Chapter 3

Profile of Sample Small Tea Growers and their Land and Labour Utilisation Pattern

3.1Introduction

One significant phenomenon of tea industry in North Bengal is the large presence of Small Tea Growers (STGs) who are the producers of green tea leaf. This new sector has registered a phenomenal growth during the last two decades in several districts of the region. With the acceleration of the growth momentum of the STGs, the tea sector in this region has begun to experience a gradual shift from estate-orientation to small-holder orientation. The Tea Board of India has defined a person as a STG who is having tea plantation area up to 10.12 hectares (or 25 acres) without any processing facility. The STGs had made their first appearance in Chopra Block in Uttar Dinajpur District during the early 1980s. In the subsequent years, they were spread over the other areas of the region− Jalpaiguri, Coochbehar and the Terai (the foothills of Darjeeling). Prior to mid-1990s, there was a very small number of STGs in this region. However, in the post mid −1990s period, there was a sudden and rapid spurt of STGs across this region. Today, whatever increase that has taken place in tea acreage as well as in tea production in the state is largely due to the growth of small tea gardens under STGs. The important factual evidence to this incident is that the total area under tea production in West Bengal has shown a considerable increase from 101,190 hectares in 1995 to 140, 440 hectares in 2013, which is about 39 percent. Given the scarcity constraint of lease-hold land that put impediment on stretching out of plantation periphery of traditional tea estates, the expansion of tea acreage is certainly due to the rapid spurt of STGs during this period. There is no alteration of this trend till date. On the production front, the tea industry has, in fact, registered a quantum jump during this period with the total production of tea has shown an increase from 157,522 tonnes in 1995 to 312,880 tonnes in 2013, which is about more than 98 percent. It is hardly to mention that a sizeable share of this contribution to tea production has been made by the informal tea sector consisting of a combination of small tea planters and Bought Leaf Factories. It can further be observed that in ten years time from 2000 to 2010 the contribution of this sector in total production has increased from 11 percent to 26 percent. In addition to its contribution to production, the sector has also been observed to contribute profoundly to productivity in terms of realization of higher tea yield

per hectare. In absolute terms, the average yield rate of tea in West Bengal showed an increase from 1589 kg in 1994 to 2066 kg in 2006. In percentage terms, it is an increase to the tune of about 30 percent.

Tea cultivation on small holding has raised some contentious issues concerning socio-economic ramifications that this newly emerged sector is expected to bring about. One such issue concerns the class of people to which these plantations belong. It is a commonly held view that the non-peasant classes of entrepreneurs with an urban origin and having good financial background have largely penetrated into this sector. There is a scant penetration of local peasant smallholders. These changeovers seem to have important bearings on the livelihood security of the smallholder agricultural farmers. Thus, it needs to be investigated whether the growth of this sector has been followed by an encroachment of the sphere of farming activities of the villagers with a peasantry background and thereby leading to the problem of livelihood vulnerability of them. The second related issue concerns land diversion− the transfer of land under traditional crop cultivation to land under tea production. It is true that a large tract of traditional crop land has come under tea following the commencement of this new mode of tea production. But an important inquiry to be made is about nature and type of transferred land. In this context, two important characteristics of landholding of smallholder cultivators in this region should be mentioned. In the first place, though lands are suitable for agriculture, landholdings are small and uneconomic in many instances. Secondly, the landholding of a significant number of smallholder cultivators in this region is consisted with a larger share of highlands which are unsuitable for agriculture. These adverse land characteristics seem to provide them sufficient incentive to look for a substitute product for paddy or any other traditional crop.

3.2 Objective of the Study

Given the background outlined above, the present study makes an attempt to examine the socio-economic background of the STGs in the region of North Bengal as limited information is available on them till date. The study also aims at testing certain relevant hypotheses on the basis of such primary information obtained through field survey among STGs. These hypotheses primarily concern the general perceptions among the people about the land transfer phenomenon vis-à-vis the appearance of STGs in the tea scenario of the State. The hypotheses underlie this study are stated below:

i) Tea plantation is a large scale commercial activity requiring huge initial capital investment vis-à-vis big plots of land. It is not suitable for small holder schemes.

ii) The small tea plantations have emerged out of cultivable land, replacing the cultivation of traditional crops with the growing of tea and depriving the peasants from their means of subsistence.

iii) The extension of the periphery of tea plantation following the emergence of STGs has led to displacement of smallholder peasant cultivators from the cultivable land and subsequently brought about the problem of land alienation.

iv) The gardens in the tea smallholding sector are largely owned by business capital which is encroaching upon the sphere of economic activities of the peasant folk in this region.

3.3 The Study Area

The primary data for the present study was collected from nine tea smallholding sub-regions under the administrative districts of Uttar Dinajpur, Darjeeling, Jalpaiguri and Cooch Behar. The total number of respondents is 124. The sample is intended to capture as much diversity as possible in terms of covering locations that are well spread across the districts vis-à-vis the land holding size of the respondents which ranges from 0.5 to 24 acres. The district and sub-region specific distributions of respondents are given in the following tables.

Table3.1. District wise distribution of respondents

Districts	% of respondents
Uttar Dinajpur	24.8
Darjeeling	21.6
Jalpaiguri	47.2
Coochbehar	5.6
Total	100

Source: Field Survey, 2007-08

Table3.2. Sub-region wise distribution of respondents

District/Sub-regions	% of respondents
Uttar Dinajpur	
Chopra	74.19
Islampur	25.81
Total	100
Darjeeling	
Chat Hut	44.44
Kharibari	55.56
Total	100
Jalpaiguri	
Fatapukur	13.56
Jahuri Talma	23.73
Hela Pakri-Bhot Patti	20.34
Panbari	42.37
Total	100
Coochbehar	
Mekhliganj	100

Source: Field Survey, 2007-08

3.4 The pattern of emergence of STGs

It is well known that the springing up of tea cultivation on small holding is a late-1990s phenomenon. The analysis of survey date substantiates this general perception about the STPs very clearly. The year-wise distinction of surveyed STPs is given in Table-3 and shown graphically in figure-1.

Table3.3. Year-wise Distribution of STPs

Year	% of STPs
1985-1993	3.23
1994-1995	4.03
1996	5.65
1997	8.06
1998	12.90
1999	28.23
2000-2002	37.90
Total	100.00

Source: Field Survey, 2007-08

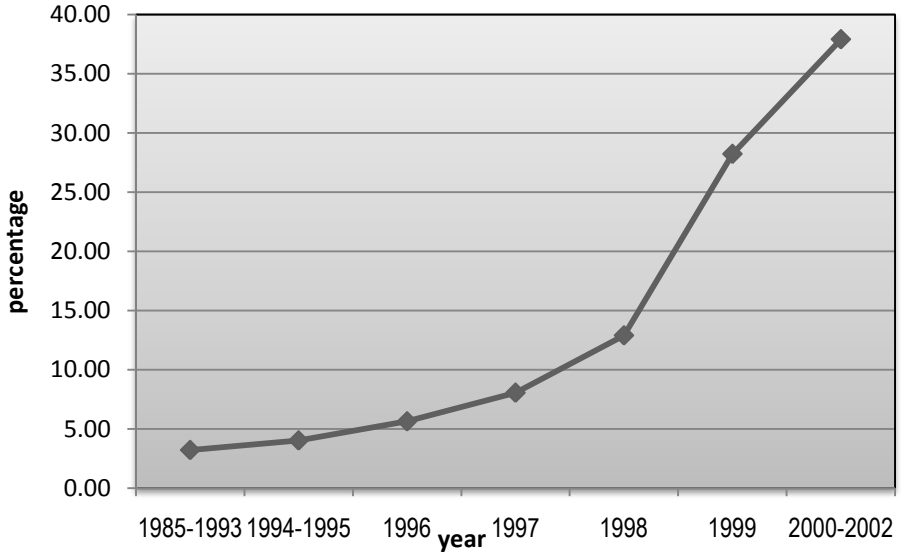

Figure 3.1.Year-wise Distribution of STPs

It is evident from the above table that a relatively smaller percentage of respondents have taken up tea cultivation prior to 1997. However, during 1998-2002, a maximum number of respondents have started tea plantation.

3.5 Socio-economic characteristics of sample STGs

For an objective verification of the commonly perceived notion about the identity as well as the economic and social background of the STGs, it is necessary to study some socio-economic characteristics of the STGs. These include age distribution, educational status, occupational status etc. These characteristics are discussed as under

3.5.1 Educational Background

Educational attainment is considered as one of the components of skill formation without which no one can make a transition from a traditional model of farming to a more advanced model of farming like the commercial model of tea growing. Moreover, for efficient operation of this new type of farming activity, the need for education is even greater. For making his venture a rewarding one in terms of achieving maximum efficiency gain, a grower needs to acquire sufficient knowledge on selection of seeds, use of chemicals and fertilizers, utilization of soil testing reports to control for soil factors influencing yield and utilisation of marketing channels for disposing of green leaf. The educated growers definitely gain an edge over the illiterates in

all these aspects. The educational attainments of respondents are summarized in the following table

Table3.4. Educational Qualification of the Respondents

Educational Status	Percentage (%)
Illiterate	4.03
Primary School Level	18.55
Junior School Level	20.97
Secondary Level	28.23
Higher Secondary Level	11.29
Graduate Level	13.71
Post Graduate Level	3.23
Total	100.00

Source: Field Survey, 2007-08

The above table shows that about 19 percent of the respondents are educated only up to the primary level, 21 percent up to the junior school level and 28 percent up to the secondary level. The percentage of respondents educated up to the secondary school level comprises to 68 percent. There are about 28 percent of the respondents who are having academic qualification above the secondary level. The respondents having academic qualification above the higher secondary level constitute only 17 percent of the total. Finally, nearly 4 percent of the respondents are illiterate. The analyses, therefore, indicates that 96 percent of the sample tea growers are exposed to formal education with varying degree of educational attainment. owever, the overall educational profile of the respondents is relatively low.

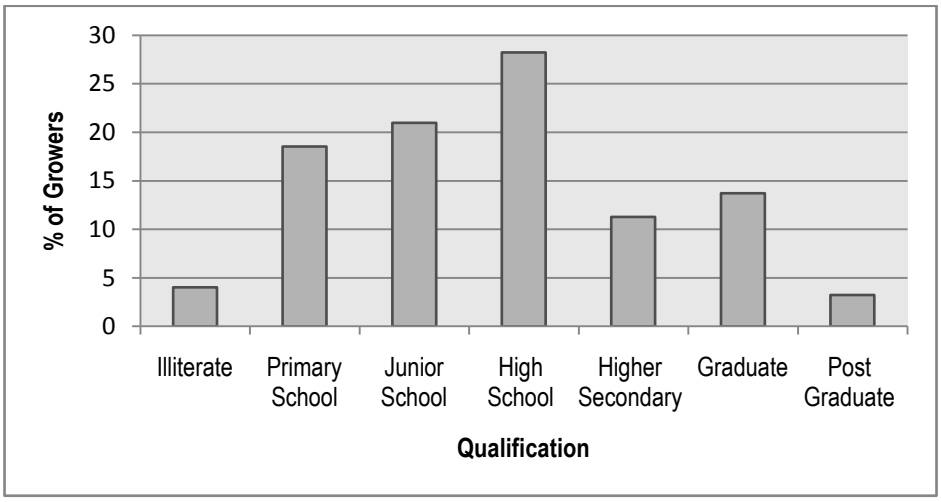

Figure3.2. Educational Qualification of the Respondents

3.5.2 Age group

A study into the age composition of the sample tea growers are important to identify for which age group(s) self-employment generation is significant.

Table3.5. Age Distribution of the Respondent

Age group	Percentage (%)
Up to 30 years	13.71
31-40 years	30.65
41-50 years	33.06
51-60 years	16.94
Above 61 years	5.65
Total	100.00

Source: Field Survey, 2007-08

It is evident from the table that about 44% of the respondents are falling under the age groups "up to 30 years" and 31-40 years, 33 percent belong to the age group 41-50 years, and only 23 percent are of above 50 years of age. We see, therefore, that 77 percent of the respondents are falling within the younger and middle age groups. As majority of the sample gardens have completed nearly 10 years of standing at the time of survey, it means that growers in the age group 51-60 years were young at the time of promotion of their ventures. This is one of the

welcoming features of the small tea sector given the fact that the employment opportunities are very limited in this region. It has, in fact, opened up wide vistas of self-employment opportunities for the working age population of this region. Our field survey revealed that respondents having rural background comprised 86 percent while those having urban background made up only 14 percent of the total number. It is, therefore, seen that permanent village dwellers, who are predominantly peasants, have made their presence felt strongly among the STGs. Taking this fact into account, it can be easily inferred that small tea plantations have created self-employment opportunities for the rural working age population on a significant scale.

The age-distribution table shown above reveals that a significant component (about 44 percent) of STGs is the younger people falling in the age-group '40 years or below'. This seems to indicate that cultivation of tea on small land holdings provides ample avenue for self-employment of unemployed rural youth, besides engaging the middle age rural people with this enterprise. It has been observed during the survey that the initiation of tea plantations is a preferred agricultural practice to the younger generation who are having a minimum qualification of secondary level of education. They usually feel less attracted to conventional agriculture possibly because of the poor incentives and lack of support services connected with it. The emergence of small tea plantations has surely helped them in taking up an occupation of their own choice.

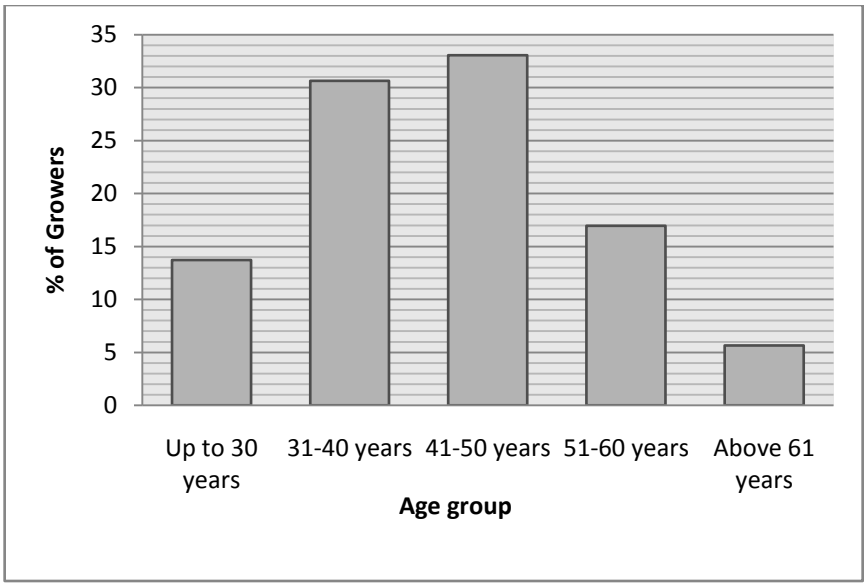

Figure3.3.Age -profile of the sample growers.

3.5.3 Occupational Profile

It has already been observed that a significantly high percentage of STGs are village people having low educational profile. This observation is further substantiated by an analysis of occupational characteristics of the sample. For gaining insight into the changing occupational profile of the respondents, we have taken into consideration the state of occupational distribution in both before tea cultivation and after tea cultivation situations, that is to say, occupation prior to taking up of tea plantations and additional occupation following their entrance into the farming activity of tea growing. The analysis is made on the basis of the following table

Table3.6. Occupational Distribution

Category	Percentage	Category	Percentage
Prior to Tea		**Additional Occupation**	
Traditional Crop Cultivation (TCC)	48.39	Traditional Crop cultivation (TCC)	35.48
Pineapple Plantation	5.65	Pineapple Plantation	0.81
Small Business (SB)	25.00	Small Business (SB)	25.00
SB in addition to TCC	1.61	SB in addition to TCC	3.23
Service	8.87	Service	8.87
Informal Workers	3.23	Informal Workers	4.03
Nothing Significant	7.26	Solely depends on Tea Plantation	22.58
Total	100.00	Total	100.00

Source: Field Survey, 2007-08

It can be seen from the table that nearly 54 percent of the sample tea growers are from agricultural background with traditional crop cultivation being their previous occupation. The crops they cultivated include paddy, jute, pine apple etc. The sample growers who are from occupation other than agriculture constitute 39 percent of the total. The different constituents of this non-cultivator group of growers include small businessmen (25 percent), servicemen (8.87 percent) and informal workers (3.23 percent). An approximately 7 percent of the respondents has been found to be not engaged in any specific occupation(s) prior to taking up tea cultivation.

Thus, it is clearly revealed from the study that the expansion of land area under tea plantations since mid-1990s is considerably due to peasants of this region, besides persons engaged in small business and servicemen. This amply contradicts the general notion among the people that the process of land transfer is accompanied by displacement of peasant community from the cultivable land in this region. The process of land transfer during the period covered under the study is, in fact, characterized by migration of peasants from traditional crops to tea.

The distribution pattern of additional occupation (i.e. occupation in addition to tea) reveals that the maximum percentage (35 percent) of the respondents is still associated with traditional crop cultivation. This is followed by small business which comprises 25 percent of the respondents. What can be inferred from our analysis is that a substantial number of small growers in the study regions have opted for dual system of farming, that is to say, tea farming along with subsistence farming that includes paddy, jute and vegetable cultivation. Some parts of land are being used for tea while the remaining parts being put under other crops. One possible reason for opting for such crop diversification scheme seems to be the diversification of risks and uncertainty associated with traditional crop cultivation and the maintenance of a steady flow of farm income over the year. It may be noted in this connection that the risk of serious disease prevalence or disastrous crop failure is fairly low in case of tea plantation. A segment of the small growers, on the other hand, supplement tea business income from sources such as wage earnings, shops, transportation jobs and private and government salaried jobs. There is also a big category of small growers, nearly one fourth of the respondents, who do not have any occupation other than tea cultivation. They are solely dependent on tea. This is probably indicative of the fact that a substantial number of STGs are small holder farmers who are not left with any land for the cultivation of traditional crops after they have taken up tea cultivation.

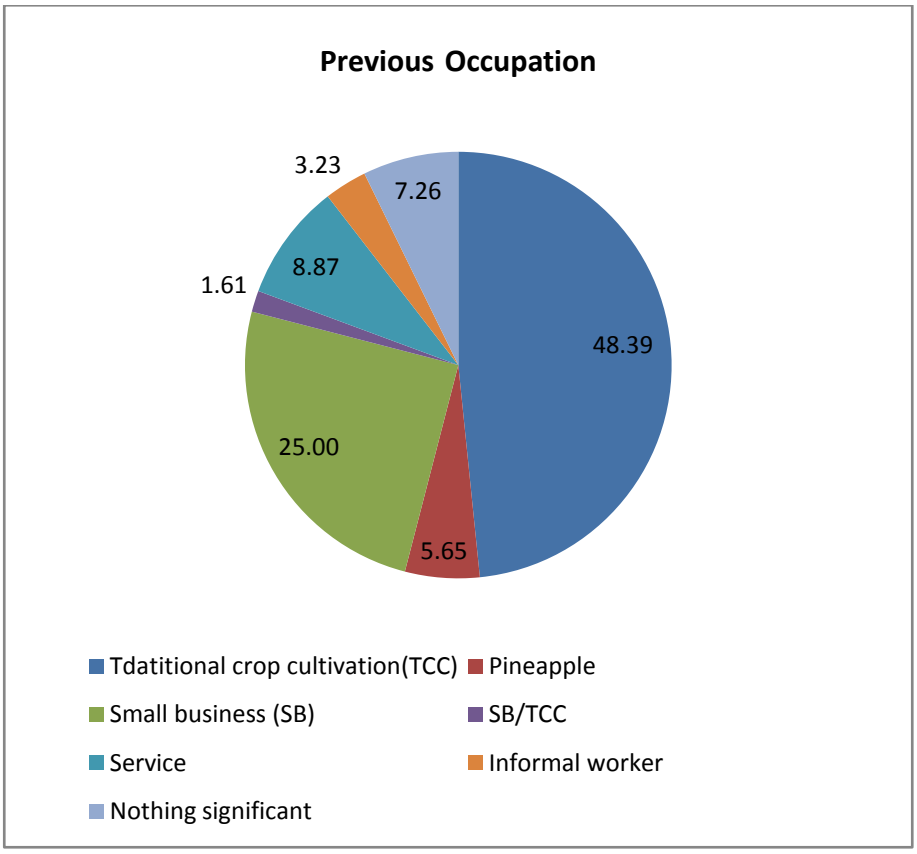

Figure3.4. Break-up of small tea growers according to their previous occupation

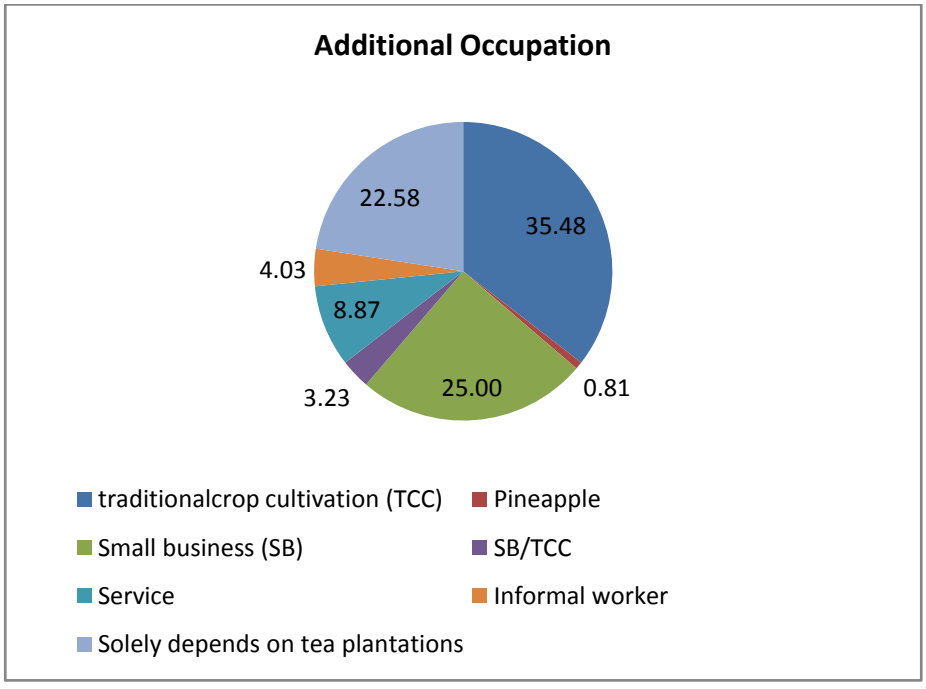

Figure3.5. Break-up of small tea growers according to their additional occupation

3.5.4 Pattern of Investment

According to the traditional view, tea industry is capital intensive in nature. It requires a large fixed sum of capital investment for land preparation, purchase of tea saplings and other related activities like digging up of deep drainage trenches, irrigation etc. Other than fixed cost, a tea garden requires a substantial amount of working capital to maintain the garden throughout the year. Taking these two components of costs together into account, the financial investment during the initial years is assumed to be quite high in tea cultivation. Given this pattern of investment, the use of institutional finance like bank loans is of vital necessity for establishing a tea plantation. For the sample STGs, the diverse source of finance for launching their tea plantations are described in the following table

Table3.7.Source of Finance

Source	Percentage
Solely Self-Finance	68
Private loan in addition to Self-Finance	16
Bank Loan in addition to Self-Finance	15
Both Private and Bank Loan in addition to Self-Finance	2
Total	100

Source: Field Survey, 2007-08

It can be seen from the table (table 3.7) that the bulk of the tea gardens in the study locations were set up thorough self-financed investment. Funds were arranged by growers either through mobilizing their own resources and / or through taking loans from relatives or from other private sources within the villages. Only 17 percent of the respondents could manage to avail bank finance to start their plantation establishments. As it was revealed from field study, one important reason restricting a vast majority of the STGs from being eligible for taking bank loan or receiving Tea Board assistance for starting up plantations is that they do not hold No Objection Certificate (NOC) to be issued by the Land and Land Revenue Department

of the Government of West Bengal even though they have applied for it several years back. The holding of NOC means a grower has the formal authorization of starting tea plantations on designated agricultural land. The submission of this document is considered to be mandatory for getting registered with Tea Board. Thus, we see that the major legal constraint prohibiting them to access various assistance schemes of Tea Board as well as credit facilities from organized financial institutions is the non-possession of NOC. As the above table indicates, only a fewer number of growers are possibly registered with the Tea Board and have been able to access either planting subsidy or credit facilities from institutional sources.

The existence of a very large proportion of solely self-financed gardens in the study areas contradicts the general perception that tea can be grown only on large scale requiring huge initial investment. The mean cost of land preparation for the sample growers has been estimated to be Rs. 28, 549, which is reasonably low. The cost of tea saplings is found to be quite negligible as the growers themselves usually produce the clone variety of saplings in their own nurseries at a minimal cost. A substantial part of other items of costs to be borne in the initial years is essentially in the form of labour costs. These costs are formidably low in small tea gardens as compared to large tea estates. One possible reason for lower labour cost characterizing small tea gardens is that they are essentially a family run enterprise in which the work force is largely composed of low-opportunity cost family labour. Other than family labour, the sector also employs hired labour but only to a diminutive proportion. This pattern of labour deployment has the implication that labour cost can be kept at a sufficiently low level. Taking all these factors into cognizance, it can reasonably be predicted that the initial investment for the commencement of tea cultivation need not be very high. This probably is the predominant reason why growers have been able to build up their plantations out of self-finance. This observed fact contradicts the general perception that tea plantation is a large-scale enterprise requiring huge initial investment. The view of large-scale orientation of tea plantations has been amply eroded by this emerging model of low investment tea growing operation. As a matter of fact, a low initial capital

investment for the starting up of plantations is a key favourable financial factor which allows STGs to proliferate.

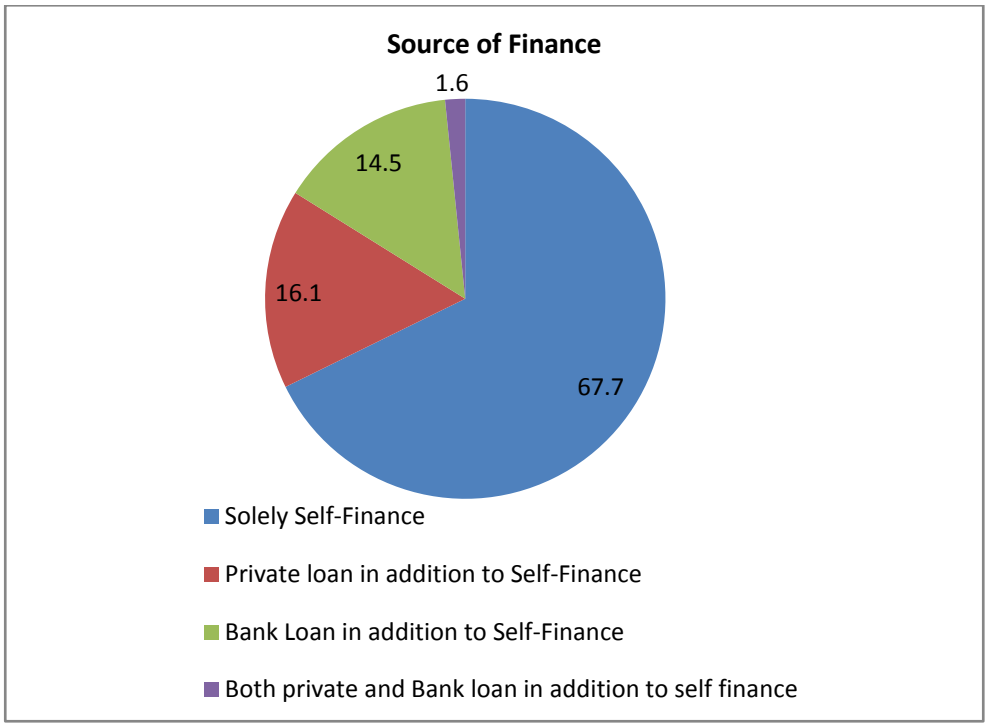

Figure3.6. Break-up of small tea growers according to their source of finance

3.6 Land Characteristics and Land Use Pattern

New tea gardens represent a major agricultural shift in this region in terms of transfer of land from traditional crops to tea. This is an issue which has been deeply contested in recent time in all small tea growing locations of the region (Sankrityayana, 2006, Rasaily, 2013). For an exploration of various dimensions of land-use transformation phenomenon, it is necessary to carry out an extensive study on land characteristics and land utilisation pattern of the STGs. First of all, the distribution of STGs according to the land holding size is presented in table 3.8. This gives us a better idea of the smallholder-dominated character of the new plantations.

Table3.8. Respondents under different holding sizes

Holding Size (in acre)	Percentage of growers	Area (%)
below 3 acres	40.32	9.67
3 to below 6 acres	24.19	20.25
6 to below 9 acres	15.32	19.22
9 to below 12 acres	8.06	14.71
12 to below 15 acres	5.65	13.34
15 to 25 acres	6.45	22.81
Total	100.00	100

Source: Field Survey, 2007-08

It is evident from the table that about 40 percent of the respondents have holding sizes under 3 acres, 65 percent under 6 acres, 80 percent under 9 acres. It can also be seen from the table that 88 percent of the respondents have holding sizes less than 12 acres and only 12 percent having farm size between 10 and 25 acres. It may be mentioned in this connection that the pattern of land holding emerging from the present study is not too different from that has emerged from the survey done by the Department of Tea Management, North Bengal University, as well as from the study of the United Forum of Small Tea Growers Association. It can be noticed that the lowest amount of area (10 per cent of the total area) under small tea cultivation belongs to the growers under the holding size 'below 3 acres'. This essentially implies the extremely small size of farm (1.26 acre on an average) of a sizeable proportion of growers.

The study, therefore, reveals that the smallholder tea sector during the period 1995-2002 is dominated by growers under the holding size ranging from less than 3 acre to less than 6 acres. A high concentration of respondents under the bottom holding size categories seems to indicate that the smaller farms are economically viable. Another implication that follows is that small holding tea plantation has appeared to

be a better land use option than the traditional small holding agriculture for the peasant folk in this region at large.

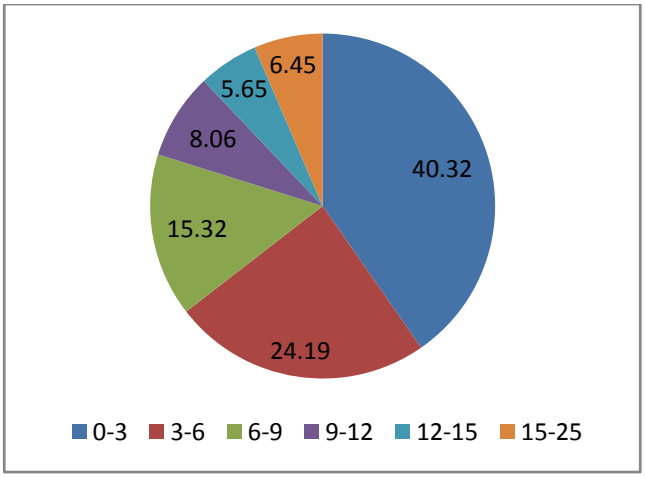

Figure3.7. Break-up of small tea growers according to their holding sizes

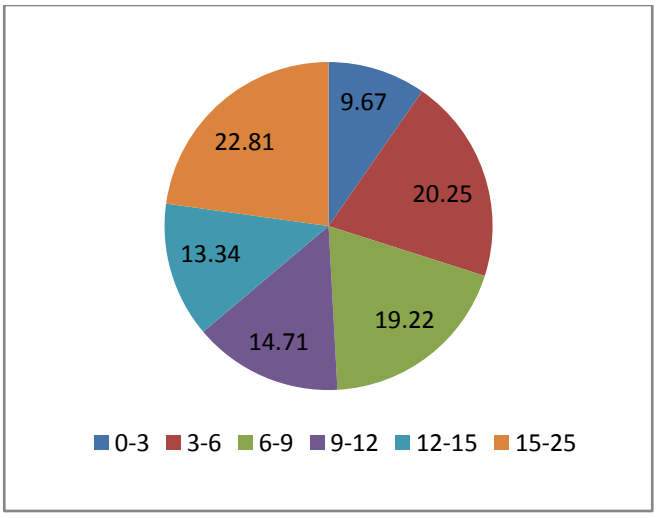

Figure3.8. Break-up of small tea growers according to amount of area

An exercise is now necessary in order to examine the land utilisation pattern of STGs. The hypothesis central in the present context is the general perception among the people that tea gardens under STGs emerged predominantly out of crop-replacing land. An area-wise pattern of land-use change is depicted in table 3.9.

Table3.9. The pattern of land-use change in the study regions

Area	Waste Land (%)	Crop-Replacing Land (%)	Total Land (%)
Chopra	4.60 (25.15)	20.73 (74.85)	25.32 (100.00)
Islampur	14.97 (91.22)	2.18 (8.78)	17.15 (100.00)
Kharibari	24.46 (80.17)	9.16 (19.83)	33.62 (100.00)
Chat Hut	7.54 (36.96)	19.48 (63.04)	27.02 (100.00)
Fatapukur	7.28 (50.11)	10.97 (49.89)	18.25 (100.00)
Jahuri Talma	1.40 (16.81)	10.52 (83.19)	11.92 (100.00)
Helapakri	9.81 (69.23)	6.61 (30.77)	16.42 (100.00)
Panbari	15.53 (69.73)	10.21 (30.27)	25.74 (100.00)
Mekhliganj	14.41 (68.30)	10.13 (31.70)	24.55 (100.00)
Total	60.24	39.76	100.00

Source: Field Survey, 2007-08

At the outset, it may be mentioned that the percentage distribution of each category of land across the regions can be read from moving across rows in the above table. The corresponding numbers are shown without parenthesis. On the other hand, the region-specific percentage distribution of total land area over different categories can be obtained from moving across the columns in table 3.9. The percentage figures representing the distribution are written within the parenthesis. The table 3.9 shows that land used by STGs can be classified into two categories: waste land and crop-replacing land. Waste lands refer to the lands which are occupied with grazing grounds, bamboo clumps, hemp field etc. The crop-replaced land, on the other hand, makes up replacement of paddy, mesta jute, pineapple, vegetable cultivation etc. It can be seen

from the table that waste land occupied major share (60 percent) of the total land area in the study regions. The areas where 70 percent of the total waste lands are distributed include Kharibari (25 percent), Panbari (16 percent), Islampur (15 percent) and Mekhliganj (14 percent). Nonetheless, a large tract of traditional crop land has come under tea. In terms of the above table, the crop-replaced land constitutes 40% of the total land area. It supports the general perception that crop lands are being replaced by plantation. The region of Chopra has the highest share of crop-replaced land (21 percent). This is followed by other regions more or less evenly excluding Islampur and Helapakri.

The sheer predominance of waste land over the crop-replaced land in the overall distribution of land under tea cultivation believably contradicts the general perception that STPs have emerged predominantly out of crop-replacing land, abandoning the cultivation of traditional crops and making vulnerable the present folk attached with it. On the contrary, it appears that emergence of STGs has led to expansion of territory of smallholder agriculture through bringing uncultivable land under a remunerative crop like tea. For a grower with a small land holding, tea is often a preferred crop for the reasons that it has long commercial life, low risk of crop failure, and stable source of income over a long time horizon (Borah, 2014).

However, there are three areas, Chopra, Jahari Talma and Chat Hut, where crop-replaced land constitutes more than 60 percent of the total land area. One explanation for this phenomenon might be that before marginal farmers decide to get into tea plantation in these regions, the virgin non-cultivable lands were possibly being fully transferred to plantations by middle growers. A relatively high small-holding concentration in new plantations seems to justify this pattern of land use change. Another explanation might be that there is a high concentration of "forced growers" in these regions who involuntarily decided to switch over from traditional crops to tea. This is because of the fact that the practice of digging deep drainage trenches in the tea gardens rendered all land situated adjacent to them unsuitable for paddy cultivation due to lowering of water table. It is mostly the middle growers' gardens of earlier phase that could have made responsible for creating this problem. As the lands were made unsuitable for paddy cultivation, the land-holders were forced to convert those lands to tea. A third explanation may be that crop-replaced lands in these areas are essentially mono-cropping land without irrigation facilities. The traditional agricultural operation seems to be economically non-viable due to such adverse

conditions. In this context, one important observation of our study may help to understand this problem. In the village named Jahari Talma, we observed that farmers whose lands are situated in the catchment area of Teesta irrigation project have not converted their crop lands into tea plantation. However, the growers whose lands do not fall in the catchment area have decided to switch over from traditional crops to tea.

Finally, in Chopra, we observed the conversion of pineapple land into tea on a significant scale. By the early 1980s, pineapple cultivation had spread over a vast area in the region and gradually the problem of over production was cropped up as the market failed to absorb the entire produce. This had eventually led to severe crashing of price in the market. It is important to mention here that pineapple is a highly perishable product which cannot be kept in storage and have to be disposed immediately. As the absorption capacity of the local market was extremely limited, mainly due to dearth of food processing industries in the region, the growers would have to depend on selling their produce at distant markets with the help of the middlemen. With the increased infiltration of the middlemen, there was a substantial reduction in the profit margin needed to keep the pineapple cultivation viable (Uttar Dinajpur Human Development Report, 2010). In such an adverse situation, the pineapple growers had felt discouraged with their existing farming activity and gradually shifted to tea. This seems to explain why crop land under tea is more than waste land in this region.

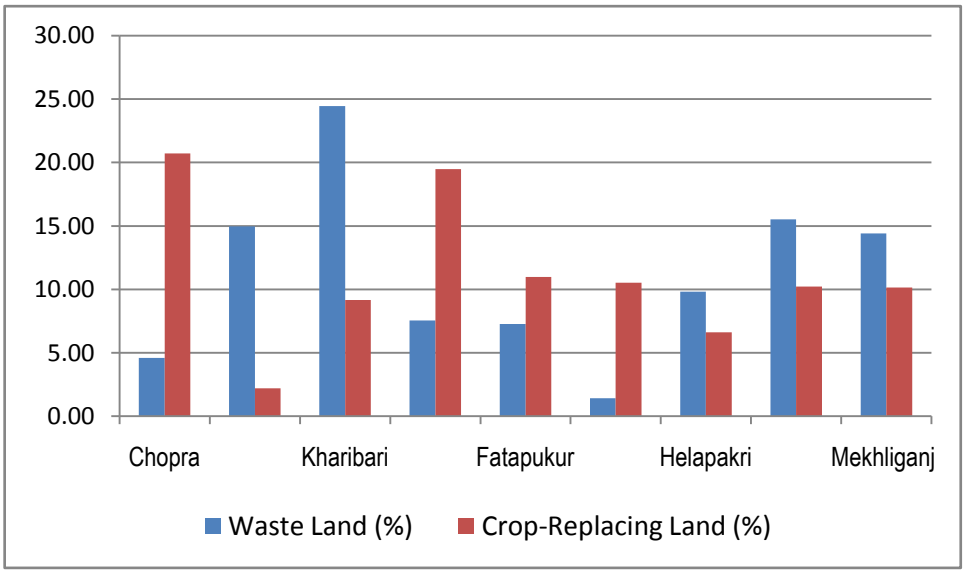

Figure3.9. Location-specific Break-up of total land area

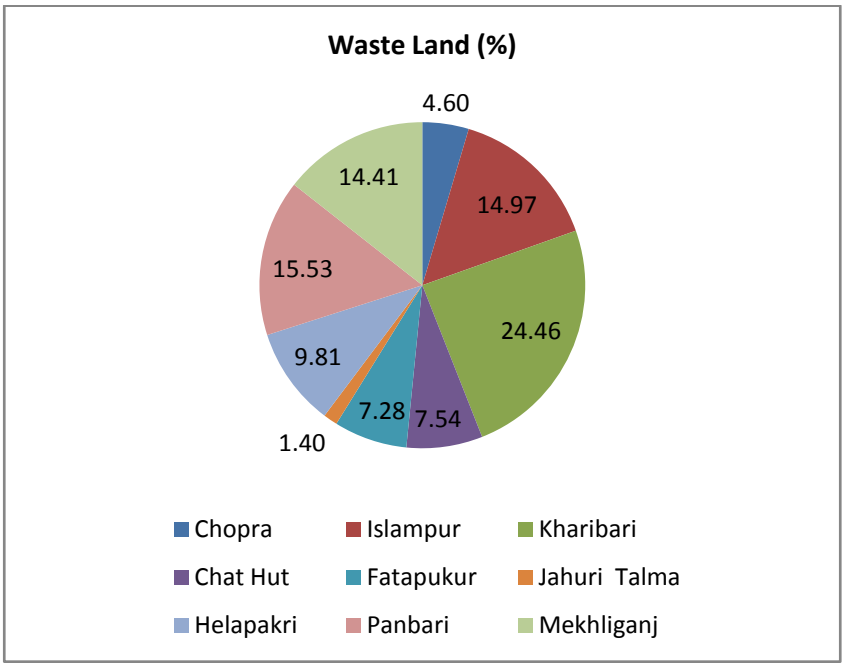

Figure3.10. Break-up of waste land across locations

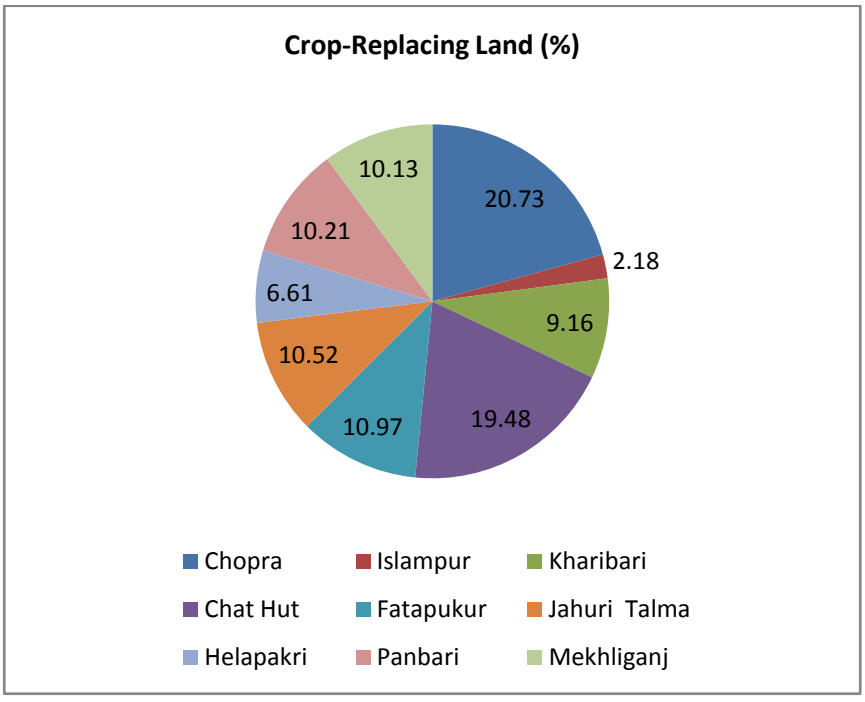

Figure3.11. Break-up of crop-replacing land across locations

It has been observed during the field survey that land used by STGs are of two types− own land and acquired land. The following tables highlights the land ownership pattern of the sample growers

Table3.10. Distribution of Owned and Acquired Land (Percentage)

Area	Own Land (%)	Acquired Land (%)	Total Land (%)
Chopra	18.22 (58.74)	7.04 (41.26)	25.26 (100.00)
Islampur	7.53 (27.03)	11.18 (72.97)	18.71 (100.00)
Kharibari	3.39 (6.54)	(26.63) (93.46)	30.01 (100.00)
Chat Hut	12.98 37.50	11.91 (62.50)	24.89 (100.00)
Fatapukur	16.49 (66.94)	4.48 (33.06)	20.97 (100.00)
Jahuri Talma	10.34 (72.99)	2.11 (27.01)	12.45 (100.00)
Helapakri	7.71 (32.07)	8.99 (67.93)	16.71 (100.00)
Panbari	23.35 (61.80)	7.94 (38.20)	31.29 (100.00)
Mekhliganj	0.00 (0.00)	19.71 (100.00)	19.71 (100.00)
Total	35.50	64.50	100.00

Source: Field Survey, 2007-08

The overall pattern of land distribution as shown in table 3.10 reveals that acquired land possession (65 percent) is more than the own land possession (35 percent). This seems to support the general perception that non-villagers have penetrated mostly in small tea plantations. One possible explanation for the emergence of this result may be that gardens owned by non-villagers are relatively of larger size than those owned by the peasant smallholders. However, this result is not to be considered as perfectly general as the distributional pattern of total land area into the categories of own- land and acquired land varies considerably from one location to other. The table shows that in four areas, namely Chopra, Fatapukur, Jahuri Talma and Panbari, the possession of own-land is more than acquired land. This tends to indicate that there is substantial penetration of villagers in the new venture of tea growing in these locations, besides non-villagers. However, in the remaining five locations, the acquired land ownership happens to be

more than own-land ownership. Notably, there is one area named Mekhliganj where all lands under tea cultivation are found to be acquired land. This probably points to the fact that the non-villagers' penetration in these locations is more than in other places. Thus, it is not the general phenomenon that the principal constituent of the smallholder tea sector is the non-peasant class of entrepreneurs with an urban background. The study finds substantial evidence of villagers' significant penetration in the small tea growing sector in many places.

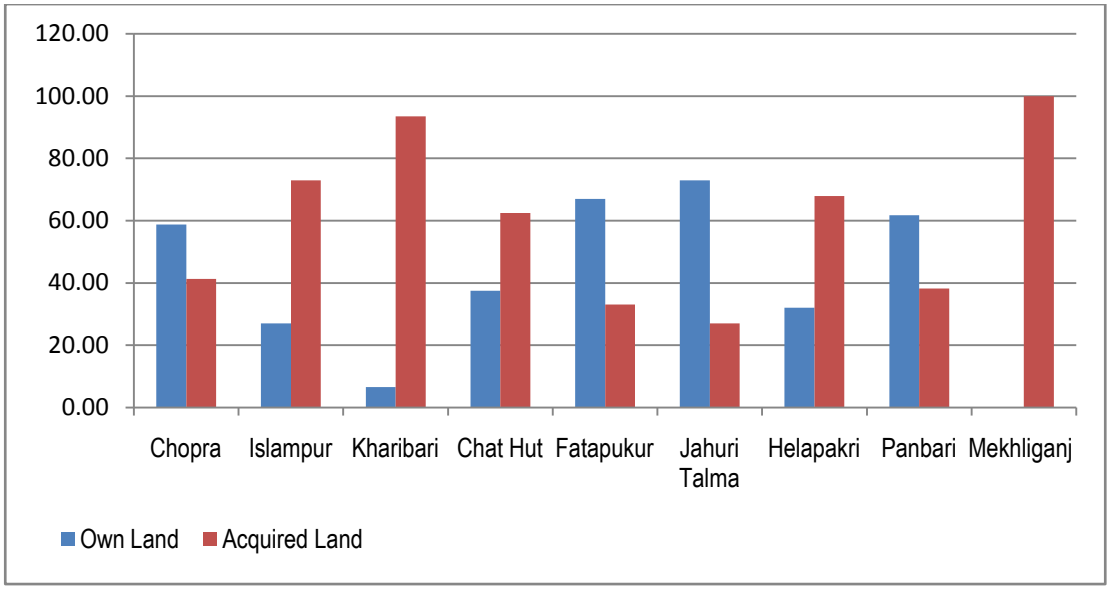

Figure3.12. Break-up of land possession across locations

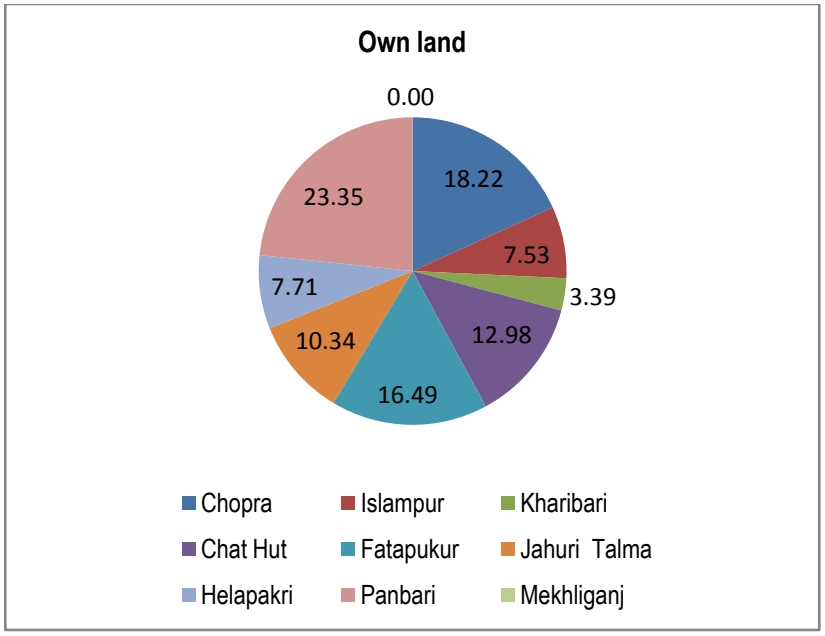

Figure3.13. Break-up of own land possession across locations

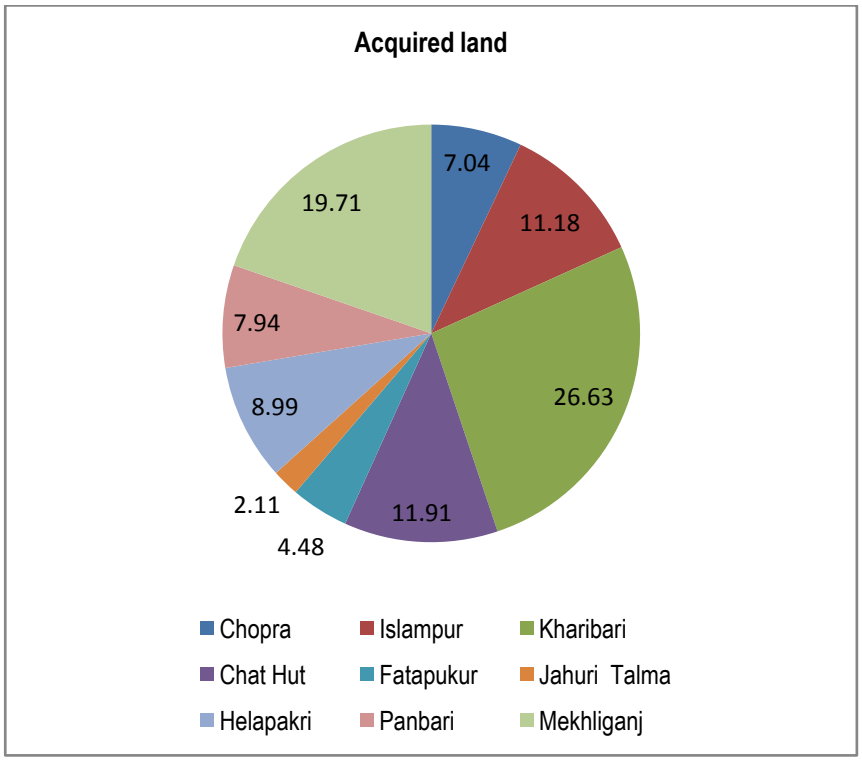

Figure3.14. Break-up of acquired land possession across locations

Finally, a comparison of the distributions of owned and acquired land over the categories of virgin and crop-replacing land has been made on the basis of the following table

Table3.11. Distribution of Land under Owned and Acquired Categories (Percentage)

Area	Owned			Acquired		
	Virgin	Crop-Rep	Total	Virgin	Crop-Rep	Total
Chopra	21	79	100	32	68	100
Islampur	69	31	100	100	0	100
Kharibari	0	100	100	85	15	100
Chat Hut	24	76	100	46	54	100
Fatapukur	54	46	100	54	46	100
JahariTalma	14	86	100	36	64	100
Helapakri	34	66	100	86	14	100
Panbabi	70	30	100	68	32	100
Mekhliganj	0	0	0	65	35	100
Total	**41**	**59**	**100**	**70**	**30**	**100**

Source: Field Survey, 2007-08

The table 3.11 reveals that 41 percent of owned land is virgin and 59 percent crop-replacing; the corresponding figures for the acquired category are 70 percent and 30 percent respectively. It is, therefore, seen that there is a dominance of crop-replacing land over virgin land in case of owned land. However, the opposite situation emerges in case of acquired land where virgin land dominates over the crop-replacing land. This result is quite similar to what we can expect normally. Since the investment on tea plantation in crop-replacing land is much higher than that of virgin land, there is a predominance of the latter type of land in the case of acquired land. On the other hand, since no such differences usually exist in the case of owned land, it is quite possible that a high proportion of crop-replacing land has underdone land use changes. Again, as virgin land is better suited for tea plantation, it has converted to tea initially. But due to non-availability of virgin land later on, the crop-replacing land has been converted to tea. This might also explain the predominance of crop-replacing over virgin land in the case of owned land category.

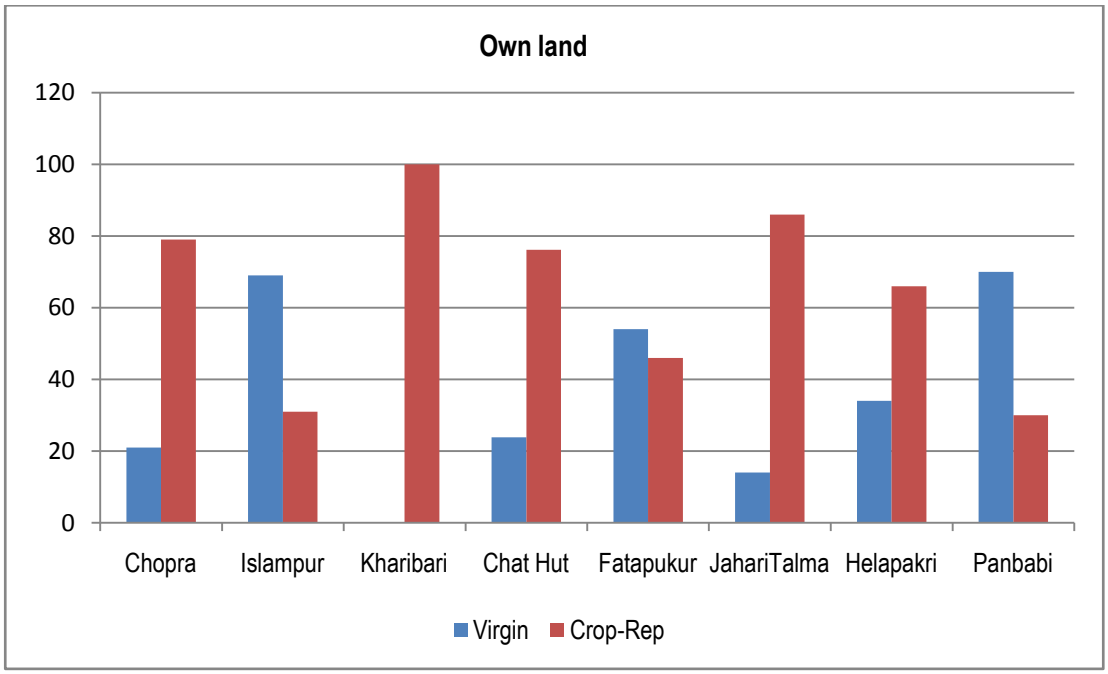

Figure3.15. Distribution of owned land

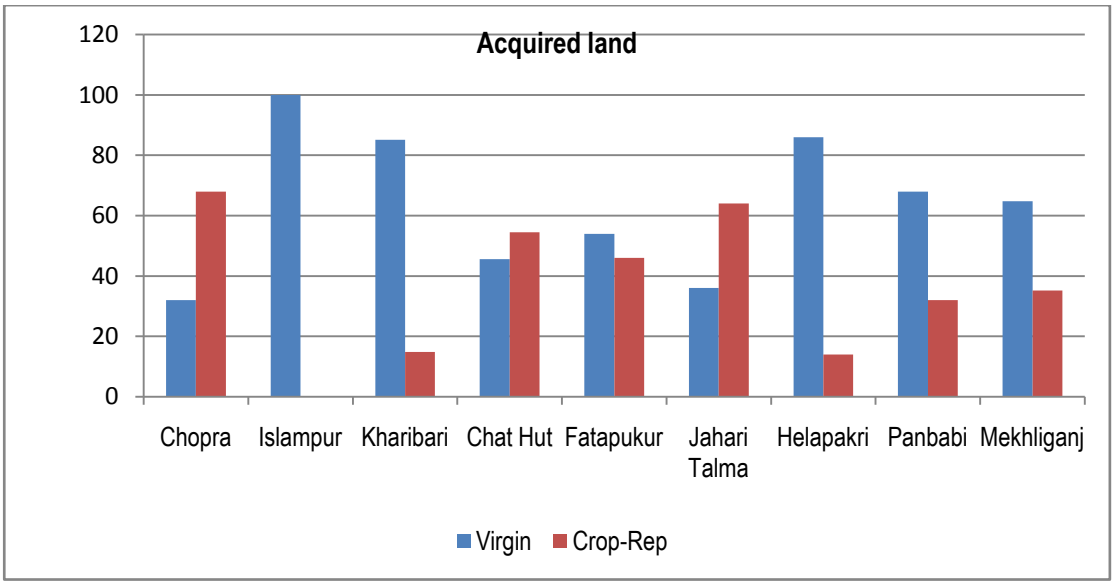

Figure3.16. Distribution of acquired land

3.7 Nature of Employment Generation in Small Tea Plantations

As tea plantation is labour-intensive in nature, an important area under the purview of the present study should be to make an inquiry into the nature and extent of employment generation in small tea plantations. As the labour market of agrarian economy of North Bengal is often found to be grappled with a number of infirmities like lack of year-round employment opportunities in agricultural operation, limited availability of off-farm jobs in the village areas so on and so forth, the creation of greater employment opportunities with a long time duration like tea plantation works is of immense significance for the people of this region. Moreover, the examination of nature of employment generation could help us understand the predominant mode of production under which this sector operates.

As far as the pattern of employment generation is concerned, we can observe from the following table hat two categories of employment are being created in small tea plantations– i) self-employment of growers along with their family members (that is to say, family labour employment) and ii) wage employment of village people (that is to say, hired labour employment)

Table3.12. Distribution of labour days between family and hired labour categories

Size of land holding (in acre)	Family labour (%)	Hired labour (%)	Total labour (%)
0-3	48.12 (20.43)	51.88 (9.03)	100.00 (29.47)
3-6	29.85 (21.22)	70.15 (20.44)	100.00 (41.66)
6-9	18.79 (13.95)	81.21 (24.72)	100.00 (38.67)
9-12	33.18 (17.29)	66.82 (14.28)	100.00 (31.56)
12-15	21.27 (8.25)	78.73 (12.53)	100.00 (20.78)
15-25	28.93 (18.86)	71.07 (19.00)	100.00 (37.86)
Total	29.08 (100.00)	70.92 (100.00)	100.00

Source: Field Survey, 2007-08

As we can observe from the above table, the participation of family labour force is quite noticeable in small tea plantations across all landholding categories. Its overall share in total labour days generated is found to be about 30 percent. The other component of labour days, namely, hired labour days, constitutes 71 percent of the total labour days. The distribution of employment between family and hired labour as per land holding size reveals that the share of family labour is of the highest order (48 percent) of the land holding size of below 3 acres where there is evidently a large concentration of peasants having marginal and small land holdings. This seems to indicate that a considerable part of tea smallholding sector resembles the peasant mode of production of the traditional smallholder agricultural sector which resorts to the extensive use of low-opportunity cost family labour of adult men and women, besides children and aged family members who have a little employment opportunity outside their own plantation. Another feature of this mode of farming is its diminutive reliance on hired labour. An examination of percentage distribution of hired labour over different sizes of land holding clearly proves this fact. It can be noticed that the land holding class of below 3 acres has the lowest share (9 percent) of hired labour among all classes. The majority of hired labour in this category

is in the nature of casual hired labour who is mostly employed to supplement the work of family labourers during the peak plucking season. It can also be noticed that family labour constitutes a comparatively lesser share of total labour days for the land-holding classes succeeding '0-3 acres'. We observe further that the small tea plantations have a considerable potential of generating wage employment in terms of their use of hired labour to a significant proportion. Even if under the bottom end holding size of below 3 acres, the share of hired labour out of total is to the tune of 52 percent. The hired labour is used by them mainly during the peak harvesting seasons. In other seasons, self-plucking is a very common phenomenon. For plantations under land holding size of above 3 acres, the share of hired labour days in total labour days is two third or above. As the agriculture sector of North Bengal is usually designated as backward due to the predominance of subsistence farms and lack of enough wage employment opportunity, the uprising of small tea plantations has plausibly led to creation of greater employment opportunity in terms of their use of a substantial amount of hired labour for running their plantations. It is important to note here that the rate of employment in plantations is not uniform throughout the year. This is because of the presence of the element of seasonality in the plantation activities, especially, in operations related to the harvesting of tea leaf. The duration, as well as the frequency of plucking rounds, varies considerably across the seasons. This, in turn, induces large seasonal variation in the deployment of labour in plantations.

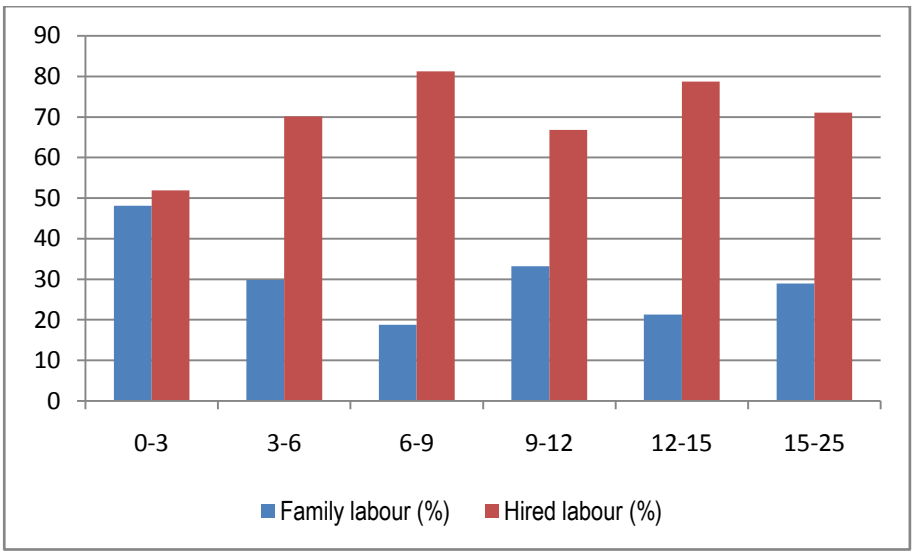

Figure 3.17 Break-up of labour days as per land holding size

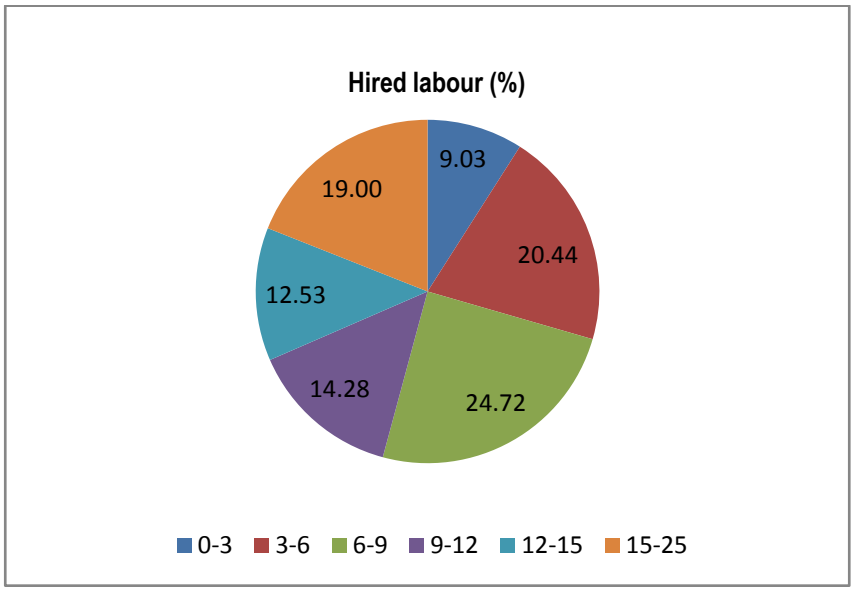

Figure 3.18 Break-up of hired days across land holding size

From the point of view of employment generation, another significant feature of small tea plantations is to create enough opportunities for employment of women as the following table demonstrates

Table3.13. Distribution of hired labour days between male and female categories

Size of land holding (in acre)	Hired labour (M) (%)	Hired labour (F) (%)	Total hired labour (%)
0-3	31.45 (8.50)	68.55 (9.30)	100.00 (17.80)
3-6	31.01 (18.96)	68.99 (21.19)	100.00 (40.15)
6-9	36.60 (27.05)	63.40 (23.55)	100.00 (50.60)
9-12	31.22 (13.33)	68.78 (14.75)	100.00 (28.08)
12-15	18.19 (6.81)	81.81 (15.40)	100.00 (22.21)
15-25	44.63 (25.35)	55.37 (15.80)	100.00 (41.16)
Total	33.44 (100)	66.56 (100)	100.00

Source: Field Survey, 2007-08

The above table reveals that the share of women labour dominates over the share of men labour by a significant proportion of the hired labour category irrespective of the land holding size. The overall gender distribution of hired labour days reveals that the shares of male and female hired labour days are given by 33 percent and 67 percent, respectively. The prime reason for a considerable higher share of women worker is that a very large percentage of the total labour days worked on a tea plantation are required for plucking of the green leaf which is exclusively done by female plantation workers. As the size of plantations gets bigger, more women workers are required for large scale plucking operations. The same skewed pattern of the gender distribution of workforce can also be observed in large tea estates. It, therefore, follows that the small tea plantations have brought about significant changes in women work participation in the agricultural operation. Before these plantations came into existence, women were subsidiary income earners and mainly engaged in household chores. They were being occasionally involved in major types of traditional agricultural operation activities which were usually found to be unsuitable for them. The tea growing operation had opened up new job opportunities for the female work force in the rural region. Thus, the tea plantations have led to employment diversification in the form of opening up job opportunities for both women and men, which were previously monopolized by men. These results arising from the analysis of labour-use profile do not corroborate the general perception that this sector does not have enough potential to increase social welfare in terms creation of higher employment opportunity. It is, on the contrary, found that the sector has contributed positively towards self-employment vis-à-vis wage employment generation.

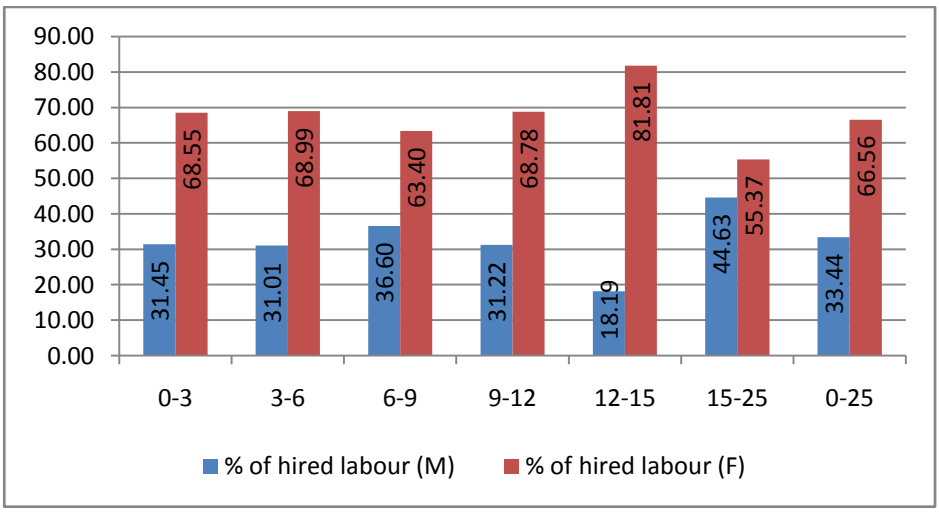

Figure3.19 Break-up of hired labour days between male and female categories

3.8 Conclusion

Tea cultivation on small holding is a very significant economic activity in four districts of North Bengal since the mid-1990s. It has brought new dimensions in the tea industry of West Bengal in terms of massive increases in tea acreage and tea production as well as the diffusion of technological know-how relating to tea growing to a vast mass of the rural population. With the gradual spread of skill required for undertaking this new activity, the number of growers has been multiplying over the years at an accelerated rate. The present study is an attempt to examine the socio-economic, land use and labour-use profiles concerning small tea growers and their plantations. These inquiries assume importance due to the fact that there are many misperceptions among the common people on these vital aspects. One common misperception is that non-villagers have penetrated mostly in small tea sector and this has led to encroachment of the sphere of traditional farming activities within the smallholder agricultural sector in this region. The present study, however, does find much support in favour of this view. It distinctly reveals the high concentration of small and marginal farmers in this newly emerged sector. In fact, it appears from the study that emergence of STGs has led to the expansion of the territory of smallholder agriculture through bringing uncultivable land under a remunerative crop like tea. The study also highlights that the important economic factors which allow small tea plantations to proliferate include initial low capital investment and the adaptation of the concept that tea can be grown as a smallholder crop. The findings of the study relating to land-use transformation do not substantially provide support in favour of general views prevailing among the people about this phenomenon. Finally, the results arising from labour-use analysis reveal the important contributions of this sector in terms of creating a major source of alternative employment and livelihood option for the agriculturally dependent people of this region. Its role towards enhancing women labour force participation by way of engaging them in newly created plantation works deserves special mentioning.