the workers but also for the future generation.

This study shows a clear distinction across the levels of the work hierarchy with regard to the living conditions of housing, sanitation and water supply and diet. Workers houses are mainly classified as *pucca*, *semi-pucca*, and *kuccha*. Maximum number of workers lives in *pucca* houses even among the daily rated workers. This is mostly so because workers over generations convert their houses from *kuccha* to semi *pucca* and then *pucca*. In Phuguri a common problem faced by the workers is lack of house repairing by the management. Thus we see a high percentage of workers have taken loans from their own Provident Fund Account for it. Those workers living in *kuccha* houses are mostly young married couples who prefer to break away from the main house.

As far as sanitation was concerned, 21% of the daily rated workers use the open space *kholcha* for defecation. This was common even in the empirical studies of Kar (1996) of the Assam tea gardens. Prevalence of diseases like hookworm and skin infections is high in Phuguri. Use of firewood as the basic medium for cooking was found to be the highest among these daily rated workers with 44.15%. Much of their earnings also go for purchasing firewood @ Rs. 700 per *thack* (pile), which lasts only for four months for a family of four. Use of *jhikra* (twigs) was common. Use of firewood was more difficult during the rainy season as it would be moist adding to their work load. Use of only gas cylinder was common among the staff as they were also provided with gas cylinders as fringe benefits. Lack of water supply during the dry season was a common problem for most of the inhabitants.

Such problems were more specific to the daily rated workers. The staff and the sub-staff had access to better fringe benefits but given the cost of living and

coupled with increasing consumerism their own salaries were not enough to manage the increasing household expenses. They tend to compare their own salaries to that of the government staff. There is increasing discontent even among this category of workers. The present demand of the workers is to convert all the fringe benefits by increasing their wages. They have therefore formed their own social support networks through the caste-based *samaj*, the *ghummori* (chit fund) that comes of help during crisis. Women especially are found to rely a lot on chit fund.

Another important finding is the way the workers perceive their own health conditions to the conditions under which they work, live and eat. They have drawn associations between their long working hours, no rest, untimely or no meals, harsh weather conditions and excessive work loads. The need to make money drives pluckers to pluck the maximum to be able to save money for *ghummori* to utilize for the purchasing household items etc. In their perception this has negative consequences for their health due to overwork and erratic food intake. They also know that only those who are in better health can pluck the maximum. Women have stated that competition between friends leads to overwork, exhaustion, weakness which is strongly reflected in the high prevalence of white discharge. Body aches, dizziness, pain in the back neck were some of the common complaints due to continuous bending and plucking with the weight of the *doko* under the strong sun or continuous rain. Sivaram ((1989) had cited a study of Indonesian plantations where how women who were less anaemic were more productive. Likewise there was a clear degree of occupation related ill health, which is clearly reflected as among the sprayers suffering from tuberculosis, the factory workers from bronchitis, jaundice, the office staff with problems of constipation, diabetes, gastritis.

In the perceptions of these workers many of these ailments and diseases are a clear reflection of poor diet, and the tendency to skip meals. Workers have no appetite or otherwise take *jaar* and *rakshi* after work. Some have felt that these drinks mask their hunger and they get sound sleep. Breman (21968) study has illustrated how the late 19th and early 20th century in Sumatra plantations, opium consumption was allowed within the estates and that workers were put to bed early making them capable for work the next day. Consumption of black tea

is high among the plantation workers. This too to a certain extent kills hunger especially while at work. In the perception of workers they see a strong association between food and health. The area under study had experienced famines during 1940-45. Some of the ex-tea garden workers recall their dependence on famine foods like *gitta*, *byagur*, *tarul* etc. Our narratives about the earlier conditions have shown great dependence on famine foods in Darjeeling, like *gitta byagur, tarul* and other tuberous roots. Though now, famine like conditions do not exist today, the dietary intake of the workers has not improved significantly. Their diet largely consists of seasonal vegetables like quash, sag, *tarul*, rice, and some occasional pulses. Milk and fruits are still viewed as luxury. As discussed in our earlier chapter expenditure on food forms the maximum share of household expenditure resulting in a great degree of indebtedness.

Their health-seeking behaviour is clearly dependent on the availability and accessibility of services. In Phuguri workers depend mostly on the dispensary and the traditional *jhānkri* for medication. Going to a *jhānkri* proves to be expensive and as one worker said "if you pay him more he treats you better". Till their ill health affects their capacity to work they rely on their own home remedies and the 'white tablets' given by the garden dispensary. Inability to afford compels them to rely on the dispensary for further referral treatment. Only those who have some cash can think of accessing these public health services because they get the medical reimbursement only after 2-3 months. These factors forces them to either take loans or buy medicines on credit or worse neglect their own health.

For the bulk of workers their immediate problems of day to day survival is of concern rather than the condition of the tea industry or the respective tea garden as such. The workers had a common set of complaints of lack or delay of house repairing, construction of latrines, lack of firewood, water crisis during the dry season, and above all low wages. Although here are certain government interventions for the welfare of the plantation workers, none of them have been implemented on a full scale. There is a Labour officer in charge of plantations. In fact there is a structure under the Labour Department of West Bengal where certain powers have been vested to the officers in charge of plantation industry. In Soureni (near Phuguri) earlier there was a Welfare Center set up under the

aegis of the West Bengal Labour Department. This was reduced to ashes during the GNLFF (Gorkha National Liberation Front) agitation in 1989 which greatly affected the tea gardens in Darjeeling.

Lack of welfare inputs both by government and managements has led to increasing dependence on the informal social support systems (like *samaj*, *ghummori*, and the preponderance of a patron-client relationship). This has been discussed in greater detail in Chapter V. Fragmented trade unions have only created discontent among the workers.

Darjeeling has been completely relegated to the past and submerged with history. Lack of archival evidence is an ample proof of the negligence on the part of the colonial state and society, especially with regard to the labouring population of the plantation industry. The reason could be historically attributed to the absence of an articulate intelligentsia among the hill population. National Movement was also confined till the plains of West Bengal. Such parallels can be seen for the case of the Assam plantation labourers where labour mobilization took place between the late 1920's and early 1930's. Narratives have reflected that despite Independence from the British Rule the workers for example in Phuguri always felt even till about the year 1955 they were under foreign rule since this plantation was under James Finlay and Company, a British company.

It is this continuity that we see through the *maai-baap* tradition that is visible from the case study of Phuguri Tea Estate. Caste continuities have remained and the middle and the lower castes still constitute the unskilled working population. The argument of social hierarchy reflecting in the work hierarchy and that disease causation is contextualised within a large set of socio-economic working and living conditions is clearly demonstrated through a case study of Phuguri T.E. Historically, there has been change in such conditions but certain features of the plantation system continue to persist, leaving the workers more vulnerable. There is a need there fore to address the large socio-economic and political factors that trigger this marginalisation and vulnerability.

In this context it is important to understand the employment status under the present Darjeeling Gorkha Hill Council. Currently there are around 10,000 casual workers under the banner of the DGHC. Even after becoming a graduate

and armed with a B.Ed degree there is no permanent employment for the youth. Therefore after getting selected in the SSC (Staff Selection Commission) exam the post does not get confirmed as a large number of casual workers are demanding their own permanent position. Their argument is that only after they get a permanent post will they allow the newly selected candidates get their respective positions. The future of the Nepalese youth gets jeopardized due to the politics of power. There is a huge wastage of state expenditure on education. Also there has been a growing trend that many of the workers of Phuguri for example are going for jobs outside the gardens.

It should be of concern of the large-scale out migration of both male and female population of Phuguri. On questioning the total income of the households it was found that few of the workers children work outside Phuguri. Sons go to far-flung areas like Delhi, Pune, Gujrat, Jaipur, Arunachal Pradesh, and closer areas like Siliguri, Mirik, and Gangtok too, some are in the army. Daughters too work as domestic help in places like Delhi, Jaipur, Agra and one respondent has her daughter working as a housekeeper in U.K! The reason behind such large scale out migration is due to lack of work opportunities, low wages, arduous working conditions leaves the youngsters with no other choice but to search for better earnings by working as domestic help, drivers and so on. It is tough for young girls who get easily lured into the city life and there have been cases where girls get trapped into prostitution and end up leading miserable lives. This is the kind of vulnerability which is worse than working in the tea plantations. Where is the future for the worker's children in this industry?

After an inspection to Phuguri Tea Estate, a Report of the Assistant Labour Commissioner (North Bengal Zone) proposes the following actions³:

- a. Certifying Surgeon- to be appointed
- b. Drinking Water- the Employer of this garden has not made any arrangement for providing drinking water to the workers' quarter. If there was any such arrangement in the past, the same has become non-existent at present. So arrangement should be made by the employer to provide

³ Information gathered from the Labour Department, Siliguri. A visit to Phuguri T.E. was made in the year 1999, by the Department. The above were the observations made.

wholesome drinking water from the spring source available in the garden area.

- c. Housing- 61 houses are still required to be constructed with at least 8% of the total requirement annually.
- d. Medical Facilities- Although there is no qualified doctor in the garden, patients requiring elaborate treatments are sent to government hospitals which are nearby. All medical bills are reimbursed by the employer. The garden has one dispensary, which keeps nearly all the prescribed medicines and has one detention bed.
- e. Crèche- The crèches existing in the garden are not as per standard specification or rules. So construction of standard crèches or alternatively modifying the same to make them as near as standard ones. Maintenance of the crèche in clean and hygienic conditions are necessary. Refreshment should also be provided to children.
- f. Appointment of Labour Welfare Officer necessary.
- g. Recreation-Indoor games should be provided to worker.
- h. 30% of the total houses are yet to receive electric connection.

This Report is an evidence to support the case study done by the researcher. According to the official, the Welfare Officer for the case of Phuguri was always taken over by the management. In one instance the manager of this garden got his own wife appointed as the Welfare Officer! He further said youngsters are not aware of such posts even in their own garden. No further investigation was done in this regard.

Given the present situation of the Darjeeling Gorkha Hill Council and the larger situation of the tea market where Foreign Direct Investments (FDIs) are being given a green signal by the central government. "The chairman of the Tea Board and the Consultative Committee of Plantation Association (CCPA) are in favour of 74%, while United Planters Association of South India (UPASI) is 100%."⁴ Darjeeling is facing stiff competition from countries like Kenya and Sri Lanka. More than the fate of the workers it is the tea industry's fate that hangs

⁴ The Public Affairs Magazine, 5th April, 2002.

in silence. Recently, the workers of Chandmoni Tea Estate in the Terai region of West Bengal agitated as the garden was sold over to build a Satellite Complex instead. Also, cinchona plantations of Darjeeling have been declared sick and have been ordered to close down by the West Bengal government.

There is a need for the management to realize that investments towards the workers health will invariably increase labour productivity. Till this realisation dawns even the fate of the tea industry hangs in silence. There is a need on the part of the management, government and the workers to rebuild the tea industry, to shun ideological leanings and jointly move toward building a better future for a generation whose hopes are dim and frightening.

There are regular media contributions on the subject of the poor conditions of the tea plantation workers, especially by The Statesman, printed at Siliguri. Some of the few clippings accessed are as follows:

The Union ministry of commerce has asked the Tea Board chairman, Mr. N.K. Das, in Kolkata to look into the memorandum submitted by the All Gorkha Students' Union (AGSU) to the Union minister, Mr. Arun Shourie, last month." (The Statesman News Service, Siliguri, 8th January, 2002.)

The Indian Tea Planters Association has approached Reserve Bank of India for financial help to 'tide over' the crisis resulting from the tea traders' strike (The Statesman News Service, Siliguri, 23rd January, 2002.)

According to a senior official from the Labour Department, "The tea industry is undergoing a recession since 1999. Banks hesitate to finance the tea industry. Only recently for example in Musnai T.E. (Jalpaiguri Dist.) has agreed to finance 30% of the valuation of the last year's production based on the criterion that they will review the situation and then will give further finance. There is a need for some understanding between the workers vis-à-vis the trade unions, so that repayment is not hampered. The tea gardens have no funds reserved. What the tea industry needs is long-term soft loans. Replenishment, replanting are diminishing returns now."⁵

⁵ Interview with a senior official, Department of Labour Welfare, Siliguri, March, 2002.

Recommendations

Based on the data from the study it is possible to make some recommendations in terms of interventions that could be made to at least marginally improve the conditions of the workers. The suggested interventions are grouped into five headings:

a) By the management

- i. To implement the rules laid under the Plantation Labour Act, 1951, especially with regard to the working conditions, provision of protective gears, toilets and other immediate needs.
- ii. To coordinate the activities between the crèche and the Aganwadi (ICDS) centre so that the children can access all the facilities of these centres i.e. get the nutritional supplement, receive some pre-school education and overall care by the attendants.
- iii. The management can encourage the setting up of a cooperative canteen for the workers with the help of the local residents. In fact older workers who are no longer productive can provide clean and simple food at a subsidised rate so that the workers do not need remain empty stomach. As women spend the maximum amount of time in cooking this time and energy can be saved. If the management can help the community in shouldering this burden, it would be of great help.
- iv. Lastly, the time is ripe for investments. To the tea industry and its workers. Replanting of the tea-bushes is indispensable to improve the productivity and quality of tea. Sound health of the workers demands priority which will be an asset for the management for quality work. Some percentage of the profits of the industry need to be diverted to the welfare of the workers. In fact in the case of Darjeeling tea industry, in the year 1986, there were high profits but no amount was invested or given as incentives to the workers. There is thus a constant need to make the workers participate and their labour valued.

b. By the Government

- i. Proper implementation and monitoring of the labour laws under the West Bengal Plantation Labour Rules (WBSPLR).
- ii. Assuring that there are regular visits by the Labour Welfare Inspectors to the tea plantations.
- iii. Problems noted by these officials of the Labour Welfare Department, should be thoroughly addressed with the joint effort of the tea garden management concerned.
- iv. Appointment of Labour Welfare officers in the tea gardens by employing educated youth within the same tea garden.
- v. To make an effort at improving the quality of the food grains provided through the Public Distribution System.
- vi. Provisioning of alternative fuel.

c. By the Trade Unions

- i. To concentrate on other aspects like basic amenities like sanitation, housing, water supply, firewood etc apart from the economic front.
- ii. Should pursue the demands on the health aspects of the workers like sufficient supply of medicines in the dispensary for common illnesses like cool- cough, fever, body aches and also avoid defaulters who get reimbursement.
- iii. There is a need to assure the management on behalf of the workers of an optimum production and likewise to the workers that their working conditions will be taken care by the management. It should be quid pro quo.

d. By the Community

- i. The *samaj* should be involved more in improving quality of life of the members. They can hold meetings often and discuss basic hygiene, health and cleanliness of the areas.
- ii. To start a strong campaign for the ills of smoking and drinking.
- iii. Attempt to bring about a source of alternative income for the unemployed youth.
- iv. Promote the use of cowdung, vegetable waste as manures for the tea bushes.

e. By the Non-Governmental Organisations (NGOs)

- i. Providing an ambulance or a mobile clinic so that the workers can actively access treatment, medicines and health services.
- ii. Provide or supply protective gears to the workers involved in factory work, spraying chemical pesticides, those in the field work like plucking, spraying provide raincoats during the monsoons etc.
- iii. Help the management in minimising the use of chemical pesticides and promote organic farming.
- iv. Also help in construction of toilets in order to avoid the use of *kholcha* thereby maintaining a clean environment and preventing diseases like hookworm and skin infections.

Scope for Further Research

a. Comparative Study

- i. Between Darjeeling and the North Eastern tea plantations.
- ii. Between Darjeeling and the southern states.
- iii. Between Darjeeling and the other tea-producing countries like Sri Lanka, Kenya, Vietnam, China and Nepal.

b. Specific Study on Occupational Health of the Tea plantation workers.

c. Comparative study on the Organic and Traditional tea gardens with special reference to health of workers in these tea estates.

d. Study on the health dispensing mechanisms i.e. the health services provided by the government, the management and other bodies to the tea plantation workers of Darjeeling.

e. Study on the environmental epidemiology in the tea gardens in Darjeeling.

Looking into factors like:

- i. Deforestation
- ii. Industrialisation and pollution
- iii. Urbanisation, overcrowding/ congestion and loss of habitat
- iv. Fragmentation of land use
- v. Tourism

GLOSSARY

- 1 *anna* = 4 *paisa* and 16 *annas* = 1 *rupaiyah*. An Indian monetary unit, 1/16 of a rupee
- almirah*: cupboard
- aloo*: potato
- aluwa chamal*: a variety of rice
- amala*: gooseberry
- anikaat*: famine
- atmah*: spirit
- atta*: wheat flour
- aurat*: female worker
- bagan*: tea garden
- bahun*: priest
- bai*: bangles
- bajra*: millet
- bakshish*: The planters or managers gave *bakshish* when they were happy with the work of the labourer. *Bakshish*, a euphemistic term for working overtime.
- ban tarul*: Wild edible yam
- bari*: kitchen garden
- basti*: village
- bawarchi*: cook
- bhajan*: devotional song
- bhasme*: Jungle clearance and where shifting cultivation is mainly practised. These like *khas mahal* are government lands initially given to settlers who pay a certain amount of tax.
- bhate jaar*: *jaar* made of rice
- bhyagur*: Cush-cush, yam pee
- bicho*: scorpion
- bigar pareko*: evil eye
- bigarnu*: to destroy, to spoil
- bihan*: at dawn
- bimari*: illness
- bora*: gunny sack
- buo okhati*: a kind of root
- bustee*: Village
- nun- chia*: salted-tea
- chiso*: cold due to moisture
- chokra*: adolescent
- chokri*: On marrying a British, a Nepali girl was called a *chokri*
- choolah*: hearth
- chuna*: lime
- chunai wali haru*: those at the sorting section
- chutti*: holiday
- chyau*: Wild mushroom
- dabaiwala*: medicine men
- dadura*: measles
- dana*: seed
- daura*: firewood
- dehan rog*: epidemic

dhan: paddy
dhara / jhora: current of water
ghoom: a bamboo knitted cover
dhusa: a piece of cloth; rough rug
doko: a basket made of cane
dubo: Dhub grass
 East India Company: A joint stock company, which ruled India, until the British Government or Crown assumed direct rule in 1857.
gagri: vessel
gangeta: a small crab
garja: tea waste
ghas: grass
ghiroula: gourd
ghiu: melted or clarified butter
gitta byagur: tuberous roots found in the hills, potato yam
godamdhura: a longhouse near the *godown*
gur: molasses/raw sugar
haat: market
haija: cholera
hareyo makai: green maize
harsu, phachang: herbs
harsu: herb
hazira: daily wage
iskush: squash
jaar: liquor made from fermented grain
jara: root
jari-butti: medicinal plant, amulets
jhar-phuk: chants *mantras*
jhora: small spring
jila: district
joro: fever
juga: intestinal worms
jungali: the evil spirit
kacho hardi: raw turmeric
kalam katnu: pruning
ragat maasi: blood dysentery
kalo-joro: black fever
kal-walas: fitters. *Kamis*, their occupation is blacksmithery. In the tea gardens of Darjeeling they came to work as fitters colloquially termed as *kal-walas*
kaman: tea gardens
kamdaris: supervisors
kami: a class of Nepali smith, blacksmith
kam-joro: malaria
kanchi: the last-born female child
kancho: the last-born male child
karchira, titibi: seasonal vegetables
karela: bitter gourd
khar: hay
khas mahat are agricultural lands both privately and governments owned.
khata: notebook

kodo: a kind of millet
kokh: womb
kokro: bamboo basket for carrying baby
kothi: bungalow
kranti: revolution
kucho: broomsticks
kuire: literally meaning blue-eyed but a colloquial term for a 'white'
kurilo: Asparagus shoot
maasi: dysentery
madisia: a plainsman
mai-khatera: infectious disease
maile: second eldest daughter
makai: maize
malgodam: a storeroom where manure is kept
Managing Agency: A firm, which contracts to undertake the management of another for recompense from the managed firm's coffers.
mangni biya: marriage through arrangement
marad: male worker
marcha: yeast, required for brewing of alcohol
margi rog: fever
marg: convulsion
marich: pepper
matar: peas
maund: One unit of *maund*=82.28 pounds=36.926 kilograms
methi: fenugreek
mughlan: India
mula: radish
muntha: one fistful
nai: barber
namlo: a rope or a strap with a band for carrying load
nanglo: a winnowing tray
naramro hawa: bad air
neuro (kalo): Edible fern shoots
nullah: drain
pachmate baja: five musical instruments
pahare dabai: local indigenous medicine
paiero: landslide
pakhala: diarrhoea
pan patta: betel leaf
pandal: shade
pani: water
paral ko gundri: a mat made of hay
pawa: 250 grams
phatengra: insect
phoshi: a vessel used for making *rakshi*
phupu: paternal aunt
phurlung: a bamboo basket to keep tea leaves
pool: bridge
rakshi: a fermented drink
rangeen: colour

raw: *kacho*
roti: bread
Ruga-margi: cold and fever
sag: green-leaf vegetable
sahab: address or signifies the manager or the planter of a tea estate
saille: younger sister
sapnadosh: night or nocturnal pollution
seerak wala: one who sells quilts
semal tarul: tuberous roots
seme: beans
sindoor: vermilion
sisnu: nettle, a plant having sharp thorny leaves
solamate: sixteen instruments
sutkeri: delivery case
tama: bamboo shoot
tarul: underground tuberous root, yam
tawa: withering section in the factory
tetepati: a bitter plant
thangne-joro: typhoid
thapli: band
thika: work
tirpal: tarpaulin
tokeri: basket
tulsi: a sacred medicinal plant
tusa: Himalayan bamboo shoot
void: traditional Healers
verandah: front portico of a house. In a plantation house it is an extension, which the workers unusually convert into a room.
vikram samvat: Nepali calendar

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APPENDICES

APPENDIX 1: PHUGURI T.E PRODUCTION

Av. Other outside garden (Avongrove T.E) green leaf

Rohini T.E. Earlier under Daga and Co. no factory there, therefore it is manufactured here. Now some other company has bought this garden.

Year	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC	TOTAL
1995	P: -	-	1148	4749	1018	5064	5966	6412	5006	2885	2715	122	35085
	M: -	-	5477	16822	3958	13436	10931	20089	13385	8823	9258	411	102585
	Total	-	6625	21571	4976	18500	16897	26501	18391	11708	11968	533	137670
Rainfall	0.29"	0.97"	2.03"	0.67"	6.93"	51.15"	48.22"	25.08"	25.54"	3.06"	5.16"	0.47"	169.57"
1996	P: -	-	3010	2572	1934	4802	3797	6605	4889	2915	1859	245	32637
	M: -	-	8302	4960	5937	16898	11640	20396	11475	11316	7498	441	98863
	Total	-	11312	7532	7871	21700	15437	27001	16373	14231	9357	686	131500
Rainfall	1.93"	0.34"	0.22"	1.44"	7.26"	22.40"	35.33"	29.81"	4425	16.89"	6.24"	-	121.86"
1997	P: -	-	207	3174	1153	2887	4795	6397	12324	3176	1297	44	27555
	M: -	-	1541	10083	5174	13350	13331	17908	16749	8841	4763	380	87695
	-	-	261	AV.5171	AV. 2787	AV. 2281	AV.67	24305	-	12017	6060	424	115250
Rainfall	0.42"	0.82"	1748	13257	6327	16237	18126	-	-	-	-	-	-
		-	2.98"	5.92"	3.85"	16.16"	32.99	29.28"	32.16	0.37"	-	2.23"	128.79"
1998	P: -	-	731	6746	2400	5198	5488	6004	5308	5366	1968	336	39545
	M: -	-	3647	13448	9195	11598	15816	15256	10705	17843	4462	785	102755
	Total	-	4378	20194	11395	16796	21304	21260	16013	23209	6430	1121	142300
	-	-	-	AV. 1870	AV. 3147	AV. 1306	AV. 1468	AV. 147	-	-	-	-	-
Rainfall	-	0.03"	8.28"	7.90"	4.11"	26.82"	59.10"	38.83"	14.06"	5.57"	1.32"	-	166.02"
1999	P: -	-	715	1283	3809	4375	5507	6474	5255	4214	1866	372	33872
	M: -	-	3681	4843	7483	21939	14804	20221	9450	14746	5901	1060	104128
	Total	-	4396	6126	11292	26314	20311	26697	14705	18960	7767	1432	138000
	-	Rohini	556	R. 862	R. 2106	R. 1983	R. 3351	R. 3221	R. 3493	R. 2340	R.1855	R. 252	R.20019
Rainfall		-	0.20"	2.01"	19.89"	30.20"	42.77"	39.25"	25.72"	9.03"	-	0.02"	169.09"
2000	P: -	-	456	4749	2813	5347	7336	6719	4826	4757	2958	6590	-
	M: -	-	1444	14242	6452	16,467	19,664	15900	10244	10294	8098	1586	-
	Total	-	1900	18991	9,265	21,814	27,000	22619	15070	15051	11056	-	-
Rainfall		-	0.55"	9.16"	22.86"	36.55"	21.07"	28.13"	17.41"	0.53"	-	-	-

Labour Legislation Applicable To Plantations

1. The Workmen's Compensation Act, 1923
2. The Trade Union Act, 1926
3. The Payment of Wages Act, 1936
4. The Industrial Employment (Standing Orders) Act, 1946
5. The Industrial Dispute Act, 1947
6. The Minimum Wages Act, 1948
7. The Factories Act, 1948
8. The Plantation Labour Act, 1951
9. The Shops and Establishment Acts (Tamil Nadu 1947, Karnataka 1961, and Kerala 1960)
10. The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 covering:
 - a) Provision Fund Scheme (1952)
 - b) Family Pension Scheme (1971)
 - c) Deposit Linked Insurance Scheme (1976)
11. The Collection of Statistics Act, 1953
12. The Industrial Employment (National and Festival Holidays) Act, (TamilNadu 1958, Kerala 1958, Karnataka 1963)
13. The Employment Exchange (Compulsory Notification of Vacancies) Act, 1
14. The Maternity Benefit Act, 1961
15. The Motors Transport Workers Act, 1961
16. The Apprentice Act, 1961
17. The Payment of Bonus Act, 1965
18. The Contract Labour (Abolition and Regulation) Act, 1970
19. The Payment of Gratuity Act, 1972
20. The Labour Welfare Funds Act (TamilNadu 1972, Kerala 1965, Karnataka 1965)
21. The Equal Remuneration Act, 1976

Source: Rai, Robert Patrick: *op. cit.*: 21.

Nepali Calendar

Chait (half of March-half of April)

Baishakh (half of April-half of May)

Jeth (half of May-half of June)

Asar (half of June-half of July)

Sawan (half of July-half of August)

Bhadow (half of August-half of September)

Asoj (half of September-half of October)

Kartik (half of October-half of November)

Mangsir (half of November-half of December)

Paush (half of December-half of January)

Magh (half of January-half of February)

Phagun (half of February-half of March)

APPENDIX-IV

The following figures show the drop in production of Darjeeling tea.

Area and Production under Tea

Darjeeling	1987	1988	1989	1995	1997	1998	1999
Area (in hectares)	20012	20041	20055	18932	17760	17450	17200
Production (in 1000 kgs.)	12099	12049	12162	11298	10054	10730	9294

Source: Tea Digest Tea Board of India, Kolkata, February 2000

Estimated Production of Tea Up to July 2002

Districts/States	Upto July		Increase (+) or Decrease (-) in 2002 over 2001
	2001	2002	
			Up to July
Assam Valley	1,75,212	1,64,775	(-) 10,437
Cachar	27,036	21,558	(-) 5,478
Total Assam	2,02,248	1,86,333	(-) 15,915
Darjeeling	5,316	4,974	(-) 342
Dooars	65,618	63,307	(-) 2311
Terai	15,204	14,638	(-) 566
Total West Bengal	86,138	82,919	(-) 3,219
Others	2,683	2,414	(-) 269
Total North India	2,91,069	2,71,666	(-) 19,403
Tamil Nadu	77,999	76,639	(-) 1,360
Kerala	38,367	35,398	(-) 2,969
Karnataka	3,026	3,365	(-) 339
Total South India	1,19,392	1,15,402	(-) 3,990
All India	4,10,461	3,87,068	(+) 23,393

Note: Figures in Thousand Kgs.

Source: Tea India: Vol 20, No. 5-8, May- Aug 2002, Printed at Print House, Kolkata

Workers Interview Schedule

Phuguri Tea Estate

(Code : 1 = yes , 2 = no, 8 = don't know, 9 = not applicable)

Profile:

1. Name: _____

2. Age in years: _____

3. Sex(M=male,F=female) _____

4. Marital Status (3 = married, 4 = ^wmarried, 5 = widow, 6 = divorced, 7 = single)

5. If married, spouse's / spouses's name _____

6. Number of Children:

No.	Age	Sex(M/F)

7.

No. of members in your family (with age)	Relation with you in your family

8. Type of family(3 = nuclear, 4 = joint, 5 = single): _____

9. Socio-economic status:

Category of work	No. of hrs/day	No. of day/week	Monthly income	Incentive wages

10. Total monthly income of family excluding your own (fill 99 if nothing)

--	--	--	--

11. Are you working in replacement of your father/mother? Yes/No

12. Are any of your children employed in this garden? Yes/No.

13. How many of your relatives work in the garden?
(3 = none , 4 = one , 5 = two , 6 = more than two , 7 = more than 5.)

14. What is your traditional occupation?

Assets:

15. Do you own any piece of land?(yes/no)
if yes please specify _____

16. Do you own any livestock?(yes/no)
if yes please specify:
cow goat pig hen others

17. Do you have any savings/investment?(yes/no)
if yes please specify the type of savings _____

18. Are you engaged in any form of chitfund?(yes / no).

19. Do you take loans?(yes / no)
if yes where do u take loan from?

1. management 2. Samaj 3. Mahajan
4. Relatives 5. friends 6. Banks 7. Others

20. Do you engage in pawning? (yes / no)
if yes what are the items you pawn?

Educational Status:

21. Are you (3 = literate, 4 = illiterate)

22. If literate how far have you studied?

(2= 1-5th class, 3=6-10th, 4= till XII, 5= Graduation,
6= non formal, 7= Others).

23. Where have you taken your education?
(3 = govt. schools, 4 = private schools, 5 = other institutions).

24. Are your children undertaking education?(yes/no)
if yes where are they studying?
(3.= govt. schools, 4 = private schools, 5 = other institutions).

25. Have any of them dropped out of school?(yes/no).
if yes, why?

3 = can't afford

4 = elder children have to help and care younger ones.

5 = disinterest among children themselves.

6 = others, please specify.

26. Why did you come to work in this garden?
(3=took work as replacement of your parent, 4=friend / relative brought you here.
5 = came on your own, 6 = others, specify).

27. How long have you been working in this garden.
(3= 0-2 years, 4= 3-5years, 5= ~~5~~ 6-10 years, 6= ~~10~~ 11-20 years, 7= over 20 years.)
6 11 21

Migration:

28. Where have you come from?
(3=nepal,specify distt., 4=other tea gardens, 5= other parts of North Bengal,
6=outside bengal).

29. When did you move into this garden?
(3=your parents moved in first, 4=0-2years, 5= 3-5years, 6=5-10 years, 7= more
than 10 years, 8= came in after marriage.)

30. How many members of your family moved into this garden

31. Do you have any links with your past village/garden?(yes/no).

if yes , what are the kind of links you maintain?

(3=go during the agricultural season, 4= send money and gifts to relatives and family , 5-others, specify.)

Ethnic Background:

32. What is the name of your caste/tribe?

33. Which category do you belong to?

3 = general 4=SC 5=ST 6 = OBC

34. Is your spouse of the same caste/tribe?(yes/no)

if no , specify his/her caste/tribe name _____

35. Form of your marriage?

(3=arranged, 4= love/elopement, 5= others)

36. What religion do you practice?

(3=hinduism, 4= christianity, 5= buddhism, 6=islam, 7= others, specify)

37. Are you a member of Bada Samaj?(yes/no)

if yes how much do you contribute monthly?

38. Are you a member of any other samaj?(yes/no)

if yes, name the samaj _____

39. How much do you contribute to this samaj monthly?

40. Are they of any help to you?(yes/no)

if yes , how?

3 -help during marriages

4 -help during death ceremonies

5 -proviue loans

6 -others, specify

41. Do you practice commensality?(yes/no)

42. Are there any forms of stigma attached to your castes?(yes/no)

if yes, please specify:

3 -discrimination during marriage

4 -discrimination at workplace

5 -discrimination at social gatherings

6 -others , specify

43. Is your income sufficient for your family? (yes/no)

44. Are you indebted?(yes/no)

if yes please specify .

Housing , Sanitation, Water Supply:

45. Is your house :

3 = private 4=provided by management 5 =live as tenants.

46. Do you pay rent?(yes/no)

if yes. how much? _____

47. Type of house(3=kuccha, 4=semi-pucca, 5= pucca).

48. No of rooms:

(3=single, 4= two, 5=three, 6=more than three)

49. Roofing of the house:

(3=tiled, 4=asbestos, 5=others).

50. Private toilet?(yes/no)

if no, do you use

3 =public toilets 4 =go to the open

51. Does your house have electricity?(yes/no).

52. Does your house have water supply?(yes/no)

53. What is the source of water?

(3=private tap, 4=dhara).

54. Do you use the same water for drinking?(yes/no)

55. Do you boil the water before drinking?(yes/no)

if no, why?

(3=don't have time, 4= need fuel/firewood, 5= never thought of, 6= others).

56. What do you use for cooking in the house?

(3= gas, 4=kerosene, 5=firewood, 6=heater)

57. Does your family suffer from water shortage?(yes/no)

if yes, what do you do?.

Food habits and nutrition.:

58. How many meals do you take every day?

3 = morning 4 = afternoon 5 = evening 6 = night(dinner)

59. What do you eat during these meals?

rice dal roti vegetables meat

fish eggs.

60. Do you drink milk?(yes/no)

if not, who drinks in your family?

3 = How often: daily 4=twice/thrice a week 5=rarely 6=never.

61. Do you eat meat/fish?(yes/no)

if yes, how often:

3 = daily 4=weekly 5=fortnightly

6=occasionally 7=rarely.

62. Do you consume liquor?(yes/no)

if yes,

Which one?

(3=country liquor, 4= jaar/chang, 5 = market liquor)

6 = others.)

How often do you consume?

(3=daily, 4= weekly, 5=fortnightly, 6=occasionally)

63. Do you smoke or consume tobacco?(yes/no)
 if yes:
 Which one?
 (3=beedi,4= cigarette, 5= chewing tobacco, 6= others).
- How often do you smoke?
 (3=daily, 4=2-3 times a week, 5=occasionally).
64. What percentage of your income do you spend on food?
65. Do you feel hungry during the night while you sleep?(yes/no)
66. Do you feel weak, tired during work and during sleep?(yes/no)
67. Do you consume black tea?(yes/no)
68. What quantity of tea leaves do you get from the management monthly?
69. What is the quality of tea leaves that you get?
70. Do you buy extra tea leaves from outside?(yes/no)
71. Do you get ration(PDS) ?(yes/no)
72. What are the items provided , please specify?
73. Where do you go to buy your household items?
 (3=local shop, 4= Minik bazaar, 5=haat, 6=siliguri).
74. Are you aware of the AWW, the ICDS service in this garden?(yes/no)
75. Do you send your child/children to the AWW 4=Creche
 (3)

Health and Health services:

76. What are the common ailments that you suffer from?
 (3=fever,4= bodyaches,headaches,5= stomach ache/gastric pain, 6= white discharge(in case of female respondent), 7= respiratory problems)
77. Do you feel that there are occupational hazards?(yes/no)
 if yes please specify.

78. Whom do you usually go for
 a. minor ailment b. major ailment
 (3=dispensary, 4= local doctor, 5= Jhakris, 6= Mirik hospital,
 7= private doctor, 8= home remedies)
79. Do you believe in jhakris?(yes/no)
 if yes
 In your family who goes for this treatment?
 (3=for yourself, 4=your spouse, 5= your children, 6=your kin)
80. Do you use any home remedies for ailments?(yes/no)
 if yes please specify the type of ailments.
81. Do you have any idea about the benefits provided by the management?(yes/no)
 if yes please specify.
82. Is there any medical checkup conducted by the management?(yes/no)
83. Has there been any major illness in your family?(yes/no)
 if yes , specify:
 3 = tuberculosis 4=heart attack 5 =cancer
 6 = typhoid 7 =others,specify
84. What is the age of the eldest member in your family?
 85. If married respondent:
 have either of you undergone sterilisation(family planning) ?(yes/no)
 if the respondent is a married woman, answer 86-93:
86. Age at which married:
87. Were your deliveries (3=normal, 4= ceasarean)?
88. Where were your deliveries?
 (3=at home, 4= mirik hospital, 5= private hospital, 6= others, specify)
89. Do you take the help of dais during delivery?(yes/no)
90. Have you had any miscarriages/abortions?(yes/no)
 if yes, number of times
91. Do the dais practice abortions in the gardens?(yes/no)
92. Have you lost any child during or after child birth?(yes/no)
 if yes, state the number of times.
93. Any specific experience you wish to share with regard to child birth?

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