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# BRINGING IN, LIVING IN, FALLING OUT: LABOUR MARKET TRANSITIONS OF INDIAN PLANTATION SECTOR, A SURVEY

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#### ABSTRACT

The plantation sector is undoubtedly a key sector under inclusive growth regimen. Plantation assumes special significance not only as a source of foreign exchange but also due to its contribution towards the employment of millions of plantation labourers, namely women who have hitherto been bypassed by the process of economic growth and face multiple deprivations. The objective of this paper is to review studies on labour market issues in the Indian plantation sector. The review is intended to throw some insights into the challenges faced by plantation labourers focusing on the issues namely the role of labour market institutions in plantations, nature of industrial relations prevailing in the sector and most importantly, the impact of production organisational innovations in the sector. Studies on social and economic status of workers as well as their working and living conditions are also discussed. This would serve to guide us to identify the underlying research gaps in the existing literature which sets the basis for future study.

#### I. Background

Plantations are large scale, capital intensive commercial enterprises employing wage labour that rely on the exports of cash crops as their source of income. Plantation assumes special significance not only as a source of foreign exchange but also due to its contribution towards the employment of millions of plantation labourers, namely women who have hitherto been bypassed by the process of economic growth and face multiple deprivations. It is well known that plantation economy has its own distinctive economic structure and is historically associated with slavery and coercion. The migrant nature of its labour along with social divisions and the remote locations of the estates have contributed to the economic and social exclusion of the plantation labour. It is well known that plantation sector is exposed to severe crisis due to erosion of international competitiveness. As noted by the Taskforce on Plantation Sector (2006), globalisation and accompanying trade liberalisation has led to sharp decline and volatility in prices of many plantation crops which in turn has inhibited investment in the sector. Consequently, the sector which generates massive employment especially for women labour, has become economically and socially more unviable. The backdrop of the fluctuating prices of crops and corresponding free trade agreements like ASEAN have further weakened the competitiveness of the plantation sector and have made it the most vulnerable sector in India's rural economy.

Rapid rate of growth is undeniably necessary for an economy, but for this growth to be sustainable in the long run, it should be broadbased across sectors, and inclusive of the larger part of the country's human resources, specifically labour force. The plantation sector is a key sector under inclusive growth regimen (Joseph, 2010). Nonetheless, one cannot deny the fact that labour market is the foremost channel through which globalisation can affect our economy. Increased import penetration, export sales, competition in services, foreign direct investment and exchange rate fluctuations could all have an impact on employment and wages. Hence, it is necessary to focus on ways to raise the pace of growth by utilising more fully those labour force trapped in low-productivity activities or completely excluded from the growth process. This calls for the need to understand the challenges faced by the labourers in the plantation labour market. In this context, a survey paper on labour market issues in plantations assumes no less significance.

The objective of this paper is to provide a survey of research on the labour market issues in Indian plantation sector<sup>1</sup>. The survey of literature presented in this paper is limited to the issues of direct relevance to the research interest focusing on the crops tea, coffee, rubber, and cardamom. The review is intended to throw some insights into the challenges faced by plantation labourers focusing on the issues namely the role of labour market institutions in plantations, issues of social costs and labour shortage, nature of industrial relations prevailing in the sector and the most importantly, the impact of production organisational innovations in the sector. Studies on social and economic status of workers as well as working and living conditions are also discussed. This would serve to guide us to identify the underlying research gaps in the existing literature which sets the basis for future study.

The remainder of this paper is organised as follows; second section provides a brief overview of the profile of each crops; third section

It is however, important to note that, there has been only very few published survey articles on the economics of rural employment in Indian labour market over the last few decades. Bardhan's (1977)<sup>2</sup> survey on rural labour market which published in three successive volumes of Economic and Political Weekly is an exception in this regard.

provides a recapitulation of labour market issues in Indian plantations. A brief note on available data sources on plantation labour market is discussed in fourth section and the final section summarizes the paper and identifies important research gaps which put the foundation for future research.

## II. Crop Profile

The plantation sector, a key sector under India's inclusive growth regimen is perhaps the most labour enterprise in rural India in comparison with general agriculture. This section of the paper gives a brief overview of various crops in terms of its area, production, crop yield and average daily employment in the sector.

#### Tea

The tea industry is considered as one of the oldest and largest agro-based organised manufacturing industries in India employing one among the largest number of women workforce. Amongst all tea producing countries, the major producers are India, China, Sri Lanka, Kenya and Indonesia. These five countries contribute 77 per cent of the total world production and 80 per cent of global exports. Tea Industry

**Table 1: Production of Tea in Major Producing Countries** 

Countries	1950	1960	1970	1980	1990	2000	2006
India	275475	321077	418517	569172	720338	846922	981805
Srilanka	138897	197181	212210	206417	234074	306794	310800
Indonesia	35384	46061	43148	73273	160481	157371	171410
Kenya	6776	13776	41077	99275	197008	236286	310580
China	62596	152861			540100	683324	1049500
Uganda	1879	4669	18217		6704	29282	35706
Japan	41725	92911	91198	98000	89903	89309	100262

Source: Tea Statistics (Various Years).

has witnessed a drastic change in the past decade, the world's largest tea producer; India has lost its position to China for the first time, in the last 110 years and has continued to be higher since then.

Table 2: Number of Tea Estates and Trends in Area, Production and Yield of Tea in India

	Number	Area	Production	Yield
1951	6214	316840	285399	901
1961	9499	331229	354397	1070
1971	12015	356516	435468	1221
1981	13410	383629	560427	1461
1991	13873	420470	754192	1794
2001	116659	509806	853923	1675
2006	143217	567020	981805	1732

Source: Tea Statistics (Various Years).

The tea industry, being labour intensive in nature is the single largest employer providing employment for more than 1 million permanent workers in 2001. According to the Tea board of India, out of total employment of 7.3 million workers in organised manufacturing sector, tea plantations employed over 1 million permanent workers. To put it simply, one out of 7 workers in the organised manufacturing sector works in tea sector (Tea Board, 2003). It is to be noted that the total employment of the industry is much larger if one takes into account the warehousing, packaging and marketing activities as well as the small holders and contract workers engaged in the industry. The table below depicts the increasing trend in the estimated average daily number of labour employed in tea plantations.

Table 3: Estimated Average Daily Number of Labour Employed in Tea Plantations in India

Year	Number
1994	1028694
1995	1028787
1996	1029651
2000	1210055
2001	1232150
2002	1255100
2003	1256210
2004	1257610
2005	1258800
2006	1259500

Source: Tea Digest (Various Years).

#### Rubber

According to the Rubber Board, India is the fourth largest producer of natural rubber (Table 4) in the world, with total production 864500 tonnes in 2008-09 marking 7.14 per cent growth from 1950-51. In production of natural rubber, India comes after Thailand, Indonesia and Malaysia and in consumption also it ranks fourth after China, USA and Japan. The coverage of area under rubber crop in India in 2008-09 was 6.61 lakh hectares, which was higher by 592971 hectares over the period 1950-51. The tappable area of rubber is 463130 hectares during 2008-09, marking an increase of 3.72 per cent. The country has been maintaining the uptrend in productivity from 284 Kg per hectare in 1950-51 to 1,867 Kg per hectare in 2008-09. The average daily employment in rubber plantations has grown by 3.02 per cent during the period 1972 to 2008-09.

Table 4: Production of Natural Rubber in Main Producing Countries

Country	1965	1975	1985	1990	2000	2005	2009
Malaysia	916.9	1459.3	1459.2	1271	928	1126	856
Indonesia	716.5	822.5	1100	1262	1501	2271	2440
Thailand	216.4	355	725.7	1275	2346	2833	3164
Srilanka	118.3	148.8	137.5	113	88	104	137
India	44.2	136	198.3	324	629	772	820
China	-	68.6	187.9	264	445	428	637
Others	340.2	324.8	521.4	611	827	1169	1563
Total	2352.5	3315	4330	5120	6764	8703	9617

in 1000 metric tonnes.

Table 5: Trends in Area, Production and Yield of Rubber

Year	Area	Tappable area	Production	Yield
1950-51	69001	55800	15830	284
1960-61	143905	65355	23175	355
1970-71	217198	134103	86773	647
1980-81	284166	179980	140320	780
1990-91	475083	306413	329615	1076
2000-01	562670	399901	630405	1576
2004-05	584090	439720	749665	1705
2008-09	661980	463130	864500	1867

Source: Indian Rubber Statistics (Various Years).

**Table 6: Average Daily Employment in Rubber Plantations** 

Year	Average Daily Employment
1972	148040
1980	192578
1990	282674
2000	347700
2005	384600
2008	433000
2009	445000

Source: Indian Rubber Statistics (Various Years).

#### Coffee

The Indian coffee industry is the fifth largest in the world followed after Brazil, Vietnam, Indonesia and Colombia. Coffee production in India is dominated in Karnataka, Kerala and Tamil Nadu forming the traditional coffee growing regions of South India, followed by the new areas developed in the non-traditional areas like Andhra Pradesh and Orissa as well. Coffee production in India has grown rapidly from 18,893 tonnes in 1950–51 to 302,000 tonnes in 2010-11 and grown by 4.7 percent during the last six decades. According to the latest statistics published by the Coffee Board of India, the area of coffee harvested in India is 360,485 hectares, with yield estimates of 838 Kg per hectare forming a total production estimate of 302,000 tonnes.

Table 7: Trends in area, Production Yield and Bearing Area of Coffee Plantation in India

Year	Area	Production	Yield	Bearing area
1950-51	92523	18893	204	92523
1960-61	120320	68169	567	120321
1970-71	135463	110231	814	135463
1980-81	208269	118646	624	190076
1990-91	270821	169726	759	223500
2000-01	346716	301200	959	313934
2010-11	404645	302000	838	360485

Source: Coffee Board of India.

According to the statistics provided by the Coffee Board of India 2009-10, the estimated average daily number of employment in plantations is 594708 which is incidentally higher than that of rubber plantations. The wages prevailing in different states for the latest year is shown in Table 9 which is highest in case of Andhra Pradesh and lowest in case of Orissa.

Table 8: Average Daily Number of Persons Employed in Coffee Plantations of India

Year	Number
2003-04	527431
2004-05	542699
2005-06	578254
2006-07	579126
2007-08	587294
2008-09	594185
2009-10	594708

Source: Coffee Board of India.

**Table 9: Labour Wages Prevailing in Different States** 

States	Wages ('/day)
Karnataka	130.09
Kerala	140.17
Tamilnadu	131.99
Andhra Pradesh	144.45
Orissa	90

Source: Same as Table 8 and 9.

#### Cardamom

Cardamom is the third most expensive spice after saffron and vanilla. Guatemala and India are the biggest producers of cardamom. Guatemala otherwise considered as a newcomer on the cardamom production, has dramatically increased both its quantity and quality of production to become the world's largest cardamom exporter within a short period of about 15 years.

Table 10: Trends in Production of Cardamom by Two Major Producing Countries

Year	India	Guatemala
1970	3170	1000
1980	4400	3400
1984	3900	5000
2000	10480	10000
2005	12500	23000

India is the second largest producer of cardamom after Guatemala and its production hovers around 10075 tonnes in 2009-10. India stands at the second place in the world consumption list as it consumes almost 90 per cent of its production. The area under cardamom cultivation in India has decreased since 1970-71 from 91,480 hectares to 71,110 hectares in 2009-10. However, production of cardamom has increased from 3170 tonnes in 1970-71 to 10075 tonnes in 2009-10, marking an increase of 3.01 per cent over the last 4 decades.

Table 11: Trends in Area, Production Yield and Bearing Area of Cardamom Plantation

Year	Area	Production	Yield
	(in hectares)	(in tonnes)	(Kg/hectare)
1970-71	91480	3170	46
1980-81	93950	4400	62
1990-91	81554	4750	78
2000-01	72320	10480	195
2008-09	71170	10999	155
2009-10	71110	10075	201

With this brief note on profile of various plantation crops, the following section discusses the changing labour market scenario of Indian plantation sector based on available literature.

#### III. Key Issues: A Recapitulation

It would be instructive to clarify the term 'plantation' before we proceed to discuss the review of literature on labour market issues in the plantation sector.

The International Labour Organisation (ILO) defines 'plantation' a group of settlers or a political unit formed by it under the British colonialism especially in North America and in the West Indies (ILO report, 1945). The definition attained a broader connotation with the colonisation of African and Asian countries by Europeans. The Plantations Convention (ILO, 1958) defines plantations as "any agricultural undertaking regularly employing hired workers which is situated in the tropical or sub-tropical regions and which is mainly concerned with the cultivation or production for commercial purposes of coffee, tea, sugarcane, rubber, bananas, cocoa, coconuts, groundnuts, cotton, tobacco, fibres, citrus, palm oil, cinchona or pineapple; it does not include family or small-scale holdings producing for local consumption and not regularly employing hired workers". It was the Plantation Labour Act (PLA) of 1951 which provided the first legal definition of plantation in India. The term 'plantation' is defined as "any land used or intended to be used for growing tea, coffee, rubber, cinchona, cardamom which measures five hectares or more and in which fifteen or more persons are employed or were employed on any day of the preceding twelve months" (PLA, 1951).

The Table 12 briefly highlights the respective sectoral profiles of various plantation<sup>2</sup> crops in India. India is the world's second largest producer of black tea accounting for 27 per cent of world production,

Plantations constitute the most labour enterprise in contrast with general
agriculture. Among the plantation crops, tea is even more labour intensive,
the rule of thumb being that it requires about three workers per hectare
compared to about 1.5 in coffee and about 1 in rubber and coconut. (Sivaram,
2002).

employing more than 2 million people. Small growers contribute 21 per cent of total tea production with around 213 million kilograms production of tea. Coffee production in India accounts to 4.5 per cent of the world production. Out of the total 1.78 lakh coffee growers, large holdings (above 10 Ha category) accounts to 2,833 and remaining 1,75,475 fall under small holder category.

Table 12: Sectoral Profile of Plantation Crops 2005-06

Parameters	Tea	Coffee	Rubber	Spices		
Production	930,850	274,000	803,000	4.04		
				Million tones		
Area	5.21	3.79	5.94	25.3		
( in lakh ha)						
Productivity	1785	723	1796	Cardamom 404		
(kg/ha)				Others 14819		
Exports:						
Quantity (MT)	181,060	201,517	320,527			
Exports:						
Value						
(Rs. in crore)	1631.60	1509.71	458.29	2295.25		
Imports :						
Quantity (MT)	16,400	24028	45285	84500		
Imports :						
In crore	99.26	100.71	274.51	515.40		
Prices / Kg.	58.06	Arabica: 114.29	66.99	215.56*		
		Robusta: 53.37		107.84**		
Share of						
women labour						
in daily						
employment	53.0	55.2	39.9	56.9		
(in%)				(cardamom)		

Source: Report of the Taskforce on Plantations Sector.

 $\it Note$ : \* and \*\* stand for small and large cardamom respectively.

Rubber plantations spread across 5.94 lakh hectares in 16 states of the country. The small holders constitute 91 per cent of rubber production in the country with an average holding size of 0.5 hectare. There are nearly 1 million producers and about 0.7 million people engaged in the plantation sector as workforce either directly or indirectly. Spices are cultivated in almost all the states in the country. There is an area of about 25.3 lakh hectares. (2004-05) under spice cultivation and production is about 4.04 million tones.

The trends in share of male and female employment in the plantation sector across a period 1958-59 to 2006 are shown in Figures 1 and 2. While analysing the trends in employment, it is evident that the share of men in employment across all plantation crops has declined. Although the share of men's employment (57.7 per cent) in natural rubber is higher than their female (42.3 per cent) counterparts, it is evident that rubber sector records the highest female labour intensity out of all plantation crops. The female labour intensity has increased from 25.6 per cent in 1958-59 to 42.3 per cent in 2006 (Joseph and George, 2011).

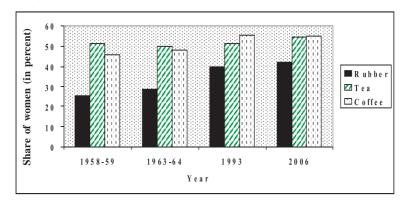


Figure 1: Trends in Female Employment in Plantation Sector

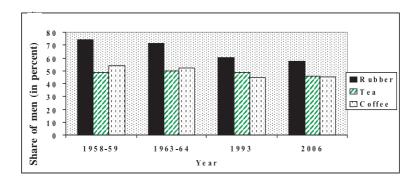


Figure 2: Trends in Male Employment in Plantation Sector

Source: Occupational Wage Surveys-Report on Plantation, Labour Bureau (Various Years).

There exists a few scholarly literature on labour market issues on plantations in the Indian context, a great deal of it focuses on issues related to tea plantations followed by rubber plantations. It is to be noted that literature on labour market issues in coffee and cardamom plantations are rather scant. Much of the literature on plantations focused thematically on labour history including slavery, colonialism; on role of labour market institutions including the legislations and nature of labour relations in the plantations. The decades of 1990's to 2000 saw extensive discussion on the emerging production organizational innovations in the sector. In what follows we discuss each of these issues in the light of existing literature on plantations.

# **Historical Process of Plantation System**

Plantations across the world, essentially by their very nature and process of development are considered to be the most representative examples of colonial economies. Plantation system in India was established by the British colonialists in the late nineteenth and early twentieth centuries. The pattern of production was so organised that capital and management were brought from the imperialist countries

whereas land and labour were made available in conditions advantageous to the management. In this way, Indian plantations were drawn into the world capitalist system.

Plantations require large areas of land as well as labour force and most of the plantations are situated at sparsely populated regions. During the formative years, plantations faced shortage of labour and it was the system of recruitment<sup>3</sup> which accounted for the migration which was forced, not free. The planters in the colonial economy deploy indentured immigrants which enabled them to have a captive labour force at low wages. Nearly all of the indentured labourers came mostly from the backward classes and tribal areas of neighboring states. Under the indenture system, the worker enters into an agreement with the planter to work on the estates for a specific period of time, usually five years. They were free to return to their native places after their contract period. However, poor wages and absence of savings prevent themselves to return to their places of origin, which made them to stay behind at the plantations even after their period of indenture. The colonial government too has favoured the planters by enacting the legislation namely, the Workmen's Breach of Contract Act<sup>4</sup> of 1859. The intended outcome of this system was the inability of the worker to withdraw his or her labour power. Indentured servitude was created to grant widespread penal sanctions to the planters where the breach of contract by the worker resulted in criminal prosecution. This Act has further legalised the system of indenture which in turn paved the way to generate a new form of bonded labour.

<sup>3.</sup> Plantation labourers were recruited independently by an intermediary person called 'kanganies' in south India. Kanganies were essentially labour recruiters and supervisors of work crews in plantations. Planters gave kanganies money in advance called 'cost advances' for the recruitment of labourers.

<sup>4.</sup> In 1859, the Workmen's Breach of Contract Act was passed which stipulated that a worker had to work for a minimum period of five years once recruited. The Act rendered the worker liable for prosecution for any breach of contract. The slightest chance of escape on the part of workers, when caught was punished severely.

The problems of plantation workers have their roots in the historic process of plantation system. Hierarchy existed in plantations based on ethnic categories. The planters (managers and their assistants) were invariably Europeans and the clerical staff were locals and the workers were outsiders who were either tribals or from the socially depressed sections (Bhowmik, 1980). Coercion, low wages and immigrant labour were initially the three inseparable components of the plantation system as this ensured the planters high profits (Bhowmik, 1982c). These workers are permanently settled in the respective region with little or no contact with their places of origin. The permanent settlement of workers in the plantations is mainly because of the prevalence of family system<sup>5</sup> of employment in plantations. In addition, the planters made sure that the surrounding regions of the estates remained backward with no other source of employment. This has made plantations to emerge as enclaves within a backward region. Like any other plantation economies of the world, the plantation economy in India can thus be referred to as an enclave economy. The enclaved industrialisation represented by the growth of tea industry has not contributed to the growth of labour (Chatterjee and Gupta 1981; Gupta, 1986). The industry was characterised by its slow growth and poor labour relations (Sircar, 1986).

Raman (1997, 2002, and 2004) documents the dynamics of plantation capitalism by focusing on the work, life and struggle of the oppressed communities namely the 'dalits' in colonial and post-colonial south Indian plantations during the early period of the nineteenth century. The study unravels the elements of changing forms of bondage and the

<sup>5.</sup> The planters encouraged families rather than individuals to migrate to the plantations. This served a dual purpose. Firstly, since planters wanted cheap labour they had to have workers who were permanently settled in the plantations and who had no opportunity for alternative employment. Therefore, encouraging families to migrate they ensured that workers were cut off from the places of their origin and were settled in the plantations. The entire family including male, female and children worked at wages determined by the planters. Secondly, family based migration ensured that labour could be reproduced, thus solving to some extent, the problem of future recruitment (Bhowmik,2005).

coercive strategies adopted by the planters viewed from an angle of a political economist. The elements of the plantation life were fashioned by the specific characteristics of the workers' location within the capitalist world-economy, along with the existed prevailing local social structure (Raman, 2009). The study focuses on problems of labour and economic development and interprets the dynamics of plantation capitalism as a guide to further historical research.

Thus the available evidence suggests that coercion and exploitation have always been the characteristics of the plantation economies. The report of Commission on Inquiry on the Conditions of Tea Plantation Labour in India and Ceylon set up in 1944 noted that the plantation labourers were unorganised and helpless and the Commission recommended the necessity of trade unions (Rege, 1946)<sup>6</sup>. The Commission also noted that the conditions of life and employment on plantations were different from those in other industries and recommended the creation of the Plantations Labour Code (PLC). The PLA 1951 was enacted on the recommendations of the Committee.

# $Labour\ Legislations\ \textbf{-}\ Plantation\ Labour\ Act\ (PLA),\ 1951$

The decolonisation of India followed <u>by</u> its independence brought about a new set of production relations in the plantation sector. Political pressure forced the governments to provide necessary protection and security of employment to plantation workers. Thus, with the post independence labour legislation especially PLA, the relation between

<sup>6.</sup> Rege Committee (also known as Rege Commission, after its chairperson) was set up by the Government of India under the chairmanship of D.V. Rege in 1944 to investigate the problems relating to wages, employment, housing and social conditions of workers in plantations. The committee covered different areas in labour welfare such as housing policy, rest and recreation, occupational disease, educational facilities etc. The committee highlighted the importance of welfare measures in improving social and economic life of plantation workers.

worker<sup>7</sup> and the employer<sup>8</sup> has been formalised in the plantations. Coercion was relaxed and trade unions began to function among the workers enabling them to fight for their rights. Plantation Labour Act (PLA, 1951) is one of the most important legislations affecting the social welfare of plantation labourers. This is the only Act that seeks to raise the living standards of plantation and also regulate employment, working conditions and working hours. This Act covers all plantations measuring 5 hectares or more, employing 15 or more persons. The Act provides for compulsory housing and lays down that every year eight per cent of the houses have to be converted into permanent structures (viz. walls of brick and tiled roofs). The mandatory health provisions<sup>9</sup> include medical facilities, drinking water, sanitary facilities and water supply in the labour residences, to be provided by the planters. The welfare provisions<sup>10</sup> to be provided are canteens, crèches, recreational facilities and primary schools for children.

<sup>7.</sup> Worker is defined as a person (including any member of the medical staff) employed in a plantation for hired or reward, whether directly or through any agency, to do any work, skilled, unskilled, manual or clerical but does not include i) A medical officer employed in the plantation. ii) Any person employed in the plantation primarily in a managerial capacity or iii) Any person temporarily employed in the plantation in any work relating to the construction, development or maintenance of buildings, road, bridge or canals (PLA,1951).

<sup>8.</sup> Employer is defined as the person who has the ultimate control over the affairs of the plantation and where the affairs of any plantation are entrusted to any other person (whether called a managing agent, manager, superintendent or by any other name) such person shall be deemed to be the employer in relation to that plantation.

<sup>9.</sup> Act suggests that in every plantation effective arrangements shall be made by the employer to provide and maintain at convenient place a sufficient supply of drinking water for all workers. There shall be a sufficient number of conveniently situated and accessible separate latrines and urinals for males and females in every plantation.

<sup>10.</sup> Under Section 11 of PLA (1951), the state government has been empowered to ask employers to open canteens in plantations employing 150 workers or more and to make rules for the working and maintenance of canteens.

The Act requires the employers to provide other facilities to workers including provision of umbrellas, blankets, rain coats or other like amenities for the protection of workers from rain or cold. Besides these, the PLA has also laid certain rules which govern the working conditions<sup>11</sup> of plantation workers. Moreover, the Act requires the planters to employ a welfare officer in those plantations which employ more than 300 workers.

The Enquiry Commission of 1956 had predicted that the provisions of PLA if implemented, would certainty elevate the social status and welfare of plantation labour and alter the working and living conditions prevailing in the industry. It is to be noted that nearly six decades have passed since the implementation of PLA, one of the key questions that arise now is to what extent the planters have provided the necessary amenities contemplated in the PLA?

Low wages, poor working and living conditions of workers in plantations have attracted attention among researchers [Rege (1946); Raman, (1986a); Bhowmik (1982a, 1983, 1994); Kurian (1997); Rajasenan (2010)]. Low wages are not the only form of deprivation the plantation workers face in West Bengal. The statutory obligations of the employers under the PLA such as provision of improved housing, water supply, medicines in garden hospitals, canteen and recreational facilities, crèches etc., have been deteriorating. (Bhowmik 1982a, 1983). Raman (1986a) discusses the Ministry of Labour's report on working and living conditions of plantation workers covering tea, coffee and rubber plantations in southern states namely, Karnataka, Kerala and Tamilnadu.

<sup>11.</sup> PLA suggest that no worker shall work for more than five hours before he/she had an interval for rest for at least half an hour. In addition, a woman resuming her work after delivery is entitled to two breaks daily for nursing her child till the child is fifteen months old. This is in addition to the regular rest interval. An adult worker is entitled to one day paid, leave for every twenty days of work. A Child or adolescent is entitled to one day paid leave for every fifteen days. Half or more than half day's work is counted as full days' work. Every worker is entitled to sickness allowance, provided this is certified by a qualified medical practitioner. Women workers are entitled to maternity allowance and benefits under the Maternity Benefit Act, 1961.

The study draws attention to the major problems faced by the plantation labourers namely the perpetual nature of indebtedness among themselves, lack of provision of social amenities such as drinking water, medical facilities, electrification of houses which leads to their increasing misery. The study emphasises the need for strengthening the PLA, 1951, in the context of structural changes taking place in the industry, such as changes in the ownership pattern, governmental regulation etc. This calls for revisiting the problems faced by the plantation labourers analysing their living conditions.

Nevertheless, the plantations in the southern states, especially Tamilnadu and Kerala have a better record of implementing the provisions of PLA than compared to their counterparts elsewhere in the country (Figure 3). The indifference of the employers towards labour welfare provisions should be dealt with strong penal provisions (Bhowmik, 1992).

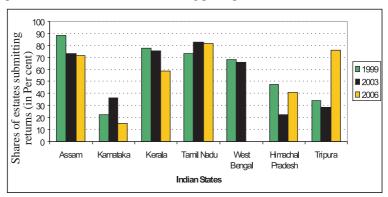


Figure 3: Share of Estates Submitting Returns to Total Number of Estates Covered Under PLA (in per cent)

Source: Ministry of Labour and Employment, Government of India.

The PLA has a direct bearing on the level of living of marginalised sections of plantation labour force namely women and children. Kurian (1997) has studied the socio-economic aspects of women workers in the plantation sector (including tea, coffee, rubber and cardamom) in Kerala.

Perhaps this is one among very few studies which have examined the challenges faced by the labourers in the plantation sector across multiple crops. She discusses how far the provisions of PLA are realised by the women workers and highlights their deteriorating living conditions. Moreover, the provisions of PLA are not implemented fully and the physical quality of life of these women is far from satisfactory.

It is no secret that today use of child labour in many countries including Indonesia, Ghana, Bolivia, India is accompanied by breach and abuse of the law. Children are found working in cotton, sugarcane, rubber, tobacco, tea and palm oil plantations in these countries and are exposed to many hazards as well. Surprisingly, it is to be noted that PLA has unquestioningly accepted child labour as an integral part of the plantation system<sup>12</sup>. Perhaps plantation industry is the only industry in the organised sector which legally permits the employment of child labour<sup>13</sup>. This is mainly because of the practice of employing the entire family for plantation work so as to save recruitment costs as well as housing costs. The factors contributing to child labour have been identified to be poverty, unemployment, high level of migration, number of children in the family and problems in provision of family needs; and inadequate enforcement of labour laws. A UNICEF survey conducted on children working in Andhra Pradesh's cotton seed farms indicated that about 95 per cent of the children were employed under some form of debt bondage. The tea-growing states of South India have very little child labour due to a better record of implementing the provisions of the

<sup>12.</sup> Plantations have four categories of workers: male, female, adolescents and children. Male and female workers are those above the age of 18 years. They are paid the statutory minimum wage. Workers between the ages of 16 and 18 years are adolescents. They are paid less than the adult workers. Children are workers between the ages 12 and 16 years. They are paid half the wage of adults. Most planters use adolescent workers in spraying of pesticides, weedicides and other hazardous chemical fertilizers in plantations.

<sup>13.</sup> The minimum age for employment is two years lower than the stipulated minimum age (14 years) in the unorganised/informal sector such as beedi, cigar, carpet, glass and matches industries.

PLA and the prevalence of higher wages, Bhowmik (1992). From the above discussion, it is evident that in spite of the institution of labour legislation like PLA in the tea plantation industry, women and children are the prime target of deprivation and exploitation. Moreover, the wage and employment multiplier of the plantation sector is quite low (Devi, 1989).

Tea plantation labourers are the most poorly paid workers in the organised sector (Bhowmik,1994). Tea workers are paid wages for time as well as piece work. In addition, the workers are given an incentive wage for plucking leaves above their fixed daily quota. Needless to mention that there exists a wide gap in the level of wages paid to the labourers in South India and North East India. Wages in South India are substantially higher and hence there are fewer children working on the plantations <sup>14</sup>. Subsidised rations are a feature of wages of tea plantation workers in West Bengal and Assam. Nevertheless, workers in South India do not get subsidized rations. However, even if this cost of subsidy is taken into account, the wages of workers in the two northern states (Assam and West Bengal) are still lower than those in the southern states (Bhowmik, 2005). The highest and lowest daily wages offered in plantations are illustrated in Figure 4.

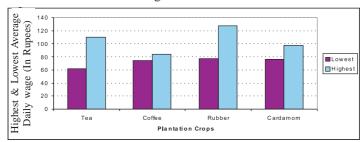


Figure 4: Highest and Lowest Daily Wage Rates in Plantations

Source: Socio-Economic Conditions Of Women Workers in Plantation
2008-09, Labour Bureau.

<sup>14.</sup> The minimum wages received by a plantation worker in South Indian plantations vary between ₹ 77.00 to 115.88 per day, and in the North East states, from ₹ 67.00 to ₹ 79.60 per day.

Rajasenan (2010) analyses the welfare measures extended to workers in rubber and spices plantations in Kerala to capture various dimensions of their livelihood. It is evident that the workers in rubber plantations are relatively better off than their counterparts in spices plantations whereas latter remain vulnerable in all spheres of livelihood. By comparing the welfare schemes of the three commodity boards namely, Rubber, Tea and Spices, Abraham (2010) discusses the burden of social costs and examines the coverage of PLA in the estates. The effect of PLA is very weak and declining in Kerala. The study calls for the increasing role of government in providing the workers with the necessary services of education, health and provisions for decent work.

The welfare provisions offered in the plantations are highly inadequate and show no signs of improvement in labour welfare. The provision of labour welfare involves costs to the employers and hence they evade implementing it. The costs are high on account of the higher wages paid and the combined social cost component, including housing and healthcare for labour force. Considering the fact that more than half

of the workforce comprises of women, the continuation of these measures becomes all the more imperative. In this context, the role of analysing social costs assumes importance.

#### **Issue of Social Costs and Labour Shortage**

One of the main reasons that the Indian plantation sector is not able to withstand the competition in the world market is also due to prevalence of high cost of production which is directly linked to the social costs. Several committees appointed by the government to study the social cost of tea estates recommended equal sharing of cost burden between the planters and government. The first Inter-Ministerial Committee, set up by the union labour ministry in 2002, made recommendation after examining the various issues related to the plantation sector. The committee estimated that the plantation industry was incurring an annual expenditure of about 460 crores in North India and an annual expenditure of about 132 crores in South India on account of statutory and non-statutory welfare measures.

Following that, the S.N. Menon Committee and O.P. Arya Committee, set up to study the competitiveness of the Indian tea industry, endorsed the sharing of social costs by the central and state governments. The O.P Arya Committee (2007) studied the various mandatory provisions under the Plantation Labour Act to the tea plantation labourers and assessed the financial burden of social cost on the growers. As the committee noted that the impact of provision of social infrastructure and facilities translates to about 3.44 per kg in South India and ₹ 4.12 per kg in North India (Table 13 and 14). The profitability of the industry at the prevailing level of prices 15 does not provide the way to meet this cost. Thus the impact of social costs accounts to about 5 and 8 per cent respectively for North and South India. It is to be noted that any further fall in prices would further raise the social cost.

<sup>15.</sup> The average price of tea is about ₹ 70 per kg in North India and is around ₹ 45-50 per kg in South India.

The Committee, therefore, feels that the social cost has to be shared by the government as well.

Table 13: Estimated Annual Expenditure for North Indian Tea Plantation for Providing Statutory Facilities

Head	Fixed cost (Rs. in crore)	Recurring cost (Rs. in crore)	Total (Rs. in crore)	Cost (in Rs. Per kg of made tea)*
Housing	76.40	34.40	110.80	1.85
Sanitation & conservation	25.00	-	25.00	0.41
Medical	5.80	75.00	80.80	1.35
Education	Nil	6.10	6.10	0.10
Drinking water	Nil	25.00	25.00	0.41
Total	107.20	140.50	247.70	4.12

<sup>\*</sup>Based on annual production of 600 m.kgs

Table 14: Estimated Annual Expenditure for South Indian Tea Plantation for Providing Statutory Facilities

Head	Fixed cost Rs. in crore	Recurring cost Rs. in crores	Total Rs. in crore	Cost (in Rs.per kg. of made tea)*
Housing	Nil	10.25	10.25	0.76
Sanitation & conservation	Nil	5.94	5.94	0.44
Medical	Nil	23.36	23.36	1.73
Education	Nil	1.47	1.47	0.11
Drinking water	Nil	5.43	5.43	0.40
Total	Nil	46.45	46.45	3.44

Based on annual production of 135 m.kgs

• Based on 2100 Kgs per hectare

Source: O P Arya Committee (2007).

The possibility of long-term survival of the sector is thus rather depressing. Moreover, plantation industry faces acute labour shortage as the younger generations are more interested in shifting from the plantations to cities seeking better paying jobs. For instance Kerala, the

state which boasts its position in terms of higher wages as well as strong trade union movements in the plantation sector protracts its survival on migrant labourers from the neighbouring states. Labour shortage has in fact more than affected small holders who depend on seasonal labourers during their harvesting period. In addition to their misery, is the implementation of schemes like National Rural Employment Guarantee Programme (NREGP) which has increased the demand for labour in the development activities outside the estates, especially in infrastructure, public works and real estate projects. This resulted in the shift of plantation labourers to other greener pastures which further reduced the labour supply. Hence, one may fear that if the present trend holds good in the years to come, the problem of labour shortage in plantations would undoubtedly affect the survival of the industry. These cases may call for the government to streamline the NREGP in such a way so as not to compete with the plantation works.

#### **Nature of Industrial Relations**

Organisation of work in plantations is similar to industrial work which involves a rationalised system of production with capitalisation and some mechanisation. This helped the growth of trade unions in plantations. Unionisation in this industry is higher than in several other industries in the organised sector. Trade unions have played an important role in improving the working conditions of workers and influence the nature of industrial relations in this industry.

The nature of labour protests in Assam tea plantations during the early period 1900-1930 can be seen in the works of Behal (1985). The workers expressed their protests against indenture system which prevailed in the plantations. The years 1920-22 witnessed increasing articulation of workers' grievances and intensity of protests in the form of strikes. Nonetheless, the tea garden workers' struggle did not, however, crystallise into a unified and organised labour movement in Assam. The major constraining factors are various features of the plantation structure

such as restrictions on mobility, enforced isolation and social and physical control of the workers. These along with the oppressive state machinery prevented the emergence of a political leadership among the workers themselves. Prasannewari (1984) analyses the labour relations in tea gardens of North Bengal based on the field work conducted in Dooars. The indifference of the management to implement several statutory provisions of PLA for labourers is one among several factors affecting the labour relations. The gradual decline in employment in tea gardens and the limited employment prospectus outside them are one of the causes of conflicts between workers and management. The unions have failed to make the management implement various provisions of PLA which results in a variety of potentially explosive situations.

The participation of women workers in trade unions has been low despite the fact that they form half the labour force in plantations (Sarkar and Bhowmik 1999). Inspite of their low levels of literacy, their response to trade unions is high. Most of them have joined or changed unions under the influence of either father, son, husband, brother or male relatives. But their active involvement in the trade union activities is rather poor. Moreover in a male-dominated society, women are expected to perform all the household chores which prevent their active participation in unions. The social backwardness and low level of literacy of these women workforce make them to continue their inferior status. The role of the state in generating social and political consciousness among these women workers within the plantation system needs to be stressed. The authors give examples to show that women have the potential for leadership which needs to be developed. For this, trade unions or other agencies should take initiatives to develop their political consciousness.

It is surprising to note that nearly three lakhs tea labourers, struck work on the issue of wage hike in West Bengal which brought the industry to a standstill for 16 days. The industry estimated that the strike cost

them a loss of \$\ \bigseleft\ 15 to 20 crores daily which also eroded some of the state and central governments revenue Bhowmik (2005). However, employers complained about the low productivity and considered that prevailing wages were too high in the industry. The employers felt the need to reduce the labour costs so as to make the industry more viable. Nonetheless, they ignore the fact that productivity can be improved if the material factors of production are improved namely the expansion of the area under tea cultivation, and replenishing of ageing bushes \$^{16}\$. It is therefore necessary to examine costs of production in the industry.

While examining the share of wages to total costs of tea companies among several other companies, it is evident that there has been a decline in the share of wages to total costs from 28.8 percent in 1987-88 to 20.1 percent in 1991-92. In contrast, while wage costs have fallen, nonetheless, the cost of management has increased (Krishnankutty, 1993). The combined effect of increased components of personnel cost as well as the aged tea bushes raise the cost of production as well as reduce the competitiveness of the industry (Bhowmik, 2005).

The above studies show that establishment costs, which include costs of personnel, are higher than labour costs. Hence, this calls for revisiting the existing belief that labour costs are solely responsible for increasing costs of production in the industry.

## **Production Organisational Innovations**

Like any other industry, plantations too have been exposed to global economic trends. Studies have well documented the deep crisis

<sup>16.</sup> According to Tea Board, over 50 per cent of tea bushes in Dooars and Terrai are 50 years old. Moreover, there are very few efforts for replanting old bushes or rejuvenating them. In Darjeeling the situation is worse, as 80 per cent of the bushes are over 100 years old. The situation in Kerala is most depressing as 71 per cent of the bushes in this state are over 50 years old. In Tamilnadu, on the other hand, a majority of bushes are less than 20 years old hence productivity is higher.

faced by South Indian plantations<sup>17</sup> [George (1986); UPASI (2003); Hayami and Damodaran (2004)]. George (1986) discusses the structural factors behind the crisis of South Indian tea industry namely, the steady increase in the cost of production as well as the declining land productivity. UPASI (2003) characterises the current status of the plantation industry as "one of the darkest phases in its history". The immediate cause of this crisis is the downfall of the world prices of plantation commodities namely tea and coffee. The value of the plantation crops in 2009-10 is estimated at ₹ 25,443 Crores, which account for nearly 2.53 per cent of the India's total agricultural GDP, while the export realisation is estimated at ₹ 5,645 Crores accounting for nearly 7.9 per cent of the total agricultural and allied product exports. The share of South India in the total value is estimated at 63.4 per cent whereas its share in the export value is 70.3 per cent. Hence, we note that the current crisis in the sector characterised by heightened competition with other crop producing countries, uncertainty in prices and steady increase in cost of production has a more serious impact in the case of South Indian plantations. Moreover, we are forced to believe that, with India's entry into ASEAN-FTA will have stronger ramifications on the Indian plantation sector.

Changes in the liberalisation policies and globalisation have transformed the plantations' identity, changing the pattern of traditional plantation estates towards more flexible forms of production. In the context of global economic change, the organisation of production in tea plantations in India have shifted away from the principal estate sector to the decentralised forms of production, namely small holder-BLF (Bought-Leaf Factory) sector. Co-operative forms of production like the share of co-operative societies and self help groups in small

South India produces nearly a quarter of the national tea output, almost all of coffee, rubber, pepper and small cardamom output.

Table 15: Estimated Number of Cooperative and Bought Leaf Factories in Tea Plantations in India 1997-2004

2004*	Coop	П			4	S	15	2		17	22
	BLF	178	80	2		264	165	12	2	179	443
03	Coop BLF Coop BLF	1			4	5	15	2		17	22
2003	BLF	179	70	2		254	163	12	2	177	431
)2					4	4	16	2		18	22
2002	BLF	129	99	2	2	189	160	10	1	171	360
01	Coop				4	4	16	2		18	22
2001	BLF	119	44			163	17 155	12	1	19 168	331
2000	Coop			6	4	4	17	2			23 331
20	BLF	105	46			151	156	9	1	163	314
1999	Coop BLF Coop BLF Coop BLF			6	4	13	17	1		18	31
19	BLF	29	27			57	146	12		158	214
1998	BLF Coop BLF Coop BLF			6	4	13	17	1		18	31
19	BLF	20	21			41	140	12		152	193
97	Coop					0	16	1		17 152	30
1997	BLF	18	14	6		41	140	11		151	183
India/States		Assam	West Bengal	Ttripura	others	North India	Tamilnadu	Kerala	Karnataka	South India	All india

Source: Compiled from Tea Digest, Tea Board of India (Various Years).

\* Figures for 2004 are provisional.

holder cultivation have also shown growing trends (Table 15) in the recent decade<sup>18</sup>.

A dualistic system of production characterises plantation crops (Hayami and Damodaran (2004). While one sector consists of large holdings employing hired wage labour, the second sector comprises of farms growing plantation crops together with other crops in small holdings. These farms rely mainly on family labour which gets supplemented by casual labour during harvesting seasons. Shares of plantations in relation to small holders differ across crops. In terms of planted area, the share of plantations is about 59 per cent for tea, 28 per cent for coffee and 12 per cent for rubber in South India (UPASI). While the bulk production of coffee, natural rubber and spices comes from small holdings, bulk of tea is produced by large estates owned by corporate sector.

The decentralised production structure has enabled estates to concentrate on primary processing and to reduce their direct involvement in production of green leaves. Such a change over in the production process from the plantation to the small growers' system has certain implications on the nature of labour market prevailing in tea plantations. Ever since the labour market has reoriented itself from permanent labour to casual labour domination, the organised labour market has replaced by the informal labour market. In this background, the role of emerging production organisational innovations merit special significance.

The growth and policy issues related to small holders in tea and rubber plantations are reviewed by many scholars [Bhowmik (1982b, 1989, 1991 and 1997); Vishwanathan et al (2003); Hayami and Damodaran (2004); Hannan (2007a, 2007b, 2007c, and 2007d); Sarkar

<sup>18.</sup> The South Indian tea plantations had their share of small plantation but for the north eastern industry, this was a new phenomenon. The basic objectives of the co-operative tea factories are to provide remunerative prices to small growers for their leaves and to prevent middlemen from exploiting them.

(2008); Upendranath (2010)]. The success story of tea garden run by workers co-operative in Dooars proves that this alternative structure of management in the industry is the manifestation of active role of workers in the production and decision making process in the industry (Bhowmik 1982b). Co-operative societies set up in Nilgiris for the purpose of addressing problems of small tea growers in the region have been able to overcome many of the associated problems. The small growers have been more enterprising in raising production than the large estates whose production has remained stagnant (Bhowmik, 1989). Worker cooperatives have been remarkably successful in building the confidence of the working class (Bhowmik, 1991). The performance of co-operative tea factories in the Nilgiris (INDCO) has improved the economic viability of the small growers by creating employment opportunities for landless labourers in the region. Nevertheless, the major drawback of the cooperatives is its lack of democratic functioning due to legal constraints imposed by the state government. The co-operative factories have a lot of potential in promoting and protecting the interests of small tea growers through collective action (Bhowmik 1997). Vishwanathan et al (2003) discusses the dynamics of the labour market in the context of structural changes in the rubber small-holdings sector. The authors analyse the process determining tapping and its size in the small-holdings. Hayami and Damodaran (2004) propose for a major restructuring of the plantation sector, with special reference to the tea plantations in Tamil Nadu, through a process of labour empowerment based on contract farming.

Hannan (2007b) explores the relationship between Small Tea Growers (STGs) and BLFs in North East India by focusing on an alternative model of price determination of green leaves in order to improve the bargaining power of STGs. A note on policy measures by Tea Board of India namely Price Stabilisation Fund (PSF) is also provided. While analysing the agricultural practices among smallholders in tea plantations across various regions namely Assam, West Bengal, Tamilnadu and Kerala, Hannan (2007a) emphasises that STGs have

limited market access for their produce and the application of scientific knowledge in tea cultivation is negligible among them. The existing policies adopted by Tea Board of India are inadequate for proper development of STG's Hannan (2007c). The main reasons are rigidities in registering gardens with Tea Board and inadequate documents on land holdings possessed by STGs. The study calls for policy recommendations to improve the conditions of STG and stresses the need for a tea policy that is conducive to STGs.

The nature of changes in production relation in tea plantations and a discussion on the profitability of the BLFs-smallholder sector in comparison with the estate sector are explored in Sarkar (2008). In the face of sharp decline in auction prices during the period 2000-2005, the estate sector found it difficult to break even whereas the BLF-smallholder sector continued to make profits. The reason for this was that the cost of production in BLF-smallholder sector was considerably lower as compared to that of the estate sector. The use of auction as a mode of primary marketing of tea was notably less important for the smallholder-BLF sector as compared to that of the estate sector <sup>19</sup>. Upendranath (2010) analyses several issues which have implications on the welfare and social security of workers with special focus on small growers in coffee plantations. The study highlights the need to analyse social security systems for plantation workers and suggest reforms in the existing practices and identify the roles of government and planters to enhance productivity and cost competitiveness.

It is well known that plantation sector is exposed to severe crisis due to erosion of international competitiveness. As noted by the Taskforce on Plantation Sector (2006), globalisation and accompanying trade liberalisation has led to sharp decline and volatility in prices of many plantation crops which in turn has inhibited investment in the sector.

In the estate sector, 50.59 percent of the produce was sold in auctions whereas the corresponding figure for the smallholder-BLF sector was only 27.33 percent.

Consequently, the plantation sector, which generates massive employment especially for women labour, has become economically and socially unviable. It is evident from the above discussion that there is an urge to reorganise the plantation system from traditional estates to that of the small-holder system.

A brief note on available sources of data is presented in the next section followed by underlying research gaps in the existing literature which provides valuable insights on the diverse issues which need further research.

#### III. Data Sources<sup>20</sup>

The existing data sources which collect information on socio economic aspects of plantation labour are given below.

### Commodity Boards

Commodity boards are under the Ministry of Commerce of the Central Government. Among other functions, these boards collect data pertaining to different aspects of plantation development. Data on labour and employment available from the Tea Board include category-wise (viz. male, female and adolescent) daily number of labour employed in tea plantation in India. This data is available from 1955 onwards at the State/District level. Apart from data on employment, Tea Board also provides daily wage data for tea plantation labour (South and North India). Apart from employment and wages, data related to labour per hectare, production of labour (District/State-wise) is also available with Tea Board. However, this data source does not provide gender specific wages and labour productivity. Data on small growers-BLF sector is available from Tea Board of India from 1998 onwards.

<sup>20.</sup> This section has drawn from Joseph (2010).

Corresponding data collected by Coffee Board with respect to labour and employment in coffee shows to be less comprehensive as compared to the Tea Board. State/District-wise average daily number of persons employed in Coffee Plantations of India (Estimate based on the average number of permanent and casual labour employed in different zones) from 1950-51 onwards are available. Surprisingly, data on provisions of social security to the labourers and their productivity do not come under the coverage of Coffee Board. Rubber Board does not provide any data related to wages, except the average daily employment in rubber plantations. Surprisingly, Spices Board does not provide any data on labour market characteristics.

However, data provided by various commodity boards do lack uniformity which can hardly be used for comparative analysis.

# Occupational Wage Survey: Report on Plantation, Labour Bureau

Occupational Wage Survey published by Labour Bureau, Ministry of Labour, is another major source of data on labour market characteristics of workers in coffee, tea and rubber plantations. The survey collects information on composition of workforce by gender, age, and system of payment, information on average daily minimum and maximum wage rates are also collected. Labour Bureau has published six rounds of occupational wage surveys report on Plantation (1958-59, 1963-65, 1974-75, 1985-86, 1993, 2006) till recently. Nonetheless, the scope of these surveys is limited to registered plantations tea, coffee, rubber which comes under the purview of PLA. Hence the information on other plantations namely pepper and cardamom as well as unregistered small holdings are beyond the scope of these surveys. This calls for primary survey or case studies.

#### Statistical Profile on Women Labour, Labour Bureau

Statistical Profile on Women Labour published by Labour Bureau collects data on characteristics of women workers in the plantation sector

among several other sectors. The survey provides state-wise data on share of average daily employment of adults, adolescents, and children by gender employed in plantations, their average daily employment, as well as maternity benefits paid in plantations. The scope of the data includes tea, coffee, rubber, cinchona, and cardamom plantations which come under the coverage of Plantation Labour Act, 1951.

It is evident from the above discussion that none of the data sets contain comprehensive measure of various variables. Moreover, the data is available at aggregate level and not at disaggregate level. Hence a primary survey is considered as a better alternative to give more insights to meet the specific needs of various studies.

## IV. Summary and Concluding Notes

The plantation sector, a key sector under India's inclusive growth regimen is perhaps the most labour enterprise in rural India in comparison with general agriculture. The migrant nature of its labour along with their social divisions has contributed to the economic and social exclusion of the plantation labour force which lead plantations to remain as enclaves within a backward region. Nevertheless, the relative importance of the sector in comparison with other sub-sectors in agriculture, it is evident that its share in agricultural GDP is more than two times of the share in gross cropped area. The sector gains added significance due to the fact that it is responsible for employing the largest number of women workforce. The total employment of the industry is even much larger if one takes into account the warehousing, packaging and marketing activities as well as the small holders and contract workers engaged in the industry. At the same time, profound changes are taking place in the global economy, the impact of which is clearly evident in the plantation sector as well. Furthermore, India's entry into Free Trade Agreement (FTA) with the Association of South East Asian Nations (ASEAN) threatens the competitiveness of the sector since imports from the ASEAN would be more promoted. Increased import

penetration, exchange rate fluctuations and competition in services could all have an impact on employment and wages of plantation labour. This reflects the call for various measures to make the growth more inclusive in terms of benefits flowing through more employment and income to these marginalised and vulnerable sections of society which have been bypassed by higher rates of economic growth. In this context, the present paper demands for the need to understand the challenges faced by the labourers in the plantation labour market. For facilitating this, a survey paper on labour market issues in plantations assumes no less significance.

The problems of plantation workers have their roots in the historic process of plantation system. Plantations are generally characterised as an enclaved society and are historically associated with slavery and coercion. The decolonisation of India followed by its independence brought a dimension to the labour welfare and production relations in the sector due to the enactment of labour legislation especially PLA. It was realised that labour welfare had a positive role to play in increasing productivity and creating harmonious relations between employers and labour force. In this context, we should not forget that the plantation legislation (PLA) in India is more than half a century old. It clearly lays down the welfare measures to be provided by the planters to their labourers, but the evidence of effective implementation of various provisions is not achieved yet. However, enforcement of these welfare measures is relatively better in southern states and rather relaxed in North Eastern states. Planters are forced to believe that they are not able to withstand the competition in the world market due to prevalence of high cost of production including labour cost and social costs. However, they argue that government should share the burden of cost by taking care of infrastructural costs like housing, education, and health to the plantation workers. Ramifications of higher costs as well as declining prices of crops have even made the industry a more vulnerable sector especially under the era of liberalised trade regime.

Welfare measures have a decisive role to play in the life of these marginalised sections of labour force namely children and women. We argue the need for strengthening the labour legislations in the estates. Health and safety standards can improve workers' welfare, but compliance increases when it is monitored by labour unions or other organisations. Despite being a highly unionised industry, concerns also rise over the prevailing prices of tea and coffee which do not give the trade unions a bargainable position to either increase wages. Tea plantation labourers are the most poorly paid workers in the organised sector. Wages in South India are substantially higher and hence there are fewer children working on the plantations. Perhaps plantation industry is the only industry in the organised sector which legally permits the employment of child labour. Subsidised rations are a feature of wages of tea plantation workers in West Bengal and Assam. Nevertheless, workers in South India do not get subsidised rations. However, even if this cost of subsidy is taken into account, the wages of workers in the two northern states (Assam and West Bengal) are still lower than those in the southern states.

It is well known that plantation sector is exposed to severe crisis due to erosion of international competitiveness. As noted by the Taskforce on Plantation Sector (2006), globalisation and accompanying trade liberalisation has led to sharp decline and volatility in prices of many plantation crops which in turn has inhibited investment in the sector. Consequently, the plantation sector, which generates massive employment especially for women labour, has become economically and socially unviable. Labour shortage in plantations has put the industry in a challenging situation. Implementation of the National Rural Employment Guarantee Programme has rather created more job opportunities outside the plantation sector, especially in infrastructure, and public works, workers are moving to greener pastures. This has contributed to large scale absenteeism in the plantations. Hence, one may fear that if the present trend holds good in the years to come, the problem of labour shortage in plantations would undoubtedly affect the

survival of the industry. These cases may call for the government to streamline the NREGP in such a way so as not to compete with the plantation works. We argue that the shortage of labour coupled with low productivity, increasing cost and eroding international competitiveness of the sector, the possibility of long-term survival of the plantation system is rather depressing.

Changes in the liberalisation policies and globalisation have transformed the plantations' identity, changing the pattern of traditional plantation estates towards more flexible forms of production. In the context of global economic change, the organisation of production in tea plantations in India have shifted away where the traditional estate model that combines large holdings with high capital base and large workforce is gradually giving way to small holdings. Such a change over in the production process from the plantation to the small growers' system has certain implications on nature of labour market prevailing in tea plantations. Ever since the labour market has reoriented itself from permanent labour to casual labour domination, the organised labour market has been replaced by the informal labour market.

In sum, the review of literature discussed here unravels various facets of labour market in plantations on a wide range of themes ranging from historical process of colonialism, role of labour market institutions namely labour legislations, issues of labour shortage and social cost and the role of trade unions. An attempt has been done in this paper to throw light on some of the issues like wages, working and living conditions based on existing literature. Due to market instability and rising competition, plantation employers respond by reducing number of permanent resident workers and rely increasingly on cheaper flexible seasonal and contract labourers. The plantation owners are not obliged to provide them with statutory provisions of PLA as well as social security benefits as it raises the social cost. The question of shifting the burden of social costs between government and planters has also not received

much research attention. Hence, a study in this direction would be fruitful. A small number of studies have looked at the extent of implementation of PLA in plantations and these are either confined to North Eastern states or are dated. While the working conditions and the wages are important, attitudes towards work, and the social dignity of labour are equally important in influencing the productivity of labour. Very little work has been done on the importance of women's economic and social well-being in the plantations. In this context, it is inevitable to study the working and living conditions of women workforce in the plantations.

The issue of labour shortage in the plantation sector is indeed an important issue to be studied in detail. The shortage of labour could be best addressed with more mechanisation and technological advancement. For example, Japan, adopts a highly mechanised system for tea production. As Hayami (2004) argues that if India could follow such a mechanised system, a tea estate of 100 acres could be managed by less than 10 permanent labourers compared with about 120 labourers being used currently. However, such a process of mechanisation based on high capital intensity is too far away from India's vision.

The early 1990's and 2000 has witnessed substantial works on the significance of emerging production organisation innovations in the plantation sector like smallholder-BLF as well as co-operative forms of organisation. What is to be noted is that while there has been several studies on varied aspects of labour market of the North East tea industry, there has been little effort to study the same in South Indian plantations. In this backdrop, where Indian plantations are slowly moving away from plantation based production system and adapt more towards small holder system, lessons from China and Vietnam who are predominantly small holders, would be more useful. More innovative forms of production like contract farming are a part of growing trend which has the potential to improve the welfare of smallholders. In this context, it is

therefore useful to understand the structure and working of other plantations elsewhere, and to learn from their experience so as to what extent we could inform these issues in the Indian context.

Nevertheless, when one considers the status of research on labour market issues in plantations other than tea, namely rubber, coffee and spices in India, it is disconcerting to note that the existing studies have hardly recognised the need to account for these diverse issues in other plantation crops namely rubber, coffee and cardamom. This paper makes an initial step to fill this gap in literature by identifying various issues that need further investigation particularly in the South Indian context.

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