GEOGRAPHIES OF CAPITAL AND LABOUR

BUILDING URBAN INFRASTRUCTURE IN KERALA

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Dissertation submitted in partial fulfilment of the requirements for the Degree of Master of Philosophy in Applied Economics of the Jawaharlal Nehru University

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I hereby affirm that the work for the dissertation, Geographies of Capital and Labour: Building Urban Infrastructure in Kerala, being submitted as part of the requirements of the MPhil Programme in Applied Economics of the Jawaharlal Nehru University, was carried out entirely by myself and has not formed part of any other Programme and not submitted to any other Institution/University for the award of any Degree or Programme of Study

June 30, 2006

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Certified that this study is the bona fide work of Mythri Prasad, carried out under our supervision at the Centre for Development Studies.

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Mythri

ABSTRACT

GEOGRAPHIES OF CAPITAL AND LABOUR

BUILDING URBAN INFRASTRUCTURE IN KERALA

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This dissertation maps the making of urban public infrastructure in Kerala by focusing on the road construction sites of the multi national Punj-Lloyd Ltd. in Trivandrum City. It explores an emergent economy of space that connects these urban sites, villages in North and North-Eastern India and a fluid multi-national corporate space. These connections and exchanges between social relations and space are crucial in situating migration of workers from North and North-eastern India to these sites. It recognises, therefore, that understanding migration requires looking beyond the push-pull framework which confines attention to specific, local conditions in the places of origin and employment. Further, it recognises that beyond the economic abstraction that is labour market, on ground, it is historically and socially constituted comprising a host of institutions, actors, processes and relationships.

The research problem in hand relates to issues of capital, labour, ethnic communities and the spatial movements thereof. The study therefore conceives of an analytical framework built upon elements of political economy, ethnography and critical geography. It draws upon a diverse range of sources: from government and company documents to ethnographic fieldwork both in the source region and host region. The experience of migration to sites of infrastructure building calls for an understanding of migration as journeys. It means centralising spatial narratives-of journeys, labour camps, and city-spaces-in theorising migration as experience.

The movements of capital and labour which currently mediate the construction process are embedded in a new institutional matrix where the rules of the game are drawn up by international lending agencies and consultancy companies. This involve a process of 'creative destruction' of the public works department by superseding the existing institutional framework rooted in developmentalism with new market facilitating state institutions for coordination of construction activity making urban infrastructure an arena of accumulation for global capital.

Production of roads has to necessarily take place at the point of demand and the point of demand may not be a cheap labour area. Capital, therefore, draws labour from cheap labour area and deploy them at the point of production/demand. Sub-contracting of procurement and labour recruitment is a crucial spatial strategy employed by capital in its process of accumulation. Capital uses geographical differentiation and uneven development recruiting immigrant ethnic groups, which helps to minimise conflicts between labour and capital. Caste and kinship play a crucial role in the recruitment process. The absence of women in the men's journeys to work sites is viewed by men in terms of their 'inability' to work in hazardous conditions, the need for participating in agricultural work to ensure subsistence and owing to a gendered disdain and disapproval of women who move and work. It signals to an economy of space which rests on all-male labour camps, subsistence activity in the villages and a temporality which circulates these spaces ensuring subsistence and reproduction of labour power.

The spatial organization of the labour camps reflects ethnicity and the hierarchy at the work site signifying a relationship between space and social relations. The identities of religion and caste mobilized in the recruitment process are structured over space in a way that reinforces and reiterates these identities, to be mobilized again at the work site through an elaborate supervisory structure. The conditions of life and work are extremely arduous. The work regimen of 12 hours a day is spread over 52 days. The temporality ensures that migrant workers do not gain power to bargain and do not forge alliances with local workers who are highly unionized. The increasing scale of in-migration has crucial implications for trade union action and governmental policy making.

CONTENTS

		Page No
I.i	ist of Tables	vii
	ist of Figures	vii
	apter 1: Introduction	01
I	Capital, Labour and Space: A Conceptual Overview	. 01
II	Objectives of the Study	10
III	Research Questions	10
IV	Methodology of Study	12
V	Organisation of Study	13
Ch	apter 2: Infrastructure as Political Economic Space	14
I	Reworking Public Works	15
II.	The Corporate Landscape	33
III.	Summary	39
Ch	apter 3: Spatial Strategies and Sojourner Workers	40
I.	Spatial Strategy of Accumulation	41
II.	Migration as Journey	46
III.	Summary	56
Ch	apter 4: Sites of Life and Work	58
I.	Producing Order and Disorder	59
II.	Regimenting Work	67
III.	Summary	73
Ch	apter 5: An Emergent Economy of Space?	75
В	ibliography	79
I1	ทรงาวการ	82

LIST OF TABLES

No.	Title	Page No.
2.1	Evaluation of Firms for the Award of a Contract	25
2.2	Share Holding Pattern of IL&FS	34
2.3	Shareholding Pattern of Punj Lloyd Limited. as on 30.03.2006	36

LIST OF FIGURES

No.	Title	Page No.
2.1	Operational Structure of Punj-Lloyd	35
2.2	Presence of Punj-Lloyd Ltd in Different Regions of the World	.37
4.1	Re-imagining Trivandrum	59
4.2	Movement of Materials and Workers to the Sites of Road Construction in Trivandrum	62

INTRODUCTION

Labour migrations are often perceived through the 'push and pull' framework that emphasizes the specific, local conditions in the places of origin and employment. The dissertation recognizes that labour migrations have their underpinnings, besides in local, microstructures of economy and society, in the larger, global system. The movement of ethnic labour from the northern and eastern parts of India to the construction sites of multinational corporations operating in Kerala is a case in point.

The dissertation explores the emergent economy of space which connects the sites of public infrastructure building in Trivandrum, Kerala's capital, the villages in North and North-eastern India and a fluid multi-national corporate landscape. The research problem in hand relates to issues of capital, labour, ethnic communities and the spatial movements thereof. The study therefore conceives of an analytical framework built upon elements of political economy, ethnography and critical geography.

I. Capital, Labour and Space: A Conceptual Overview

Understanding the political economic context of road development in Kerala requires an awareness of the world economy as a system which presides over movements of capital and labour. It recognises that global is an important dimension in understanding the strategies of accumulation deployed by capital in sites of road building. In the study, political economy is defined in broadest possible terms, as a perception of economy as constituted by social relations among different economic classes.

Karl Marx, was among the first to emphasize the conflict-ridden relationship between social classes and to develop a theory of class-exploitation based on a notion of surplus value. It was the extraction of surplus value through control of production and labour processes that rendered accumulation possible for the capitalist. The sustained development of capitalism depended on continued accumulation of capital by the twin processes of concentration ('self-expansion of capital' through reinvestment of profit in newer, more productive techniques) and centralisation ('destructive expansion' of large capital by wiping out small capital through competition and use of credit capital).

The Leninist theory of imperialism argues that development of capitalism necessitates expansion outside the boundaries of nation states in order to find new markets and sources of raw materials. To Lenin, imperialism refers to a definitive stage in the development of world capitalism where the national capital, unhindered by competition, attains the status of monopoly capital and searches out new possibilities outside its national territory.

Rosa Luxemburg engages with the question of crisis of capitalist development by noting that capitalists overcome the problem of under-consumption by dumping the excess commodites, value of which is unrealisable in the home country due to low wages and unemployment, in the colonies. Both Lenin and Luxemburg, take stock of the development of capitalism since Marx's time and locate the sustained development of capitalism in the realm of the 'global'.

Political economy of underdevelopment emerged from the critique of a notion of universalising development according to which all countries would catch up with the developed countries overtime subscribed to by earlier political economists including Marx and his followers. This view of the process of development was challenged in particular by Andre Gunder Frank, Samir Amin and Immanuel Wallerstein and their followers who are known variously as dependency theorists or world-system analysts. They looked at the implications of capitalist development in the metropolitan countries on the less developed countries unlike Lenin and Luxemburg who approached the situation from the point of view of the problems of capitalist development in the metropolis rather than from the colonies.

The world-system analysis (Wallerstein, 2004) argues that there have been thus far only two varieties of world-systems: world-economies and world-empires. A world-empire is a large bureaucratic structure with a single political centre and an axial division of labour, but multiple cultures. A world-economy is a large axial division of labour with multiple political centres and multiple cultures. According to Wallerstein, the hyphen is essential in communicating these concepts. World system without a hyphen suggests that there has been only one world-system in the history of the world (Wallerstein: 98-99). Wallerstein argues that the main feature that binds together the world-system is the hierarchical division of labour between different regions. He categorises regions of the world into core, periphery, semi-periphery and external based on their relative position in the world system.

World-system theorists ascribed the sustained development of capitalism to the international division of labour between the core and periphery and the resulting unequal exchange thus locating the generation of surplus in the circulation of commodities as well as in the system of production.

The awareness that space is a critical element in the sustained development of capitalism was an implicit undercurrent in the works of the world-system theorists. Soja (1980) observes that the world system theorists made important contributions to regional political economy rather serendipitously as adjuncts to their insightful but largely nonspatial analyses of expanded reproduction under capitalism.

The organization of space became an object of research quite late in the history of social sciences. It was often subsumed in narratives of the 'social' as mere surface where social relations are played out rather than as being socially constructed. Soja (1980) argues that the social and the spatial are to be understood in terms of a dialectical relationship that social relations of production are space-forming and space-contingent. He identifies three approaches to the organization of space in Marxist spatial analysis. At one extreme is Henri Lefebvre who thought that space and the political organization of space express social relationships but also shape, rework and react back upon them. Organised space reflects more than a reflection of the social relations of production and it can contain its own major contradictions and transformational potential with regard to the mode of production. At the other extreme Soja places authors who use conventional Marxist approaches in their analysis of space viewing it as part of the superstructure devoid of any

transformational potential and label the attempts of scholars like Harvey and Lefebvre as fetishist and deterministic.

David Harvey (1998) unravels the geography of capital accumulation. Flows of capital found some terrains easier to occupy than others in different phases of capitalist development. Labour movements that facilitate the capitalist accumulation also are contingent on spatial strategies and geographical orderings. Walton (1993) reviews Harvey's work on the historic renovation of Paris after 1848 and its political fall out eventually leading to the Paris commune in 1871. He comments that Harvey through his analysis of the urban space of Paris, traces how, urban renewal and political conflict took place in related but unpredictable ways against a background of the contradictions of capitalist development. Soja (1980) observes that Harvey, Castells and Wallerstein fall somewhere in between these two approaches inasmuch as they maintain the preeminence and decisiveness of aspatial social relations though they have developed some of the most insightful presentations of the dialectical relationship between the social and the spatial.

Another theorist who has engaged with space as an active element in accumulation is Doreen Massey whose work *Spatial Divisions of Labour: Social Structures and the Geography of Production* (1995) sketches out a 'new way of thinking about economic space'. Massey notes that behind major shifts between dominant spatial divisions of labour within a country lie changes in the spatial organization of relations of production, the development and reorganization of what are called spatial structures of production. She recognizes that the shifts in spatial structures are a social and conflictual process. She locates the survival of capitalism in these spatial structures like Lefebvre and stresses that space should not be viewed as a mere product of capital's requirement but as an active element in accumulation. Massey and Lefebvre push forward their arguments beyond a conceptualization of space as produced by social relations to theorise it as reacting back on them and in terms of its transformational potential.

This dissertation does not aspire to directly engage with these theoretical debates. It recognizes, nevertheless, that thinking about the spatiality of road construction and of migration requires approaches informed by these debates. By spatiality of roadwork I mean the lack of fixity of road construction sites as places of work and production that has immense implications on strategies of accumulation in terms of

procurement of materials and labour. The second and related point, concerning centralizing accounts of the 'spatial' in narratives of migration, too, is inspired by these debates. I argue that the experience of migration requires descriptive strategies which take into account the spatial narratives of movement-of journeys and cities. Labour migration in the post-liberalisation era, particularly to sites of infrastructure building, has been characterised by disparate journeys rather than circular movements to a specific place, say a factory or a mine.

World-systems analysis throws light on how workers in the periphery-states are drawn to the world-economy and international division of labour. Wallerstein suggests that it may not be appropriate to view all the workers who provide labour for the productive processes as proletarians. These workers are not isolated individuals but are linked to other persons in household structures. 'Household' plays an important role in the world-systems analysis and further strengthens its structuralist framework.

A typical household consists of three to ten persons who, over a long period, pool multiple sources of income in order to survive collectively. Households are not usually egalitarian structures internally nor are they unchanging structures. What distinguishes a household structure is some form of obligation to provide income for the group and to share in the consumption resulting from this income.

Wallerstein argues that there are five kinds of income, which accrue to a household. (1) wage income (2) income from subsistence activity (3) income from petty commodity production (4) rent and (5) transfer payments. He calls a household where wage-income accounts for 50 per cent or more of the total lifetime income, a 'proletarian household' and a household where the share of wage income is less than 50 per cent as a semi-proletarian household. By employing a member of a semi-proletariat household, an employer pays a wage below the absolute minimum wage, without necessarily endangering the survival of the household. In a capitalist system, employers would in general prefer to employ wage-workers from semi-proletarian households. Since subsistence production and petty commodity production are characteristics of households in the periphery, employers would prefer wage-workers from there. When these employers face demands for higher wages in one location, they relocate their production units elsewhere. Wallerstein calls these "run away factories".

A site of roadwork, by virtue of its shifting and unsettled nature, is unlike the classic factory. At the same time, Wallerstein's 'run away factory 'is also not an adequate metaphor to describe its spatiality. The work sites and labour camps managed by global capital are to be understood as a complex terrain which necessitates the deployment of varied spatial strategies by capital. These spatial strategies draw upon uneven regional development within the country and mobilize identities of caste and religion whose expressions differ across space. Though these specificities might have significant bearing on class formation and though many of these workers could be classified as semi-proletarians due to their dependence on agriculture and other occupations for their livelihood, an account of class formation is beyond the scope of this dissertation.

Reading Wallerstein, one longs for an account of how the world capitalist system has orgnised and reorganised the labour process during the course of its development and the experiential realities of the work process. Harry Braverman, in his much celebrated work *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*, does precisely this, but from the point of view of workers in one of the core states: United States. Braverman explains how the labour process is dominated by and shaped by the accumulation of capital and how workers are alienated from the labour process through the mediation of science and technology. He views technology as produced by the social relation represented by capital, instead of simply producing social relations.

In a close scrutiny of the modern work place, Braverman traces how workers lost control of the labour process and the power to take decisions. He unravels the dubious origins of what is now the suave science of management and 'the pivot around which all management turns: the control over work through the control over the decisions that are made in the course of work'. Before the industrial revolution, in each craft, the worker was presumed to be the master of a body of traditional knowledge, and methods and procedures were left to his or her discretion. Modern management made the skill of the workman irrelevant. He identifies three principles which govern modern management. The first is the disassociation of the labour process from the skills of the workers. The second is the separation of conception from execution thus separating mental and manual labour. The third is the use of the monopoly over knowledge to control each step of the labour process and its mode of

execution. Braverman quotes FW Taylor¹ who is considered the father of modern management during his experiments in increasing productivity with a man 'Schmidt'.

"With a man of the mentally sluggish type of Schmidt it is appropriate and not unkind, since it is effective in fixing his attention on the high wages which he wants and away from what, if it were called to his attention, he probably would consider impossibly hard work...." Taylor elsewhere refers to Schmidt as 'so stupid and so phlegmatic that he more nearly resembles in his mental make-up the ox than any other type.... He is so stupid that the word "percentage" has no meaning to him, and he must consequently be trained by a man more intelligent than himself into the habit of working, in accordance with the laws of this science before he can be successful.

What the modern management perpetuated, according to Braverman, is dehumanization and degradation of work and a certain interchangeability of workers and finally a complete reification of the work process. It was necessary for the modern manager to treat the worker as a mere instrument in production stripping him/her off all subjective elements. Developments in machinery worsened this process of alienation and reification.

The changes in the nature and structure of capitalist enterprise and the advent of the modern corporation further made the labour process more nuanced and an administrative apparatus emerges which itself involves "a labour process conducted for the purpose of control within the corporation, and conducted moreover as a labour process exactly analogous to the process of production, although it produces no product other than the operation and coordination of the corporation. The particular management function is exercised not by a manager, but by an organization or workers under the control of managers, assistant managers, supervisors etc. Thus the relations of purchase and sale of labour power and hence of alienated labour, have become part of the management apparatus itself."

¹ Braverman notes that even Marxist thinkers like Lenin could not resist the temptation of Taylor's scientific management. Lenin urged to utilise it to suit the requirements of Soviet planning: 'combining the Soviet power and the Soviet organisation of administration with the up-to-date achievements of capitalism'.

While Braverman's research focused on the labour process in the metropolis, authors like Sidney W Mintz and June C Nash explored the domain of labour in the periphery and attempted to situate the life histories of workers in the larger trends in world economy. These authors treated the everyday life of workers as an important element in the domain of labour as much as the work place and the labour process. They viewed work places as implicated in production of meaning in everyday life and labour process as culturally constituted. This dissertation views the labour process and the places of work and life as entwined and inextricably linked producing a complex site of production and necessitating varied strategies of accumulation. The world-system theory provides a framework that allows attention to micro processes without denying the importance of retaining some vision of larger world-historical trends. This attention to the close analysis of local situations is where political economy comes in contact with ethnography (Marcus&Fischer, 1986:81).

Mintz's account -- Sweetness and Power: The Place of Sugar in Modern History (1985) -- traces how sugar attained its place in modern society and how it has come to be 'the symbol of the modern and the industrial'. Sugar cultivation was the locus of much of European entrepreneurship in the Americas and the Caribbean and also of political struggle in Britain between planter-capitalists and the advocates of free trade. The plantations employed slaves from Africa and the organization of production was based on discipline and time consciousness which are features of a capitalist enterprise, though these were yet to appear in Europe. On the question whether these sugar plantations were capitalist or not, Mintz notes:

Both in its labour forms and in its organization, plantation is an oddity. Yet its existence was predicated on European intent, and in its own way it became vital to European development over time. If it was not "capitalistic", it was still an important step toward capitalism.

The sugar plantations in the Caribbean were not only places where capitalism grew precociously, they profoundly changed the dietary patterns of Western Europe. Sugar consumption grew in Britain during 1850-1950 to become a virtual necessity from a rarity and luxury. Mintz argues that this was not because of any innate primate liking for sweetness or any such 'natural' causes, but because of a radical reorganization of the dietary patterns of the English working class. To match the rigours of the industrial work schedule, the working class homes tried to reduce the

time spent on preparing food. Tea and sugar and its by-products were convenient substitutes and replaced more calorie rich but time-consuming preparations. The gendered division of labour within the family further reinforced such trends with 'a wife leaving the house to work having a restrictive effect on the family diet though her work might increase the family income'.

Mintz takes his arguments further by examining how the consumption of sugar had important implications for the growth of mass consumption. Sugar, in its transition from something ceremonial and laden with ritual meaning to an ordinary item of mass consumption, shows how 'symbol making and meaning investment' can only happen after the political, economic and military organization required for sugar production in the periphery is carried out.

Reading *Worker in the Cane*, life story of a Puerto Rican sugar cane worker, also written by Mintz, along with *Sweetness and Power*, brings to fore how the turbulence of the world economy shapes the life of a worker and the ways in which he participated in the social and political movements to resist the exploitative sugar corporations and political repression. Tracing the events in his life which might not be directly related to larger political and social structures, for example the acceptance of a new religious faith, stresses the need to respect individual life trajectories while suggesting relationships between life histories and social and political background.

June C Nash describes in We eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines (1993) the arduous physical labour and life of Bolivian tin miners. Nash argues that in order to understand the true relationship of society and culture, we must blend contemporary social science analysis with much older paradigms found in our cultural roots. She accomplishes this by allowing the miners to speak for themselves which gives a certain persuasiveness and cogency to her arguments.

The central focus of the work is a contradiction in consciousness: a sense of dependency on the mines as a source of employment and a sense of outrage at exploitation and oppression by those who control the mines. Her field notes in the chapter on "Conditions of work in the mine" includes an unforgettable account of her experience underground, of the everyday experience of work by reporting the day-to-day tasks performed by the workers, and of the inhuman conditions in the mines.

Dipesh Chakrabarty (1989) emphasizes the cultural aspects of working-class history, communal divisions among workers, ties of language, religion or kinship by focusing on the jute workers in Calcutta during 1890-1940. The book marked an important shift in labour historiography of South Asia by highlighting the cultural aspects in the formation of class-consciousness. He looks at the nature of class-consciousness and the formation of subjectivities in a pre-capitalist society characterised by hierarchical and inegalitarian relationships as opposed to a bourgeois order in Europe distinguished by ideas of equal rights and citizenship and its implications for emancipatory class politics.

II. Objectives of the study

In the context of Kerala, South-west India, this dissertation seeks:

- To trace the political economic context of the movement of capital and labour
- To explore the patterns and trajectories of relocations of ethnic communities in the new spaces of global capital.
- To understand the life and labouring conditions in the new spaces

III. Research Questions

With respect to the first objective, that is, tracing the political economic context of the movement of capital and labour, the following questions may be pursued. What are the new features of the nexus between the local and global economies? How are city-spaces re-imagined and reworked in the context of this nexus? What is the context of the new movements of capital and labour to Kerala? What is its relationship with factors local and global? How has the public works scenario in Kerala changed over time? What are the rules of entry and exit of different actors in the construction industry? What are the implications of the movement of global capital and immigrant labour to local capital and labour? What are the strategies of capital accumulation employed by global capital? How is this related to space and geographical differentiation?

The second objective, that is, exploring the patterns and trajectories of relocations of ethnic communities, raised an additional set of questions. Which specific regions of northern and eastern parts of India are the labourers drawn from? What are the

socio-economic conditions that prevail there? What is the social and economic location of the labourers in their places of origin? Do these regions have a history of migration? How was a footloose workforce created? Why did they migrate? What were the economic reasons, other reasons? Which of these pre-dominate and why, if it does? What occupations were they engaged in? Did they have prior experience in construction industry? Which are the cities and towns they have migrated to? What is their experience of the cities? How did they get to know of employment possibilities outside their regions? How did they get recruited by the company? Who recruited them? Who were the intermediaries involved? On what terms were they recruited? Are there occurrences of violation of contract? What role does the cashadvances play in recruitment? How were the workers transported from their villages to Kerala? Do they migrate with their families? If not why? What is the nature of agency of the non-migrant women? Is there an increase in their mobility?

Fulfilling the third objective that relates to understanding the life and labouring conditions of the immigrant workers required a thick description of the sites of work and dwelling. What are the spatial forms created by the reordering of cities? What are the views, sounds, and smells at the worksite and labour camps? How are the workers dressed? What gear - like boots and helmets - do they use? What is the organisational hierarchy at the worksite? Who are the workers' immediate bosses? Who demonstrates the work? Which are the different kinds of workers employed? Is division of labour related to ethnicity? What are the work patterns? What are the work processes? What kind of machines is used? What are the methods of labour control? How do workers view their bosses? How do the workers perceive their own being? What is the nature and duration of breaks and rest hours? Where do they have their food? What is the nature of interaction among the workers at the worksite? How are wages paid? How much wages are they paid? Are there any health hazards at the worksite? What is the level of safety measures in place? What is the spatiality of their dwelling quarters? Does ethnicity and religion influence spatial organisation? What do the workers do in the dwelling quarters? Who are the managers of dwelling quarters? How do ethnic and religious identities influence relationships?

IV. Methodology of study

This study of the making of urban public infrastructure explores three of its constituent dimensions: political economic, geographic and ethnographic. The political economy of urban infrastructure making prompts an enquiry into a complex web of relations involving global capital, international lending agencies, peripheral governments, local capital and labour. Critical geography could contribute to understanding these processes by unraveling the interplay of space and social relations. Ethnography recognizes personal experiences, detailing, and attention to micro processes and structures. Especially useful here could be the method of multisited ethnography. ².

I focused my study on the urban infrastructure projects undertaken by Punj-Lloyd Ltd in Trivandrum City. The study drew upon a diverse range of sources: from government and company documents to ethnographic field work both in the source region and host region. Besides observing the domain of labour, I documented to some extent the everyday practices of the elite—'studying up' international lending agencies, government departments, technical consultancy companies, construction corporations and contractors. It involved attending workshops conducted by the government in collabouration with the World Bank and meetings of contractors' associations to voice their grievances and demands.

I visited village Banma in Saharsa district of Bihar and Kaliachak in Malda district of West Bengal. In Banma, I stayed for five days with Mukhilal Sada, a worker whom I had met in Trivandrum and his wife Ghurni Devi. Conversations with the workers who had come to Trivandrum had helped me to understand what migration means

² Marcus (1995) in an article titled 'Ethnography in / of the world system: The emergence of multi-sited ethnography' writes that global is an emergent dimension of arguing about the connection among sites in a multi-sited ethnography. He notes that multi-sited ethnography is an exercise in mapping terrain to represent a system, though not necessarily in totality. Migration studies are an area where multi-sited ethnography is done by following the migrants through their spatial trajectories. The limited time available for the study has, instead, confined the fieldwork to sites of work and life in the city and the regions from where the workers are recruited which capture some of the movements and processes involved.

and the conditions of life and work in the sites of infrastructure building in many parts of India. The narrative form I have attempted, in a way, has been shaped by these conversations. Fieldwork in the work sites and in the living spaces of these workers located in Trivandrum city involved conversations with workers and engineers and sometimes just sitting/standing and looking on.

VI. Organisation of the Study

Chapter II explores the political economy of infrastructure building in terms of the restructuring of the Public Works Department in Kerala and the institutional realignments drawn up by international lending agencies. It situates the movements of global capital and immigrant, ethnic labour to the sites of urban infrastructure building in the context of the changed institutional matrix and traces the corporate landscape which followed these processes and the implications for local capital.

Chapter III takes forward the exploration of political economy by presenting the process of recruitment and deployment of labour through a chain of sub contractors. Towards this, it investigates subcontracting as a spatial strategy employed by capital in the process of accumulation. Second, the trajectories and patterns of relocations of workers are traced by highlighting the element of journey involved in these relocations. I attempt an understanding of these processes of recruitment and relocation by looking at the villages the workers come from, their occupations and livelihoods and the reordering of lives which entails migration and their encounters with travel and the city.

Chapter IV examines the implications of unsettled and shifting nature of road building industry on coordination of construction and labour process. It deals with the supervisory hierarchy at the work site which is deployed to control the labour process and the role of labour camps and their spatial oraganisation in reinforcing the hierarchy. The chapter also discusses the conditions of work and life in the work sites and the 'labour camps' in detail.

Chapter V is in lieu of a conclusion. It summarises the main observations and central arguments of the dissertation and briefly discusses questions and issues to be researched in future.

2

INFRASTRUCTURE AS POLITICAL-ECONOMIC SPACE

The road is that physical sign or symbol by which you will best understand any age or people. If they have no roads they are savages; for the road is a creation of man and a type of civilized society. If you inquire after commerce, look at the roads, for roads are the ducts of trade.... So if there is any kind of advancement going on, if new ideas are aboard and new hopes rising, then you will see it by the roads that are building. Nothing makes an inroad without making a road. All creative action, whether in government, industry, thought, or religion, creates roads.

Rev. Horace Bushnell, 1846³

The early history of the making of roads is intimately connected to the history of empires, their military expeditions and expansion. This is exemplified by Roman roads, Alpine roads built by Napoleon and the Grand Trunk Road built by Sher Shah and later improved upon by the Mughals and the British. When the roads across Alps were available, Napoleon felt regarding the military position 'that there were no longer any Alps' and his command over Northern Italy was secure⁴. 'Road making' as opposed to the gradual development of tracks beaten by passage of humans and animals in search of food and other necessities signals important shifts in the political organisation of a place. The objective of this chapter is to examine the political economic context of road making in contemporary times. To pose Bushnell's statement as a question, what kind of inroads does a road make?

Construction, where production has to be invariably at the site of demand, is

³ *The Day of Roads*, a pamphlet published in 1846 in Connecticut, USA, as cited in http://www.rootsweb.com/~ohhamilt/histhc/221.html (accessed 22.06.06)

⁴ Gregory, J W, The Story of the Road, p 265

different from other forms of industry where production and sale/use occur in different sites. At the risk of stating the obvious, a road has to be made where it is needed; it cannot be made somewhere and fixed or assembled elsewhere - at least at the level of technology currently available. Even if this were available, the assemblage or fixing, which is integral to the production of a road, would still have to be done at the site of demand. The fixity in terms of location is quickly undermined when we consider road making as a site of production and work.

Construction, seen merely as a service sector activity, tends to ignore its specificities as a produced commodity, a commodity produced with "men, materials and machines" as any other industrial product. This commonality with the classic factory is lost once we consider the spatiality of its production, particularly in the case of road making. While roads do not move, road making does! This lack of fixity as a site of production manifests itself not only in terms of this physical movement of the site but also in terms of the changing workforce, 'undefined' employer and the period of employment. This chapter traces the political economic context in which the construction of roads takes place and the underlying processes, by documenting the every day practices of the international lending agencies, government departments, technical consultancy companies and construction corporations.

Section I deals with the continuities and discontinuities in the institutional matrix and in the roles different actors play in these processes. Towards this, it examines the origins of public works in the colonial era and the recent institutional changes and neoliberalisation of the urban public infrastructure facilitated by international lending agencies. Section II explores the nature of corporate landscape that has resulted from this institutional realignment and looks at the intersections between global and local/regional in this fluid space inhabited by corporations.

I. Reworking Public Works

Road construction is no more an exclusive state domain and this is reflected as a change in the institutional matrix and rules of the game. The Public Works Department which undertook construction on its own or through contractors is now the target of major institutional restructuring and increasingly act as a facilitator of road construction rather than an undertaker. To fully grasp this change, a brief look into the origins of PWD will be useful.

A. Emergence of Public Works

Jeffrey (1976) examines, among others, the role of public works department in the context of the rapid commercialization of the Travancore economy during the nineteenth century. Transportation played an important role in integrating Travancore to the global economy. Transportation was an integral component of the process of incorporation in the capitalist world economy and need to be conceptualized as a political-economic relation than as mere infrastructure (Rammohan, 1996). The creation of public works department (PWD) in Travancore in 1860 should be seen in this context. The first roads were mostly built to link plantation districts directly with the coast thus facilitating the movement of plantation products in the global commodity market.

The amount spent on public works in Travancore dramatically rose in the subsequent years. From a mere Rs. 38,550 spent on public works in 1855-56, the expenditure rose to Rs. 5.61 lakhs in 1865-66 and further to Rs. 12.21 lakhs in 1871-72 which was 24 per cent of the total budget of the state. There evolved a permanent establishment of clerks, overseers and supervisors for whose upkeep another Rs. 20000 was set aside in 1863. Singh (1944) remarked that the largest share of public works went to the opening and maintenance of new roads as canals also served as important means of travel and transportation in those days. The expenditure on roads formed 53 per cent of the total outlay on public works, a two-fold rise from 26.8 per cent in 1880-81.5

In Travancore too, convicts and coolies were used in roadwork (as wherever a public works system arose whether it is ancient Rome or 19th century Britain or US), but William Barton, who arrived as Chief Engineer in 1863, found this source of labour as insufficient and unsatisfactory. *Uriyam*, a form of forced labour, which was used in earlier times to repair and construct public roads and buildings had fallen into disuse. The abolition of slavery in Madras presidency (of which Malabar was a part) in 1854 and subsequently in Cochin and Travancore in 1855 helped the release of labour for working in the plantations and for building roads. What the PWD did to ensure a regular supply of labour had immense consequences for the lower castes in Kerala and was an important step towards the proletaraianization of the workforce in Travancore.

⁵ Singh, Bright D, 1944, p 447

The labour problem was solved by raising wages and ensuring their regular payment. In 1865-66 nearly 10,000 Irava and slave-caste coolies were on daily wages from the public works department. The scale was not extravagant, but the four annas a day which was paid to men, represented an increase of three or four times the rate before the establishment of the PWD........the benefits of these changes fell to those who were prepared to work as labourers. Given an alternative form of employment, the slave castes gained a little leverage against their old masters. Hundreds of Irava women became PWD coolies⁶.

Another class, which was created altogether newly, was contractors –mainly non-malayali Brahmins, Syrian and other Christians and Tamil Sudras. When Barton began work, there were no contractors. The following passage illustrates the hardships he faced in procuring materials and in executing works in the absence of contractors.

The entire absence of contractors, not only for the construction of any portions of the works but even for the supply of the most ordinary materials required by the Department, make the labour extremely hard.

We have had to make our own bricks, quarry the stones, dive for the shells and burn lime, and even to fell the timber required for our works....

The most trifling aid is not forthcoming; every nut and screw, bolt or nail has to be constructed in our own workshop: and when work was first started, we had to burn the charcoal and manufacture the gunpowder before blasting operations could be commenced.⁷

PWD in the early years undertook most of the works by employing the workers directly that necessitated a large number of supervisory staff involving huge expenditure for the government. Further, the system of large-scale muster rolling was prone to corruption. As a result, PWD preferred to operate through contractors and the direct execution of the works became very rare. According to the PWD manual (1970), "building works are undertaken departmentally, by employing daily labour, only if no contractor is available or if it is found more suitable." Contractors emerged as a result of the need to control and manage the labour process as much as the need to find and ensure a regular supply of labour (Harilal, 1986).

⁶ Jeffrey, Robin, 1976, pp 91-92

⁷ Jeffrey, Robin, 1976, p 92 quoting Barton from Travancore Administration Report 1865-6

About a century and a half later, PWD had grown into a mammoth organisation with around 18,000 personnel in which around 1400 were engineers and another 4000 were supervisors. It accounted for an annual estimated budgetary expenditure of Rs. 105056 lakhs in 2005-2006 which was 6.3 per cent of total expenditure on development services in the state.8

B. Private Public Works?

The pronounced role of the state in the construction and maintenance of the roads, bridges and public buildings has continued over these years. But the neo-liberal ideology which guides policy and governments today understands state interventionism only as an expression of the functional needs of capital accumulation and the process of reproduction of capital. Infrastructure along with a functioning legal system is indispensable in this process of capital accumulation which is increasingly becoming global. More than anything else, transportation infrastructure spatializes political agendas and relations of power in a region. Infrastructure is not only understood as a prerequisite for capital accumulation, but also as a symbol of governance and as an important constituent in a recipe for the 'success' of an economy⁹. Infrastructure is increasingly being perceived as a means to swiftly move in and out of the metropolises of India rather than essentially linked to the productive requirements of the country; thus becoming a means of capital accumulation in itself.

Attempts to re-imagine and re-order Trivandrum as global city and to inspire awe and respect in its dwellers and visitors are not new and it is intimately connected to endeavors of nation-building. Architecture and urban planning was always

⁸ Source: Budget in Brief 2005-2006, Kerala State. This includes expenditure on works by other departments and excludes expenditure on salary of employees.

⁹ Flyovers, underpasses, escalators, metro railway and straight and smooth roads are articles of collective consumption and fuel the aspirations of city dwellers. I distinctly remember the feeling of satisfaction and pure joy while traveling in the Delhi metro — distances earlier traveled by the city's notoriously slow 'blue line buses'. It replaces the feeling of helplessness a middleclass woman faces in having to wade through the noisy clutter of a mega-city with a sense of empowered negotiation. One feels that one is safely away from the dark corners and the dangerous underclass of the city in the flashy and smooth metro railway. That Trivandrum is much smaller than Delhi does not hinder aspirations; but one needs to situate the desires of the 'small town' and a social fetish of infrastructure and retrieve its political economic context.

harnessed to demonstrate the supremacy of the state. The Public Works Department played a prominent role in the making of Trivandrum as a capital city. Jeffrey(1976), in a section aptly titled 'Symbol of Trivandrum', deals with this transformation.

To appreciate the drama of the changes of Madhava Rao's administration, it is convenient to look at the capital city of Trivandrum. There, between 1865 and 1873, the public works department completed three ambitious public buildings-the General Hospital(1865), the Public Offices(1867) and the Maharaja's College(1873)-which changed Trivandrum from an anonymous temple town to something closer to the Victorian idea of a capital.....One of the aims in constructing the new public buildings on a grand style was to give an 'architectural ornament to the capital..., dignity to the state and respect to the courts and Cutcherries..' Success was indicated by the report of a sycophantic north Indian that 'all the institutions in Calcutta.. can be seen in Trivandrum, the capital of Trvancore, in miniature'. ¹⁰

The ideology of speed when combined with the ideas of progress and development has proved to be a more violent concoction. Grandeur is no more sufficient for cities to ensure their place in the global financial circuit. Cities are rapidly being pushed to re-organise themselves and the spatial forms characterized by a cumulative, unplanned trajectory are quickly being replaced by planned ones resulting in the displacement of the poor and the destruction of their livelihoods. Slum dwellers and pavement vendors become eyesores and the habitability of a city is judged by their absence and the presence of shopping malls, highways, metro railway and flyovers.

The recent move of the Government of Kerala to construct an Express Highway (Access Controlled High Speed Corridor) demonstrates this ideology of developmentalism and speed. The proposed highway cuts through the heart of Kerala to connect its two ends in the south and the north and has only 19 points of entry. The estimated expenditure is Rs.6400 crores. The proposed alignment of the highway bypassed major towns and cities of the state and ignored the unique spatial formation of the state which is characterised as 'rurban'. The innumerable hardships it might cause to residents in the vicinity as it restricts entry and the possible environmental hazards of the construction of a raised platform for the road were not seriously considered by the government though it bowed to popular pressure and shelved the project later.

¹⁰ Jeffrey(1976), pp 100-101.

The onset of liberalisation and privatisation and the change in the nature of regimes have given greater role for international lending agencies in matters of policy and government. The national economic reforms of the early 1990s and the ongoing second-generation reforms have given considerable space for the private sector in policy arenas. International Financial Institutions including World Bank, Asian Development Bank (ADB) and USAID present private participation as a panacea for the inefficiency and problems of public sector enterprises of developing countries. Ghosh (2005) comments that despite the proliferation of institutional structures and partnerships described as Public-Private Partnerships (PPPs), there is little analysis or critique of their effectiveness and accountability.

A host of legal mechanisms and acts were put in place to facilitate private participation infrastructure development both at the national and state levels. In June 1995, the National Highways Act (NH Act) 1956 was amended to facilitate private participation in infrastructure development. These amendments empower private sector to invest in the National Highway projects, levy, collect and retain fee from road users. To attract private investors, government gives incentives like a subsidy of 40 per cent of project cost, tax exemption and duty free import of construction equipment and bears the cost of project feasibility study, land acquisition, shifting of utilities (over and underground cables and pipes etc.). The section on public-private partnerships in the website of the Ministry of road transport and Highways enumerate three forms of private participation the Government of India use:

- 1)Build Operate and Transfer (BOT) Toll
- 2) Build Operate and Transfer (BOT) Annuity
- 3) Special Purpose Vehicle (SPV)

In a BOT (Toll) Model, the concessionaire (private sector) meets the construction cost and the expenditure on annual maintenance and recovers the entire construction cost along with the interest and a return on investment out of the future toll collection.

In a BOT (Annuity) Model, the Concessionaire (private sector) is required to meet the entire construction cost (no grant is paid by the client) and the expenditure on annual maintenance. The Concessionaire recovers the entire investment and a predetermined cost of return out of the annuities payable by the client (the government) every year. The selection is made based on the least annuity quoted by the bidders

(the concession period being fixed). The client (Government) retains the risk with respect to traffic (toll), since the client collects the toll.

SPVs are separate legal entities formed under the Companies Act, 1956. According to the ministry, it involves less cash support from the government in the form of equity/debt; rest of the funds comes from ports/financial institutions/beneficiary organizations in the form of equities/debt. The amount spent on developments of roads/highways is to be recovered in prescribed concession period by way of collection of toll fee by SPV. An UNCTAD document on financial fraud explains how Enron used special purpose vehicles to dress up loans as commodity transactions thus circumventing internal credit ceilings in banks. 11 Special Purpose Vehicles were the prime vehicle for the fraud that brought Enron¹² down, and were widely used by other companies to take liabilities off their balance sheets, obscure their financial condition, and obtain lower-cost financing than they deserved. There are some financing and tax benefits of SPVs, although the primary motivation is often to achieve off-balance sheet financing. 13 There seems to be little choice for the 'public' in any of these three forms of 'Public- Private Partnerships'; a toll or a 'shadow toll' in the guise of an annuity or an evasive phantom called SPV lurk behind these partnerships.

In 2001, the Kerala Road Fund Act was formulated to facilitate private participation in infrastructure development. The establishment of road funds is a measure actively encouraged by the World bank and the ADB to make sure that infrastructure development is financed off-budget and to facilitate private sector participation. The policy conditionalities put forth by ADB while lending for the Modernising Government Program and Fiscal Reform (MGP) includes charging of user-fee in the delivery of public services such as education, health and infrastructure and restructuring of State Level Public Enterprises (SLPEs) with cost recovery and

¹³ Bob Jensen "What's Right and What's Wrong With SPEs, SPVs, and VIEs" http://www.trinity.edu/rjensen/ at Trinity University



Gers/

¹¹ UNCTAD,2003 "A Primer on New Techniques Used by the Sophisticated Financial Fraudster with special reference to commodity market instruments"

¹² Enron Corporation is an energy company based in Houston, Texas. Prior to its bankruptcy in late 2001, Enron employed around 21,000 people and was one of the world's leading electricity, natural gas, pulp and paper, and communications companies, with claimed revenues of \$101 billion in 2000. It became infamous by the end of 2001, when it was revealed that its reported financial condition was sustained mostly by institutionalized, systematic, and creatively planned accounting fraud.

efficiency in delivery being the pivotal points (Raviraman, 2004). Road funds, empowered to enter into agreements with private companies, ensure that infrastructure financing is gradually shifted out of the exclusive domain of the state. Kerala Road Fund Act, 2001 along with Kerala Road Fund Rules, 2003 allows government agencies to enter into concession agreements for the construction of transport facilities. The 'project management agency' in charge of these projects is Roads and Bridges Development Corporation of Kerala Ltd. which was formed in 1999 in line with a World bank document to establish an Independent Roads Contractor Company which would perform "all work relating to the maintenance and construction of roads which was, immediately before the commencement of this act, usually performed by the Department of Transport"14.

Road funds were experimented in Britain in the early 20th century without much success. In 1909, a Development and Road Improvement Funds Act was passed by the Government which created a fund to which all of the motor tax collected was deposited to be administered by the Road Board constituted under the Act. As the income of the Fund grew and expenditure fell short of income, the exchequer started borrowing from it. In 1936, the road fund was wound up and the proceeds of the taxation was paid directly to the exchequer since then. Walker(1956) quotes Rees Jeffreys, a historian of the English roads who put the blame of the failure of the Road Board "to their very independence of the Government and of Parliament which preserved their actions and policies(or lack of thereof) from the criticism to which they might otherwise have been subjected to". It is clear that along with the imperatives of fiscal management, lack of accountability and transparency have led to the dissolution of road funds.

Not that the idea of road fund or road boards is unknown in Kerala. In fact, Travancore experimented with it for a brief period in the 1930s (Singh ,1944) . A Road Board was established in 1929-30 with a view to give people opportunity to suggest new schemes and to select the order of priority of works. There was a Central Board with headquarters at Trivandrum and six District Boards-one for each of the public works divisions. The Central Board was under the presidentship of the Chief Engineer with 12 official and 12 non-official members-the latter consisting of 4 elected from the legislative council, six from the popular assembly and two

¹⁴ World Bank, Example of legislation to establish an independent roads contractor company, http://www.worldbank.org/transport/roads/con&main.htm

nominated by the government. The District Boards were formed of the Assembly members and a few local revenue and public works officers. However the Boards were extremely short-lived and were suspended in 1932 as "the new works already recommended by the Boards far exceed the number likely to be financed for a long time to come". In 1931-32, a Road Development Fund was instituted out of the contribution made by the Indian Government which was used solely for the purpose of opening and improving new roads. If one attempts a comparison of the Road Board of 1930s and the one formed by the present government, they do not have much in common, in terms of constitution or purpose. While the former consisted of elected members of the legislative and popular assembly, the present board has no members of legislative assembly as members except the Chief Minister and Ministers of Public Works, Finance and Transport. Whereas the Road Boards of the 1930s were formed to suggest new works and set the priority, the present Board seems to be made for the sole purpose of entering into agreements with private companies.

In the former USSR, where the state organised and laid down the law in all walks of life, change of regime led to drastic changes in the public works scenario. A World Bank document (1995) provides some insight into the changes effected by it in the operations of the public works department in the former Soviet Union. World Bank anticipates that the reliance on railway as the primary mode of transport will be reduced and as a market economy grows stronger, there will be a shift to road transport. 'To forestall a collapse of the road infrastructure due to this increased demand', a project called the Russia Highway Rehabilitation and Maintenance Project was implemented for which the Bank provided a loan of US \$ 300 million.

The Bank introduced competitive bidding and pre-qualification of contractors in the implementation of this project. The project design and supervision was done with the help of U.S. Federal Highway Administration. This was also attended by privatisation of construction agencies of the government, which created private contracting firms. The bank encouraged these companies to associate and form joint ventures with 'Western companies'. The result was that out of the total 64 prequalified contractors 24 were foreign and 13 were joint ventures between foreign and Russian companies.

 $^{^{15}}$ Travancore Administration Report, 1931-32, quoted in Singh(1944) p 450 $\,$

The recent shift in the institutional framework and rules of the game in the public works department is best illustrated by the Kerala State Road Transport Project with a World Bank loan of 1216 crores which is 80 per cent of the project cost. A recent report of the Comptroller and Auditor general of India (CAG) tabled in the State Assembly indicts the PWD for "violation of contract obligations and undue favour to contractors" under the Kerala State Transport Project, causing a loss of 92.87 crores to the state exchequer¹⁶. It points out that though the world bank guidelines say that price adjustment (to compensate price escalation of raw materials) is not necessary in contracts having currency up to 18 months, the department included provision for price adjustment clause in the contracts and led to avoidable expenditure of Rs. 2.74 crore. The report, among other things, charges the government for postponing the recovery of mobilisation advance (an interest free advance before commencing the work) thereby letting the contractors derive 'unintended benefit' to the tune of Rs. 3.33 crores.

The project invited bids from 'consultants with sufficient experience to assist implementation of institutional strengthening of the department'. According to the guidelines laid down by the lending agency, the final ranking should be on the basis of the total of 75 per cent of score obtained on technical evaluation and 25 per cent of score awarded on financial evaluation. The final score position of the three front-runner firms was as shown below (Table 2.1) and the contract was awarded to the firm SMEC (Snowy Mountains Engineering Corporation) International¹⁷.

Source: http://www.smec.com.au/ (accessed 05.01.06)

http://www.aidwatch.org.au/

 $^{^{16}}$ Report(Civil) of the Comptroller and Auditor general of India (CAG) for the year ended 31March 2005 Government of Kerala , Paragraph 4.2.1 pp 85-90

¹⁷ SMEC grew out of the Snowy Mountains Scheme which was a massive hydropower and irrigation project undertaken in Australia between 1949 and 1974. The purpose of the scheme was to divert the rivers of south eastern Australia back towards the west to provide irrigation water and also to generate peak load electricity for the states of New South Wales and Victoria. At the time it was the largest infrastructure project in Australian history involving the construction of seven large dams, seven power stations and one pumping station, over 144 kilometres of tunnels, 80 kilometres of aqueducts and 1000 kilometres of roads. Once known as the Snowy Mountain Energy Commission this innovative company is involved in all manner of projects from bridge construction to water control, energy policy and is currently an 'asbestos consultancy' in East Timor.

Table 2.1

Evaluation of Firms for the Award of a Contract

	Financial price	Score Awarded		Total score 75 per cent	Rank
	Offered	Financial	Technical	of (iv) plus 25 per cent	
Name of Firm	(Rupees)	(Points)	(Points)	of (iii)	
			Ì.	(Points)] .]
					ļ
(i)	(ii)	(iii)	(iv)	(v)	(vi)
SMEC	8,67,86,644	59.33	94.17	85.46	I
International,					
Australia(A)					
SPAN-DRD	5,14,91,530	100	77.99	83.49	II
JV,India (B)					
0	0.00 (0.04)				
Scott Wilson Kirk	9,27,63,064	55.51	75.60	70.58	III
Patrick, UK (C)					

Source: Report of CAG for the year ended 31st march 2005, Government of Kerala

The Report puts a question mark on the bidding process as firm B which scored 100 points on financial evaluation could not come successful in the final run as it missed out 1.97 points on final evaluation. It lost out because it was judged as possessing less international experience which the CAG feels that may not be a 'fair criterion for technical evaluation as far as the demands of the department is concerned'.

The report reveals practices of evaluation of bids followed by the public works department according to the guidelines laid down by the World Bank and that the economy and scale of corruption in the infrastructure development has changed.¹⁸

¹⁸ These practices make the World Bank and the public works department seem more like two school teachers desperate to fail a student whom they hate and pass another whom they like. One has the mark sheet they have concocted to peruse!

Institutional change is an explicit objective and component of the project as well as a loan condition. To quote from a project appraisal document prepared by the World Bank where the main loan conditions are dealt with,

The government and PWD will undertake a comprehensive review and subsequent revision of PWD manuals and codes, and operationalize the revised manuals and codes not later than December 31, 2004 (before mid-term review);

The government and PWD will complete an assessment of PWD's current organizational structure, prepare a revised organizational structure, and begin to implement this before December 31, 2004 (i.e, before mid-term review). The government and PWD shall furnish to the Bank quarterly reports indicating progress on this...(emphasis added)

In the same document, the mechanism for this institutional change is outlined:

Based on the ISAP (Institutional Strengthening Action Plan), PWD aims to restructure its internal organization, develop human resource capacity, introduce modernized financial management practices, develop a road maintenance management information system, revise outdated codes and manuals, improve contracting and procurement procedures, introduce environmental and social impact monitoring, and strengthen road safety engineering capacities.

ISAP constitutes the non-construction component of the project and is implemented through SMEC International, the consultancy company mentioned earlier. The contract is worth Rs. A\$3M which is approximately Rs.10 Crore. Infact, consultancies play an important role in the project. There are five consultancy contracts awarded as part of the project; one each for project coordination and institutional development and three for construction supervision. These consultancies are from USA, Canada, France and India. Consultancy services account for 5.5% of the total project cost¹⁹.

C. The Local Contractors: 'Missing the Deluxe Bus'

I attended a two-day construction summit organised by All Kerala Government Contractors' Association in November 2005 organised in Hotel Windsor Palace in

 $^{^{\}rm 19}$ Source: Economic Review 2005 published by the State Planning Board, Thiruvananthapuram, p 302

Kottayam. Listening to Varghese Kannampalli, the association's president one gathers an urgency in his voice.

We are standing on the footboard of a super deluxe bus, not allowed to enter the bus. We pick up and eat the orange peels thrown out of the bus. We have to rush forth into the bus. We need to take initiative for a liberation struggle (*vimochana samaram*)²⁰.

All the contractors' associations in the state complain about the delay in payment and the dues (*kudissika*) which stood at Rs.774.5 crores in 2004 March. They feel that government is pursuing a policy of double standard by paying big construction corporations on time and deferring their payments indefinitely. They complain of the PWD rates for raw materials (sand, aggregates, steel etc.) which is much lower than the market rate and the rates which contractors in the World Bank project procure materials. They accuse the IAS lobby of conspiring against them and trying to dismantle the Irrigation and Public Works Department by letting the works be done by consultancies which ought to be done by the engineers in PWD and awarding the construction contracts to foreign corporations which should have been undertaken by the Kerala contractors.²¹ The economy of corruption has transformed itself to exclude bureaucracy, particularly lower levels of it. The bribes contractors had to shell out to push files across in the department has given way to 'kickbacks' to politicians and higher bureaucracy in the age of corporations.

Kerala State Transport Project changed the rules of the game in the public works in the state. It introduced pre-qualification of contractors which meant that even the A class contractors registered under the PWD is not eligible to place their bids. Prequalification means an evaluation of the financial and technical capabilities of the

²⁰ Vimochana Samaram or 'The Liberation Struggle' was the political agitation that started in 1958 against the first Communist government in Kerala under the chief ministership of E.M.S. Namboodiripad. The main forces behind the Vimochana Samaram were the Church, the Nair Service Society and the Muslim League. The immediate cause of the outbreak of the Vimochana Samaram was the introduction of an Education Bill which reduced the role of private sector in education and the land reforms ordinance which were viewed as detrimental to their interests by land owning class and communal organisations. The invocation of *Vimochanasamaram* by Varghese Kannampalli connotes the resentment of the local entrepreneurs whose origins and allegiances are linked to processes and transformations during *vimochanasamaram*. All Kerala Government Contractors' Association closely associates with the many factions of Kerala Congress, a political formation the ancestors of whom have roots in the turbulence of liberation struggle, though latter hardly insulates entrepreneurs from the onslaught of big capital.

²¹Kerala Government Contractors Association, Kerala Kararukar Avasyappedunnu, 2004

bidder before the bid²². Works were awarded in large lots of 127 KM and 78 KM in phase I of the project instead of breaking them into smaller stretches which used to be the practice before. This meant that only big companies would pre-qualify and the contracts were awarded to a consortium of Bhageeratha Engineers Limited (BEL, India) and PATI (Malaysia) and to Oriental Structural Engineering (India). BEL, which is one of the largest construction companies in India, had to tie up with the Malaysian Company because even it could not bid alone. At the same time, this option to tie up with each other is denied to the local contractors. In a recent workshop in Thiruvanathapuram on institutional strengthening organised by PWD, I got to see a draft Standard Bidding Document (SBD) for Performance Based Maintenance Contract prepared by Rob Scott, team leader of SMEC and sent to the Chief Engineer, PWD. This was for the maintenance of the national highway and the state highway in phase II of KSTP and the work was to be undertaken only by 'local Indian contractors'. But "bids from joint ventures are not acceptable". An extract from my field journal dated 05.01.06:

I wonder why this is so and asks an assistant engineer with PWD and she fails to give an explanation. An employee of the SMEC intervenes and remarks that since SMEC has prepared the documents, engineers of PWD do not know much. She directs me to meet Rob Scott. But Rob Scott tells me that he is very busy and I will have to fix an appointment with his Office Manager.

I called the office manager several times during the following month, but Mr. Rob Scott seems to be too busy to answer my queries.

According to Kannampalli, before the entry of World bank, there were at least 15-20 contractors bidding for a contract. But when the foreign companies are involved, there are only very few bidders. He feels that the World Bank intervention has eliminated competition and brazenly favors big capital.

²² In fact, it would be useful to take note of words like this. Other words (Some owe their worth to a neo liberal lexicon popularized by the World Bank) which I have encountered while reading documents, attending workshops and talking to officials are: Institutional Development/ Strengthening, Interface, Public/ Private Partnership, Transparency/ Accountability, E-procurement, Regulatory and Strategic context, Modernization, best practices, stake holders and so on.

As per this draft Standard Bidding Document, the 'local Indian contractors' should demonstrate "the availability (own, lease, hire etc.) of the following equipment.

- 1) 1 No. 6 Tonne Patrol Tray Truck
- 2) 1 No. Pedestrian Vibrating Roller
- 3) 2 No. 10 tonne Tipping Trucks
- 4) 1 No. Hot Mix Plant (60 TPH) And Paver(3.5m)
- 5) 1 No JCB
- 6) 1 No. Pneumatic Tyred Roller
- 7) 1 No. Power Broom
- 8) 1 No. Bob Cat Skid Steer"

Not allowing joint ventures and insisting on a large equipment base amount to an effective barrier of entry for the local contractors.

In the construction summit held at Kottayam, local contractors realized the importance of possessing equipments. They were contemplating the formation of equipment banks whereby five or six of them pool in money to buy expensive equipments. In fact, as part of the summit there was an exhibition of equipments and a presentation of their various uses and functions by representatives of Larson& Toubro Case Equipment Private Ltd. The presentation consisted of a promo of a few road-building equipments and an offer of discount of Rs. 40, 000 for the participants of the summit. The advertising jingle of a loader backhoe (L&T Case 851) heard in the summit makes for an interesting read.

This is world's latest technology...It is technology that is proven in work sites across the world. Now it comes to you.

Eight Five One is the One
It is strong and sturdy
Working all day long...

L&T Case.
It gives you more
It helps you soar...

Eight five one is the One.

The L&T Case 851
Is the brute with brain
The marvel with muscle
Its High-tech Hydraulics...

The appeal is to the listener's masculinity and it explicitly invokes the manmachine relationship and a certain technical sociability which usually excludes women. But the lone woman contractor in the meeting and an engineer by training, Lata Kumari seemed to be the only participant who could comment in detail about these equipments. As she participated in the discussion, I overheard a contractor asking another: "Is that female a contractor? (*Aa pennumbilla contarctor aano?*)." What I witnessed was a subversion of the terms of this manmachine relationship, immediately recognized and acknowledged by the men with surprise and suspicion. To confront and negotiate global and big capital and the regime of gigantic machines in road building, the local contractor had to graduate from an individual entrepreneur at the mercy of a Kafkaesque bureaucracy of the public works department to a businessman who can summon men, machine and materials at short notice.

Many of the participants said they do not possess expensive equipments and few had the means to buy them. Yet, they understood the importance of possessing them if they have to compete with the large companies.

According to MC George, an ex- contractor and an activist of INFARM, a farmers' organization the coming of large construction companies ended the era of small and big individual contractors. I quote from a conversation with him on the profession of contractors:

A contractor should have the skill to coordinate a number of aspects - collection of materials, labour management, design and scheme of work etc. In the 60s and 70s, the big contractors in Kerala were individuals like Kumaran nair, Chako Pilla, Pylippilla, and KP Poulos. KP Poulos built the Kabani dam. Chakko Pilla was a wizard and was an efficient manager but had only an education up to second standard. That was enough during that time. From 80s onward, technical skill was required. They hired technically qualified people. Finance was no problem for them. They had finance and had control over it.

He went on to recount how the fortunes of individual entrepreneurs have turned as big construction companies entered the field.

Now it is the time of companies. But the funds are not the responsibility of anybody-chairmen or directors...No financial discipline. This had led to the ousting of individual contractors. Big companies are good manipulators. They try to get money without doing work. They design the agreement conditions to suit their interests. This is part of the deterioration of the political system. Political executive has become corrupt. Irresponsible political executive controls bureaucracy.

He felt that pre-qualification was only a means to filter out local contractors from the bidding process and favour big capital.

If the decision making body has some contractor in mind whom it wants to award the contract, then it makes the qualification of that contractor the prequalification.

Individual contractors staked claim to contributions to nation building and said they were driven by a desire to do useful things while earning a living and sometimes the search for a means to socialize in the company of people from different walks of life.

I am not a professional contractor, though I am a registered 'A' Class contractor. Professional contractor has certain features. First of all, the loyalty to one's work, then, maintenance of certain standards in work, fulfilling the obligation to people and such philosophical things.... By philosophical side I mean the feeling that 'we are doing something good to others'.

Parameswara Kurup, 76 became a contractor in the 1970s when the commercialisation of agriculture in Kuttanad was taking place.

In earlier days, only once in every two years the paddy fields were cultivated. Rest of the time the flat area was left fallow. Hence we could take a short cut to the town (Alleppey) through these fields. When agriculture developed, there were even two crops in a year, and cultivating once a year became common. This is after the second world war.... So then this required protection (of fields) with bunds. All the fields and kayal (back water inlets) were embanked with stone structures and a scheme for this was set up by the government so that the public does not need to bear the cost..... Before that all over Kuttand water transport was (extensively used). But when agriculture developed, this pre-existing transport facility had to change.... Even when other areas had road convenience, Kuttanad remained a hated area. So only recently, that is 1981 onwards, roads were formed in Kuttanad. I was the first man for a construction of a road-new road-through NREP(National Rural Employment Programme) scheme. Mulakkanthuruthi- Krishnapuram road. It was 5 KM long. It was the first road to come down to Kuttanad from the mainland. I don't remember whether it is 1981 or 1982.

I became a contractor for my village. I was born in an orthodox Nair family. There were Brahmin marriages in the family which was a symbol of status during those days. To be a contractor was difficult in that kind of a social set up. I told you we were orthodox in those days. There was a lot of caste and religious feelings. Contractors were supposed to be obedient to their superiors in the PWD- including

the peon in the office. They advise us. The department is under the control of the government. They are government servants also. This was the continuation of the times when one had to fear the shankhumudra of the government as much as the Rajah. Instead of the Asokachakra, it was shankhumudra during those days. Though I was not scared, I had to preserve these fears to enter the society. Caste, creed... all these things and economic differences. And then the orthodox family traditions. But I saw the human development of my village as more important than all these things. I think human development is the word. That is how I ventured into this profession. When the bridges were over, there was competition in the contracting field. Then I became happier. I could mingle with people from all classes. I could collect knowledge from everybody. Since I had money, I had no intention to make money. I had to do some works-new works. So when the Kuttiadi irrigation project came up I went to Malabar and worked. During those days, there was not much work here (in Kuttanad) in these rural areas. So I took workers from here and cooperated with workers (in Malabar). It was a very happy life to me. My intention was to mingle with people. At any level, we can bring people together to develop into a class...I have to enjoy my life, happily with the company of people. So I led it very well. Then came family duties. So I wound up work at Malabar. I have two girls. When they become mature, people might start talking that (their father) had gone to make money. So I returned back and continued the works in Kuttnad I ran this (works) and farming simultaneously. I always liked the rustic life.

To become a contractor was to contribute to 'human development' of one's village and to respond to the rapid changes that are taking place in the agrarian economy of the region. Negotiating and bending tradition and bureaucracy, to be able to balance family duties and social norms on the one hand and the imperatives of entrepreneurship on the other, read as a familiar trajectory of development of capitalist entrepreneurship in an agrarian setting. But this account is marked by an understanding of the profession of the contractor as one which facilitates and demands exploration of terrains, physical as well as human.

Another contractor from the same region, Sunny John, recounts as unforgettable, the experiences when he first built a box culvert on Alleppy- Changanassery canal in Ramankary in Kuttanad.

Coconut pile was driven in and a bed was made by filling sand, the box culvert was made on top of that. This design was developed from local practices and not scientifically proven. It was successful. Everybody warned me it would not stay. But it stayed and is still there.

The local contractor experimented with technology, shaping it to suit local conditions. Surplus from agricultural produce formed the major source of their capital. Parameswara Kurup says that since the public works department used to make the payments to the contractors promptly, there was no need for huge finances.

The restructuring of public works department involved a destruction of the existing institutional structures and creation of a new institutional matrix which resulted in the displacement of individual entrepreneurs called local contractors and the entry of multinational corporations into infrastructure building in Kerala which could be called a neoliberalisation of the political economic space of infrastructure. Brenner & Theodore (2002) argue that in contrast to the neoliberal ideology, in which market forces are assumed to operate according to the immutable laws no matter where they are unleashed, neoliberal restructuring projects have been produced within national, regional and local contexts defined by the legacies of inherited institutional frameworks, policy regimes, regulatory practices, and political struggles. They term these processes of institutional reworking and restructuring 'actually existing neoliberalism' to emphasise the contextual embeddedness of the neo-liberal restructuring projects. They note that the neoliberalisation involved, in the case of Western capitalist countries, a sustained critique of institutional forms and political compromises associated with Fordist-Keynesian order and a concerted program to dismantle the latter. The restructuring of PWD in Kerala involved the reworking of politico-institutional space characterised by capital accumulation based on developmentalism and individual entrepreneurship to one based on the ideology of neoliberalism and global big capital. This reworking has to be seen in the light of the pressing need for global capital to look for profitable investment opportunities and the multilateral lending agencies and a subservient political leadership which creates these opportunities.

II. The Corporate Landscape

"Efficiency is what the government wants. We are just three of us here (Assistant Executive Engineer, Assistant Engineer and a typist cum peon) We run the entire Road Fund Board."

"Efficiency and less bureaucracy", the chant of neo-liberalism, is not only heard in workshops conducted by the World Bank, but in the corridors of the public works department. But the less fortunate engineers of PWD complain of an erosion of their skills as the services of the engineers in the department are being replaced by that of engineers in the consultancies and corporations. The restructuring of the public works department has resulted in a reorientation of the skills of bureaucracy rather than in "less bureaucracy". Engineers are assigned responsibilities ranging from management of financial budgets to clerk of works as per the Draft Project Management Guidelines prepared by SMEC International for the World Bank Project.

The Board has undertaken, at present, only the Thiruvananthapuram City Roads Improvement Project (TCRIP). The contract was awarded to Thruvananthapuram Road Development Company Ltd (TRDCL), a 50:50 joint venture of Punj- Lloyd Ltd (PLL) and ITNL (IL&FS Transportation Network Ltd). TRDCL is an SPV and the project is a Build Operate Transfer (Annuity) project. Two companies (Gammon India Ltd, Bombay and Oriental Structural engineers, Bombay) other than PLL placed their bids and one of them quoted a price lower than that quoted by PLL. But PLL was selected on account of its superior technical proposal, according to an official in the road fund board. The supervision consultancy was awarded to Wilbur Smith Associates, a US multinational which would report to TRDCL and not to the PWD.

ITNL is a company wholly owned by IL&FS whose major shareholders are Life Insurance Corporation of India/UTI and Orix Corporation, Japan (Table 2.2).

Table 2.2 Share Holding Pattern of IL&FS

Shareholder	Percentage
Life Insurance Corporation of India / UTI	26.98
ORIX Corporation, Japan	21.32
Housing Development Finance Corporation	13.1
Ltd	
IL&FS Employees' Welfare Trust	11.28
Central Bank of India	9.18
State Bank of India	7.68
HSBC Group	5.23
Government of Singapore	5.23
Total	100

Source:http://www.ilfsindia.com/financials.asp?section_id=3&child_id=11 (accessed 21.06.06)

Infrastructure Leasing and Financial Services (IL&FS) was formed in 1987 with the support of the Central Bank of India (CBI), Housing Development & Finance Corporation (HDFC) and Unit Trust of India (UTI). It was formed by GoI to facilitate financing for infrastructure projects in India, as well as provide financial services. IL&FS has invested in various projects, including the NOIDA-Delhi toll bridge, various road projects in Gujarat (Vadodara-Halol Road Project and Ahmedabad-Mehsana Road Project) and in Tamil Nadu. It closely associates with World Bank in its projects in India particularly in the water sector where rapid commercialization is underway.

Punj-Lloyd Ltd is an engineering construction company and operates in energy and infrastructure sector. Figure 2.1 shows the company's operational structure. The Punjs, a Delhi based Punjabi entrepreneurial house really came into prominence in the 1970s and 1980s. They were one among the several private engineering contractor firms specialising in electrical engineering. Punj-Sons Private Ltd. was the nodal company of the composite Punj-family consisting of several brothers. They also promoted Fedders Lloyd, a company specialising in air-conditioning equipment in 1954. In the mid 1980s the family split and Punj-lloyd consisting of SNP Punj and his son Atul Punj was formed in 1988. They broke away from the Fedders Lloyd branch of the family led by SP Punj and BR Punj. Asok Punj of PSL holding limited, another major group with investments in steel pipes is part of the Fedders Lloyd group²³.

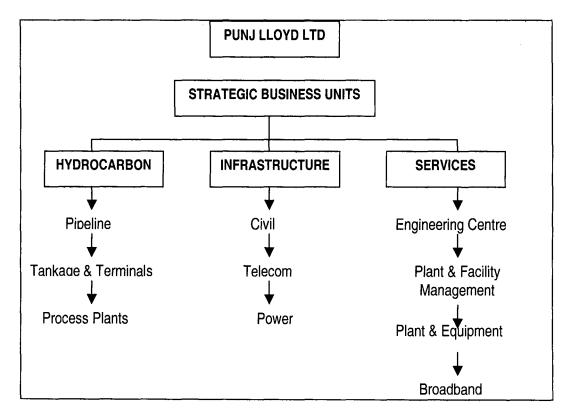


Figure 2.1
Operational Structure of Punj Lloyd

Source: www.punjlloyd.com (accessed 21.06.06)

²³ I owe Raman Mahadevan for this information.

Table 2.3 shows its shareholding pattern which still has a fairly large component of family ownership.

Table 2.3
Shareholding Pattern of Punj Lloyd Limited. as on 30.03.2006

	Category	Percentage of Shareholding
A	Indian Promoters	
1	Indtech Construction Pvt. Ltd	8.1
2	Indu Rani Punj	4.43
3	Satya Narain Prakash Punj	4.22
4	Mangalam Punj	2.68
5	Uday Punj (HUF)	2.68
6	Uday Punj	1.61
7	Others (< 1% shareholding)	1.96
	Total	25.68
B Foreign Promoters		
1	Cawdor Enterprises Ltd.	29.12
	Total	29.12
C	Instituttional Investors	
_1	Mutual Funds and UTI	1.79
2	Banks, Financial Institutions, Insurance Companies	
	(Central/State Govt. Institutions/Non-government	0.67
	Institutions)	
14:	Foreign Institutional Investors	<u> </u>
3	Dunearn Investments (Mauritius) Pte Ltd.	4.15
4	New York Life Investment Management India Fund II LLC	3.94
5	Fid Funds (Mauritius) Ltd.	3.24
6	Others (< 1% shareholding)	7.41
	Total	21.2
E	Others	
1	Private Corporate Bodies	3.9
2	Indian Public	5.36
3	NRIs/OCBs	0.5
$\boxed{4}$	Trust	0.23
5	Clearing Members	0.41
	Foreign Venture Capital	13.6
	Total	24
	Grand Total	100

Source: Source: www.punjlloyd.com (accessed 21.06.06)

A glance through the companies it has worked with reveals its global presence and associations with powerful multinational companies. It has worked with oil companies like British Petroleum, Shell, Petro Kazhakstan, TengizChevroil (a joint venture of Chevron), Dabhol Power Company, BPCL and HPCL and with

Engineering Construction Companies like Betchel, Engineers India limited and Skoda. Figure 2.2 shows its presence in the West Asia, the Caspian, Africa, and South Asia. It has 13 subsidiaries including two in Kazhakstan and Georgia. It is primarily engaged in laying oil pipelines in these countries. Corporations like PLL are perennially in search of greener pastures eager to exploit newly opened up resources and opportunities as a fall out of a change in regime as exemplified by its operations in the Caspian nations which were formed after the disintegration of Former Soviet Union. Recently, it was approached by the US Government to undertake the reconstruction of New Orleans after the devastation caused by Hurricane Katrina. In addition, it is looking forward to sub-contracts from Betchel in the reconstruction of Iraq after the war. In India, it has worked in infrastructure projects of National Highway Authority of India (NHAI) and Delhi Metro.

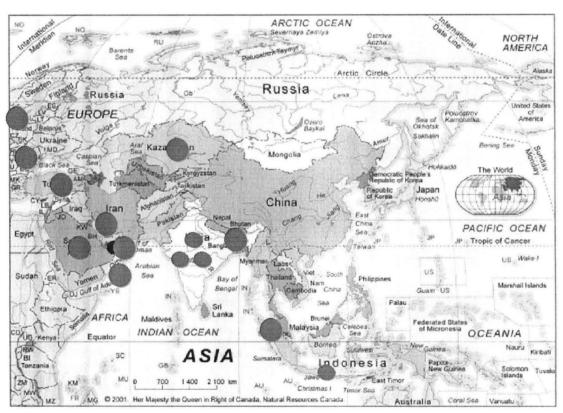


Figure 2.2

Presence of Punj-Lloyd Ltd in Different Regions of the World

Source: Compiled by author based on information accessed from www.punjlloyd.com

The organisation of a company into larger units of capital, both through merger and takeover (centralisation) and through internal expansion (concentration) represents an increase of the control of individual capitals over the production process- both the physical means of production and, through the supervisory structure, control over

labour. The next chapter deals with these aspects in more detail in the context of infrastructure building in Kerala. Massey (1995), while engaging with the spatiality of a capitalist economy, points out that 'size' of a company might not be an adequate differentiator. She feels, monopoly capital or big capital, can have very different spatial proclivities and different parts of big capital can have very different ways of making use of spatial variation. The development of spatial forms should be, then, seen as a social and conflictual process. She also differentiates firms in terms of the social nature of forms of ownership. According to her, the difference between a wide ranging multi sectoral conglomerate and a single-industry company is not always just one of intersectoral spread. Rather, it may be one of a different attitude to production and investment opportunities. Conglomerates are involved in essentially in a financial mode of operation, commitment to particular sectors of production is minimal, and investment may be shifted rapidly and frequently between industries. Production, in general, is subordinated to making a financial profit. Though profit is the motive of production in the case of single industry companies, but the social forms of this process of capital accumulation can be played out differently. While the conglomerate asks the question: where (in which industry) the profit is the highest? or where shall I move next? the single industry company asks: how many generators/shirts (say) should I produce? According to her, this is crucial in explaining managerial behaviour along with the 'requirements of accumulation'

Though Punj-Lloyd is primarily an engineering construction company, its involvement spreads over a number of sectors and it has a global presence. Its ownership pattern has evolved from that of a family-owned private limited company to a public limited company and, recently after a public offer, to a listed company in the stock market. Whom the Punj-Lloyd displaced, after its entry into road construction in Kerala, were not smaller companies, but mostly individual entrepreneurs. As we have seen, this entrepreneurship was historically shaped in the context of the commercialisation of an agrarian economy during the colonial era and later in the context of 'nation building' and an ideology of developmentalism in the post independence period. When seen in the light of a social fetish for "sleek infrastructure" the restructuring of public works department according to the rules drawn up by the World Bank, consultancy companies and a conniving

²⁴ A term I heard in the construction summit in Kottayam, held on November 5 and 6, 2005 from the Minster of Public Works during a public speech which exhorted the contractors to modernise or perish.

subservient political leadership, and the change in the economy of corruption from 'bribes to kickbacks', its rather smooth entry seems not surprising.

III. Summary

In this chapter, I have dealt with the political economy of infrastructure building in Kerala in the context of restructuring of the Public Works Department that involved a changed institutional matrix drawn up by the World Bank. The new institutional landscape which facilitated the entry of multi national corporations was achieved despite contestations especially by local capital. The geography of capital accumulation, which followed these institutional realignments, involved a corporate landscape dominated by the global capital. It also involved a form of neoliberalisation of public works that addressed the problem of sustained accumulation by establishing market facilitating forms of coordination and cooperation like Road Fund Board.

3

SPATIAL STRATEGIES AND SOJOURNER WORKERS

I left the work site in Delhi (Delhi metro) and got into a train, I had no money, so I took no ticket. I got down at Ballabgarh. From there I boarded another train and got down at Agra. From Agra, I reached Mokama. I stayed in Mokama for 2 days. I did not eat anything, as I had no money. I decided to come because I did not get any money for my 2-½ months of work. I asked for money, but the *sahibs* of the company said, you ask your dhekkedar and, "isko kaho, usko kaho".

I was prepared to be even jailed or even to walk the entire distance. I wanted to come home. I never had even a grain of food after starting from Delhi. I just had water. When I reached Mokamma I couldn't even speak.

From there I went to Barouni. I lived in Barouni for 3 days. Nobody helped me with the way. Nobody told me that this train would go to your place. I boarded a train which took me to Begusarai. Then I went to Baliya on foot. It was five days since I had had anything. I didn't even come to know day or night, I kept walking. When I reached Baliya it was morning. Then I asked for food in a temple; they didn't give me food. From there I got a train till Khagaria and then to Mansi and from there to Bakhtyarpur .It took 10 days to reach. I walked to Banma from there.

Bindasree Sada Village Banma, District Saharsa, Bihar, March 2006

This account closes in all questions, leaving the listener paralysed, submerged in the stark experience it narrates, and with no desire to know anything more. But researching infrastructure building seems to involve encountering and engaging with spatial narratives such as these.

In this chapter I take forward the exploration of the political economy of infrastructure building attempted in the last chapter by presenting the process of recruitment and deployment of labour through a chain of sub contractors. Towards

this, I investigate subcontracting as a spatial strategy employed by capital in the process of accumulation. Second, I try to trace the trajectories and patterns of relocations of workers by highlighting the element of journey involved in these relocations. I trace the role of ecology and interventions by the state in taming ecological processes in creating a footloose workforce in the context of near-feudal agrarian structure. I attempt an understanding of the processes of recruitment and relocation by looking at the ecology and economy of the villages the workers come from, their occupations and livelihoods and the reordering of lives which entail migration and their encounters with travel and the city.

I. Spatial Strategy of Accumulation

Massey(1995) observes that spatial form and strategy can be an active element of accumulation and calls these *spatial structures of production*. There are many different ways in which the fact of distance and geographical variation can be actively used in the process of production and accumulation of capital. She, therefore, interprets spatial distribution of employment as the outcome of the way in which production is organised. She further states that precisely because geographical form can influence the rate of accumulation, it may well be that one of the conditions for the development of particular kinds of division of labour within production in the first place is the existence of particular kinds of geographical differentiation.

In Chapter II, I had mentioned the distinctiveness of road works - that is, production has to necessarily take place at the site of demand/ consumption. This necessarily rules out the possibility of subcontracting as it happens in commodity manufacturing with parts or components made in various countries and assembled in still another country or a similar division of labour within a country with uneven regional development. The spatial strategy of accumulation involved in subcontracting appears in a different form in road making as fragmenting production (distributing it across centres where labour and materials are cheap and across different organisational segments as small scale units or household production) is not possible, capital reaps the benefit of geographical/ spatial differential through other means - by drawing labour from various centres where it is cheap, even drawing them over long distances. With labour contractors and sub-contractors controlling their set of labour at the work site, it is like subcontracting occurring right on the site of final commodity production. Viewed thus, a site of roadwork is a complex site of production as this chapter and the next would elaborate.

A. Allies in Accumulation

In the last chapter, I noted that the entry of Punj-Lloyd had rendered local capital vulnerable and resulted in their displacement from infrastructure building in Kerala. Rivalry and competition, however, constitutes only one aspect of the relationship of Punj-Lloyd with local/ regional capital. There is also a realm of close cooperation between the two. This section explores the strategic alliances PLL has formed with local or regional capital to procure materials and at times to carry out construction itself.

The stones to build the roads and flyovers as part of the Thiruvanathapuram City Roads Improvement Project come from a quarry situated in *Mookkunnimala* in the south eastern region of Trivandrum district. The quarry is operated by Mr. KK Verghese who is a retired assistant manager of Catholic Syrian bank. His visiting card tells us that he is the state vice-president of the All Kerala Crusher Owners' Association. He was an administrative council member of the Archdiocese of Trivandrum and has held posts in the Y's men's club and Lion's club. He runs the KK Rocks and Granite India Pvt. Ltd. and the Kottackal Granite and Earthmovers. The latter owns the vehicles and the equipment like excavator, earthmovers and tipper lorries while the former company owns the crushing unit and the crushing area and operates the quarry.

A chat with Verghese during my visit to the quarry revealed his economic position and the nature of the contract with Punj-Lloyd Ltd. An extract from my field journal dated 30.08.2005:

He owns around 51 acres in the area. He says the area and equipments are worth 6 Crores. He has leased the crushing unit from Punj-Lloyd worth Rs. 6 crores, which the PLL might give him when they leave. His contract with PLL is to supply 9 inch soling (aggregates) for 30 months. The land was given to freedom fighters from Kuttanad by the government. Each of them had 3.5 acres. He bought the land from them. He says that he allows the local people to collect firewood etc., that is, "sharing but not everything". There was a massive crusher which produced aggregates of different sizes which was collected directly into tipper lorries. One could also see the excavators and JCBs (loader backhoes) and other machines transporting the gouged out stone pieces to the crusher. The place was full of the sound and dust of the crusher. Massive conveyor belts were all over the place. It was gigantic in size than anything I have seen ever. A little distance away, the hill stood showing the white of its rock.

Apart from the trajectory of the transactions which had taken place on the land, i.e. from the government to freedom fighters in Kuttanad and finally to the owner of a quarry, what struck me was the everyday life of this businessman.

Then he started talking about the daily chores he performs. He claimed that he gets only a profit of Rs.1 per load of aggregates he delivers to Punj-Lloyd. A while ago he had told me that he doles out Rs. 10000 a month on an average as bribe or as contribution to local organizations and religious groups. The output per day was around 150 loads on an average. Annually he pays Rs.3 lakhs as electricity tariff. That left me clueless about his turnover. He had to go to the panchayat office to get the water pipe which passes through the site removed. He had already paid bribe to the previous officer in charge, but he got transferred. Now probably he would have to pay the new guy again. He said that going the political line was useless, Mani (Minister of Revenue) and all he knew, but no point. "To get things done, we have to find our own means".

Sub-contracting the procurement of materials involved striking deals with local capital which was in a better position to negotiate local bureaucracy as quarrying involves obtaining environmental clearances and getting around bureaucracy and local population. Sub-contracting, seen in this context, is a strategy employed over space, and influences the process of capital accumulation.

Punj-Lloyd realized while doing the piling work for a flyover in Trivandrum as part of the project that the hydraulic rig it uses for piling cannot handle the hard rock characteristic of the sub-soil in many parts of Trivandrum, which begins to show up after 10 meters or so. It therefore contracted out the piling work to a company called Raman Dayar & Sons (RDS). Excerpts from my field journal dated 30.07.05:

RDS does the work with a chain rig which is a heavy metal shaft propped up on three metal poles. It is operated by a worker by rotating a chain which results in the shaft hitting the ground and slowly pounding the surface beneath. When we were looking on, three workers were repairing the machine with a welder helping them.

A chain rig is slower than a hydraulic one, but is more efficient in handling hard rock. As the chain rigs PLL possesses are engaged elsewhere in the country, it had to sub-contract the work.

B. Labour Farmers: The Recruitment Process

Sub-contracting of labour recruitment and employment presents an altogether different element of space in the production of roads where the fact of spatiality appears not as a passive surface on to which relations of production are mapped or as distance to be crossed, but as an active element and strategy in the production of roads. Structures of dominance and subordination between economic activities in different places mirror the way in which the relations of production are organised over space (Massey, 1995). Recruiting labour from multiple sources constitute a spatial strategy of capital to bring in new social groups in to the labour force, to manage and control labor process which helps to minimise the conflict between capital and labor. Viewed in this context, the mobility of labour, geographical differentiation and uneven development which triggers off these movements becomes more intelligible.

The construction boom as a result of the increased remittances due to malayali migration to the gulf in the 1970s resulted in large-scale in-migration of Tamil workers to Kerala (Anand, 1986). 1990s witnessed in-migration from North and North-Eastern India into Kerala's construction industry as Tamil workers learned to negotiate the labour market better. More careful research, however, is required to map these changes in the source of labour for Kerala's construction industry. The present case, however, marks a qualitatively new phase where the movements are being orchestrated by global capital deploying uneven development and ethno-social differences as strategies of accumulation.

Labour migrations are often perceived through the 'push and pull' framework that emphasises the specific, local conditions in the places of origin and employment. Taking into account the spatial forms of production and employment might be helpful in circumventing the orthodoxy of 'push and pull' framework.

The workers are drawn from the villages in Bihar, Jharkhand, West Bengal, Orissa and Karnataka. The workers, particularly the 'unskilled' workers come for 52 days involving a work day of 12 hours. The fieldwork was carried out in village Banma of District Saharsa in Bihar and in Kaliachak in District Malda in West Bengal.

The workers from Malda are recruited through a chain of intermediaries. Contractors known as *commissions* are at the top of the hierarchy. A professor in a local college remembered a certain 'Chihir Commission' who once had 30,000 workers under him. The *commissions* also run economic societies/saving pools which award the savings to the workers in advance on a lottery basis. Commissions recruit workers through dafadars. Dafadars move around in the countryside, talk to workers about the work, distribute advance which he gets from the *commission*, buy tickets depending on the number of workers he has mobilised and sometimes travel with the workers to the worksites. The *commissions* provide the finances. The next in this hierarchy are *meths* who negotiate with the *commissions* and *dafadars* on behalf of the workers on wages, on the amount of work if it is piece rate work and on working hours. At the work site, the *Meth* has to work like an ordinary worker though he occasionally supervises them. Dafadar, if at all he stays back in the work site, will only engage in supervisory work.

The recruitment process in Malda, West Bengal has evolved over a longer period of time and is more nuanced and is entwined with caste and kinship systems. In Malda, commissions are invariably Muslims. Dafadars are usually Muslims, though occasionally, men from other communities become Dafadars as well. Meths would belong to the same community as the workers do i.e. if the majority of the workers were Adivasis, then the meth also would be an Adivasi.

The workers of Punj-Lloyd were mobilised through a *commission* named Sayed Ali whose *dafadars* recruited workers from the district Sahibganj in Jharkhand as well on the west of District Malda, on the banks of river Mahananda, a tributarof a river Ganga.

In Banma (Bihar), the chain of intermediaries did not include *dafadar* as the negotiations were carried out between the *meth* and the contractor who is called *dhekkedar*. The *dhekkedar* for Punj-Lloyd was AK Singh from district Siwan²⁵ in Bihar who had been recruiting workers from the village for the past 5 years to road projects in Gujarat and parts of Bihar. As in Malda, caste and kinship ties play an active role in the recruitment process. The *musahars*, who are traditional agricultural labourers, of the village who had come to Trivandrum to work in the road construction undertaken by Punj-Lloyd go together for work often choosing their headman as *meth*. Interestingly, if one or two workers from other communities say *yadavs* or *malekaars*, accompany them, the *meth* continues to be the headman of *musaharas* who are below the *yadavs* and *malekars* in terms of caste hierarchy. This shows that caste

²⁵ Another worker told me he is not from Siwan, but from Bhagalpur.

and kinship play a crucial role in the recruitment process, though in a contingent manner.

II. Migration as Journey

The UN Multi-lingual Demographic Dictionary defines migration as a form of geographical mobility between one geographical unit and another, generally involving a change of residence from the place of origin to place of destination or place of arrival. But there is a general lack of unanimity in employing specific time and space criteria while defining migration and migrants.²⁶. As the workers stay only for a few months in these sites, the temporality of their relocation makes one wary of applying any criteria on to them. Journeys, rather than settlement, characterise the life of these workers. In this section I attempt to trace the migration of workers to the sites of infrastructure building by focusing on the element of journey.

In Saharsa district, 1 or 1 ½ Kg of grain, actually 2 ser, was the wage rate, for agricultural work. This was year in the year 1978. Nobody went out in search of work, those days. The workers were organised by the Communist Party of India. There was a one-day hartal demanding 4 Kg of rice as wage. There was lathi charge against workers. The workers were in bondage to their masters-the kisans. But the demand was granted and the wages increased to 4 Kilograms of rice. The workers strength increased. In 1984 there was a juloos to Delhi and 200-300 workers went in that rally. From 1984-85 onward, workers started going for juloos to Delhi 2-3 times a year. There were at least 4-5 joloos every year. So after the juloos, some people started to stay back in the city. They got used to journeys and the city. They found work in the city. After some years, contractors started coming here in search of workers, take workers and bring them back. The workers also thought, 'how long will we sit without work, let us go out to work'. Some of them became meths and started getting commission too.

This account is by Jaykishore Mahasay, the local committee secretary of CPI, Banma-Itarhi, who was instrumental in this struggle for better wages by agricultural workers in the area. It signals to the possibility that getting acquainted with the city and travelling long distances was an unintended outcome of the workers' movement and the *juloos* to Delhi (also called *Dilli Chalo*) to demand from the state their rights.

²⁶ Preethi Saro Varghese (2004) Migration: A Bibliographic Study on Kerala

A. Ravaged by Rivers: Ecology and History of Migration

The struggle for the rights of the agricultural workers occurred in the context of widening inequalities in the Kosi area, comprising of the districts of Saharsa and Purnea, after the introduction of flood control mechanisms and irrigation in the absence of land reforms (Appu, 1971). Kosi area is prone to floods and change of course caused by relentless riverine activity. It has, therefore been the target of projects to tame the river and use the water for irrigation purposes from the colonial era. The giant Kosi project which started in 1955, benefited the area through protection from flood and improved irrigation facilities. Appu (1971) observes that the salient features of agrarian structure of the Kosi area were extreme concentration in the ownership of land, absentee landlordism with all its accompanying evils, widespread share-cropping characterised by insecurities of tenure as well as a multitudinous population of landless agricultural labourers eking out a precarious livelihood under the extant near-feudal relations of production in agriculture. The project resulted in enhanced land values and increased productivity of land which had given incentive to landowners to oust sharecroppers who were mostly members of the Scheduled Castes and Scheduled Tribes. Coupled with the lack of institutional reform in the agrarian sector, this resulted in the increase of the number of landless workers who formed 53.39 per cent of the population in the district Saharsa as against 47.31 per cent for the state of Bihar according to the 1971 census. In North Bihar, migration has a longer history, dating back to 18th century and the destinations were often as far away as Mauritius, Fiji, Suriname, British Guyana, and Uganda which were European Colonies. The Bidesia genre of Bhojpuri folk songs is an articulation of the experience and culture of migration. They often reflect the loneliness and waiting of the worker and his family and the hard work in an alien setting²⁷

> Railiya na bairi se jaha jawa no bairi se paisawa bairi na mor saiyan ke bilmawe se paiswa bairi na

(It is neither the train nor the ship that is our enemy but rather the money that compels our husbands to migrate to other lands)²⁸

²⁷ Das, Arvind N. The State of Bihar: An Economic History without footnotes.

²⁸ Tiwary, B N. 'Migration, Change and Folk Culture'

Songs like these poignantly capture the agony and pain of separation caused by migration and recognizes the compulsions which underpin these journeys. Ships and trains appear not as mere conveyance, but seem to have a life of their own, and form an integral part of the experience of migration.

Though similar information is not available on Malda district in West Bengal, labour migration from the district also seems to have a long history and at least some of this is entwined with the zigzag ways of river Ganges which has forced people to move constantly in search of shelter and livelihood. The District Gazetteer of Malda (1918) attributes "emigration to the constant changes of jurisdiction caused by variation in the course of the Ganges and to the settlement of the surplus *diara*²⁹ population in the vacant *chars*³⁰ of Purnea and in the *dubas* in Dinajpur". The phenomenon of migration to the construction sites in various cities of India, however, is a fairly recent one, catching up only in the late 1980s and early 1990s.

B. Occupations and Livelihoods

The 11 workers who came to work in Trivandrum from Banma (Bihar) belong to different communities. My field experience is based on a short stay with Mukhilal Sada, a worker whom I met in Trivandrum and who later on became a friend. During the stay I interviewed some of the workers who had come to Trivandrum. Out of the eleven workers who came to Trivandrum from Banma, four were *musahars*, three were *machcuas*, two were *yadavs* and the rest belonged two belonged to *kumbhar* and *malekar* castes. The wages for agricultural work is around Rs. 40 while for construction work it is around Rs.50-60. Most of the workers cited lack of employment rather than a wage differential as the main consideration in their decision to travel in search of work. The wages offered when they went to Trivandrum was Rs. 2700 for 52 days of work which means around Rs.52 per day. The wages for roadwork in Kerala for a malayali worker can be as high as Rs.350 per day or even more.

Musahars are largely landless agricultural workers and belong to Scheduled Castes. According to Risley(1891), Musahar are an offshoot of the Bhuiya tribe of Chotanagpur and the name Musahar means 'rat-catcher' or 'rat-eater' following a

30 Island formed as result of fluvial action of river Ganges

²⁹ A strip of alluvial area formed as aresult of the centuries of fluvial action by river Ganges

popular etymology in an apparent reference to their "fondness for eating field-mice". The Musahar hamlet in which I stayed consists of around 24 families and Mukhilal Sada is the headman of the hamlet. An extract from my field journal dated 20.03.06:

I learned that two of Mukhilal's two sons and three brothers are in Delhi working in the Delhi Metro. Mukhilal's house is a concrete one room with a veranda and a cooking place in the front. His sons and brothers also have concrete houses made with Indira Awaz Yojana (central government scheme to build houses for the poor) funds. Their wives and children live there. Mukhilal and his sons' and brothers' families are a close-knit group but cook separately. The other houses in the *tola* (hamlet) were not as good as Mukhilal's. Each had their own stove made of mud and storage places for grain called *kothis* made of mud which looked like earthen *almirahs*. Each family has to fend for their needs but gets support from Mukhilal at times of great need. Apart from Mukhilal and Mukhilal's son Rajkumar, two others Bindasree Sada and Jalo Sada came to Trivandrum from the *tola*. At the time of my visit Rajkumar and Bindasree were away in Delhi though the latter turned up towards the end of my stay.

During my journey to the village from Patna, I met an advocate in the train, practising in Saharsa, coming back after meeting his brother in Jawaharlal nehru University, New Delhi. He questioned me thoroughly about my plans and intentions. He showed me Kosi and Bhagmati and told me about their zigzag ways wreaking havoc on the banks. A washed away bridge was being reconstructed. The train moved through a makeshift wooden bridge. He told me that the title 'Sada' belongs to a caste called *Musahar*, and that it means one who eats rats and gave an extremely sarcastic smile. But did not quite explain and quickly brushed away the topic as co-passengers protested saying that his remarks were quite out of context and unnecessary. *Musahars* are often the targets of caste violence and massacres carried out by *Bhumihars* and *Yadavs* in Bihar.

Bindasree Sahni and his son, Mangal Sahni came to Trivandrum and belong to *machhua* community who are traditional fish workers. Bindasree had to go out in search of work because of a decline in the amount of fish in River Kosi which according to him is due to the excessive use of chemicals by fish workers to catch fish. Sudo Pandit who died of malaria in Trivandrum was a potter whereas Surendar Sarma belongs to the *malekar* community which makes garlands and other items of decoration for *pooja* and marriage. But Suendar never engaged in the traditional occupation, as he had learned carpentry at a young age. He has to go out and do

construction work since in his village, he is usually unemployed. "Do roz kam milta hain toh char roz baidhtha hain" (If I get work for two days, then I sit (at home) for (the next) four days). He has one and a half acres of agricultural land and he cultivates maize, daal, and rice. Pappu and Bijendar, yadavs, owned some land but not enough to support them and their families throughout the year. Yadavs are traditionally cowherds and milkmen, but were the beneficiaries of zamindari abolition along with bhumihars and kurmis³¹. The musahara workers borrowed money for their travelling and other expenses from their Yadav landowners who are their employers. The recruitment process to the sites of global capital, paradoxically, is facilitated by the same relationship of bondage with the landowning castes in an agrarian setting.

The workers who came to the worksites in Trivandrum from Malda, West Bengal, are predominantly Muslims and are mostly skilled masons, drivers and helpers of masons. They belong to the Shershabadiya community who are descendants of the army of Sher Shah³² and the name is derived from Shershabad Pargana of Murshidabad district, from where they were forced to migrate to owing to the erosion of Ganges.³³ Carter describes them as 'good agriculturists who spend much time and labour on the reclamation of land which the ordinary cultivator would not attempt to clear'. *The District Gazetteer of Malda* (1918) reports that Shershabadi Muslims were immigrating facilitated by the construction of the railway in those regions. Though this signals to possibilities of skill formation as a result of their engagement in the army of Shershah who was also a road builder and later in the construction of railway by the British, more detailed research is required to confirm this.

³¹ Das, AN (1992) notes that land reforms in Bihar was limited to the abolition of *zamindari* and never touched those at the bottom of agrarian hierarchy-Dalits and Adivasis. *Zamindari* abolition substantially benefited the rich and middle peasants who replaced the relatively weak among the upper layers of the agrarian order. In caste terms, this meant the replacement of the landed power of most *kayasthas* and many *rajputs* by *bhumihars*, *yadavs* and *kurmis* etc. Following the consolidation of the new rich peasantry, conflicts manifested themselves between the powerful new elements in the countryside and the rural poor.

³² Sher Shah Suri (1472-1545) was the Shah of Delhi during 1540-1545 after defeating Mughal King Humayun and was known for his administrative abilities. He built the Grand Trunk Road, introduced a land revenue system and undertook extensive repairs of major roads.

 $^{^{33}}$ Carter, MO.1938. Final Report on the Survey & Settlement Operations in the District of Malda, p $45\,$

C. Re-ordering Lives in the Village

As had already been pointed out by authors researching migration, lives of women are reorganised to cope with the absence of the men. Gulati (1993) profiles wives of men who have migrated from Kerala to West Asia and observes that the lives of those who are left behind are radically transformed in many ways. She notes that women start performing tasks that traditionally men excluded them, which increases their mobility.

In Banma, the experience of women left behind are reflected in numerous songs which recount the 'loneliness at nights, though the days are bearable'. The ways in which days are made bearable constitute the theme of the present section. The workers I met never take their families during their sojourns though there are a few workers in the vicinity who have taken their women and children with them. In most agricultural households, women do not migrate, as there are tasks to be performed during the agriculture season. Kakhridevi, Mukhilal Sada's co-sister hires a motor pump and irrigates the land she has taken on rent when her husband is away.

The villages in the area lie submerged in flood water for three months (*Savan, Bhadro*, and *Asin*) beginning from August which is the time when men usually migrate though migration during other times is not uncommon. The water dries up in *Karthik*. After water recedes, they cultivate rice. After harvesting rice, maize, wheat and sunflower are cultivated followed by green gram. There is a second crop of rice, during which varieties which stand in flood water are sowed. When I went in March, it was the beginning of the harvest of wheat exclusively carried out by women. Sunflowers were in full bloom.

Mukhilal told me that they had stopped raising cows because it was difficult for women to get grass from far off places or take them for grazing. Only goats are raised in the *musahara* hamlet, as they are easier to manage. The reordering of lives for women takes shape in the context of gendered roles and norms of mobility as much as in the context of pressures to carry out chores of subsistence and agricultural routine, stretching further their role as subsidizers.

In Malda, women engage in rolling bidis alongside carrying out their role as agricultural workers during the harvesting season. Though this might not be consequent to migration, it is an important way of ensuring the subsistence of the

family. Through an arrangement that resembles the putting-out system, they manage Rs.35 or 40 for 1000 bidis. The contractor provides *tendu* leaves and tobacco; rolling is done in homes or in sheds rented in by workers themselves.

In most agricultural households, women do not migrate. This is particularly true of workers who own small amounts of land who use a part of their wages to finance agriculture. Surendar Malekar, who owns 1½ acres of land, ploughs back the income into agriculture. Adivasis, who practice low capital, low productivity shifting agriculture, do migrate with their families. An extract from my field-journal dated 19.03.06:

Ramvilas Ram thinks that women could not work in the construction work sites. They work in the fields of others in the village, mainly during harvest season for which they get anaaj (grains) in return. This is very useful during the time when their men go out. If they do not remain in the village, this income will be lost. Second, they will not be able to do hard work of loading and unloading stones and bricks. Only those who stay there permanently in the city as family, those women, do labour ka kaam. Haven't you seen Chatisgarhis (reference to Adivasi migrants from Chatisgarh) who make huts in the sites and live with their families? They will tie a swing for their children in the site or they will make the child lie on the floor. We have seen children dying in the site. Sometimes, a stone falls or an iron rod breaks loose. We know how these work sites are. That is why we do not take our families. Even if we are hungry or thirsty, we will not let our women do work outside. "We will go out. You sit and eat and drink at home".

The nuances of the passage above raises a host of questions but defies inferences on the nature of agency of the non-migrant women and their role in the process of migration. The absence of women in the men's journeys to work sites is viewed by men in terms of their 'inability' to work in hazardous conditions, the need for participating in agricultural work to ensure subsistence and with a gendered disdain and disapproval of women who move and work. The narrative oscillates between these explanations. One could argue that basic subsistence is ensured by labour of women in the village fields when men migrate for work. This would however require a more nuanced documentation of the agricultural routine during the absence of men and when they are around. It would also necessitate a closer look at the ways of perceiving and valuing cash as against grain or any other payment in kind in terms of subsistence. Another layer of the narrative contains understanding of worksites as a dangerous terrain which is anti-thetical to family life and

domesticity practiced in their households. This aspect becomes more complex due to the reference to Adivasi migrants who move with their families which perhaps hints at the relatively better position of the workers from Banma.

The passage also raises questions about the recruitment practices in terms of a tacit preference for male workers. It signals to an economy of space which rests on all male labour camps, subsistence activity in the villages and a temporality which circulates these spaces ensuring subsistence and reproduction of labour power. It might, however be noted that, these observations are intended as areas of possible research than as inferences.

The migration also made telephone a part of every day life of the workers and their families. A clear evidence to this is the public call offices mushrooming all over the region. An extract from my field journal dated 19.03.06:

At night, there were a lot of phone calls from the brothers and sons of Mukhilal who are in Delhi. They talked to me. When Dinesh, one of the sons called, he started scolding his wife, Renju, saying that she picked up the phone always. His brother (Rajkukar) apparently complained to him that Dinesh's wife was too eager to pick up calls. Then Mukhilal intervened and scolded and told him to behave properly to his wife.

Telephone etiquettes practised in the house mirror relations of power and proprieties followed among the members of family. Another instance represented how telephone is used to deal with erring contractors and to negotiate better wages for the family members working in the city.

Mukhilal and Bijendar (Sada) came by 9 O'clock and the moment they heard that Gorelal (the contractor) had called, they started shouting. Both of them were drunk. At first I thought it had to do something with me. My heartbeats steadied only when I came to know that the target of their wrath was Gorelal. Both of them wanted to speak to him. Bijendar, who is generally very gentle and soft-spoken, looked very angry. He said if Gorelal cheated Mukhilal's sons and brothers, he would not be pardoned. A short while later Gorelal called again and Mukhilal gave him a good scolding and asked him to pay wages immediately. Two-and-a-half months of wages were pending. Gorelal said the company was not paying. But Mukhilal was unrelenting and threatened him.

Telephone, plays an important role in the recruitment process and constitutes one of the limited resources with which the workers have to negotiate and manoeuvre the spaces of infrastructure building managed by global capital.

D. Cities and Journeys

In this section, I attempt a sketch of the journeys, the workers of Banma, Bihar have undertaken in their search for work and their experience of the city. The account is by Bindasree Sahni who brings to fore a map of cityspaces as 'labour markets' as well as the everyday life as worker in the city.

He was 17-18 years old when he went out first for work in Gowahati which was in the late 1980s. He used to load and unload coal in a *godam* near the railway station. It was on piecework basis. Three-four workers used to join together and take *dhekka* (contract) of a particular load of coal. If it was a good day, they can make up to Rs. 300, but there used to be days when they made only Rs. 100 or even less. He was there for only a month. In Delhi, he went without the aid of a contractor. He used to search for work on a daily basis. There used to be places where labourers used to assemble and where employers or their agents came to pick up labourers as many as they want. These were called 'labour chowks'. These are there everywhere in Delhi according to him. He did building construction work being a helper to a mesthri. He lived with two others from his village renting a room and cooking on their own, in Baroula in UP near Noida. He got Rs. 40 which was very less and was not making any 'profit' after paying for rent and food. He came back after 3 months. He came back alone. He was not scared. Somebody commented "Bihari mein dar to nahin hota (there is no fear in a Bihari"

Bindasree's son, 18 year old Mangal, went out for work in Delhi when he was just 12 with his *Chacha* (paternal uncle). Children are recruited for diverse tasks and under inhuman conditions of work. The older relatives who accompany the children see to it that they are not given heavy work for which they negotiate with the contractor and later with the supervisors at the work site.

Mangal worked in a wedding card factory. He worked from 8 o' clock in the morning to 5 in the evening delivering the wedding card to those who had placed orders. There was no break for lunch. He used to get Rs. 500 per month for working 30days. He never went to school. He used to play *kancha* (marbles). His friends went there first and told him about the work. His friends were getting get RS.1500 per month. They were trained in card printing and he was told that he would also become *karigaar* after getting some work experience. After coming back from Delhi, he went to Noida. He was the helper of a mesthri at a building site. He went with his younger brother. He used to cook for himself and his brother during the 'free time'. The wage rate agreed upon was Rs. 80. The contractor went away without paying their wages when the work got over. His name was Purushottam and was from Munghyr District in Bihar. They could not locate him. Nobody got their wages.

Ramvilas Ram, a worker who is trained to repair machines, including road building equipments, had roamed around all over Delhi. The city and its delights are treated with care and caution.

Under the Juma masjid I have seen the chor bazaar jahan pe doh number ka kaam hote hain. Suppose I see a walkman for Rs.2000 and bargained down to Rs.1000. Even if we buy it, we might be robbed of our money and the samaan. That is the kind of place. But if you are lucky you get nice stuff there. They sell Chori ka Saman (stolen goods) there.

Surendar Malekar, who is a district committee member of the Communist Party of India, went out first 10 years ago when he was 18.

He lived in Sant Nagar in Delhi near Buradi *gaav* in a room rented out by a lawyer. He did loading and unloading sand (*mathi*) and used to get 50 rupees per trip. He used to load the sand from the banks of Yamuna to Santh Nagar where the construction of a building was taking place. Three or four men would take up a truckload of sand and they used to make 10-15 trips. A worker would get something between Rs. 100 to Rs.200. He met Mukhilal in Delhi accidentally one day when he was buying pan at a shop. Mukhilal was also working in the same area. He was with another 10-12 men. The contractor was from Siwan. They had given Rs. 900 for their expenses on food to him. He disappeared with that without paying them anything. They lost the wages of 2 months. He said this person must have been doing the same thing by shifting his recruiting base to other areas.

Cheating contractors are penalised by spreading the word about their practices among workers. Surendar recounts how he was tricked into doing agricultural work when he was taken to Ludhiana where they were told by the contractor that the work was to lay telephone cables. But when they reached there they were asked to do harvesting work. Surendar had never done harvesting in his life. He was never into agricultural work, particularly harvesting. But he had no choice but do it; otherwise how would he find food in a place where he knew no one? His hands got swollen and it pained a lot. He used to wash his hands everyday with hot water to ease pain. All the 12 people from the village went because Surendar was going. Ham ko kya idea tha yeh dhan katvaenge? (How can we have the idea that these people will make us do harvesting?) Such instances underline the lack of informed choice in the recruitment process and the element of unfreedom involved in these forms of labour it perpetuates.

Ramkhilon Sada went to Delhi, when he was very young and spent six months there. He went when Indira Gandhi was assassinated. He had to come back from Khagariah railway station after hearing the news and he postponed the journey. He went after 10 days. The riots were still going on in the city. He was helping a mesthri in a building site. The wages were as low as Rs.11 a day. He used to sleep in a park near Subhash Nagar in Delhi. During those days very few people went out to work from these areas. Earlier he used to go to Haryana and Ludhiana for sowing and harvesting. Now he is 45-50. He went out for the first time when he was quite young. It was to Nepal for the construction of a bridge and he stayed there for 2 ½ months. He used to get 75 Nepali Rupees which are around Rs.35 according to him.

Ramkhilon added that when he used to go in 1980s the train fares were as low as 80-95 for Saharsa -Delhi, now it has become 250. They go in general compartment. Sometimes they used to enter first class but then the police picked them up; they had to shell out 10 or 15 rupees. They say " kai chada first class mein? (Why did you get in to first class(compartment)? Then give us something too, khane pine ke liye...(to eat and drink)" General compartment will be very crowded. Those who are travelling alone would be thrown out of the train by bigger groups of workers.

Workers from a nearby village Salkua in Saharsa District told me that the Railway Protection Force harassed them. They asked for identity card even if they had shown the ticket and would often tell the workers that they have boarded the wrong train. Workers are often picked up and thrown out of the train.

These accounts urge for an understanding of the experience of migration in the light of journeys undertaken and the spaces they inhabit in the cities and towns they move to and the conditions under which they embark on these journeys.

III. Summary

Sub-contracting of procurement of materials and labour recruitment is a spatial strategy employed by capital in its process of accumulation. The spatial strategy of capital makes use of geographical differentiation and uneven development, particularly in the case of labour sub-contracting, recruiting new ethnic groups to minimise conflicts between labour and capital.

These geographical inequalities have been exacerbated by interventions in riverine ecology by the state without reforming the agrarian structure of the regions, particularly in the case of District Saharsa in Bihar. Caste and kinship play a crucial

role in the recruitment process, though in a contingent manner. For example, in Malda, commissions or contractors are invariably Muslims. Dafadars who recruit workers from the villages are usually Muslims, though occasionally, men from other communities become dafadars as well. Meths, who negotiate on behalf of the workers, would belong to the same community as the workers do i.e. if the majority of the workers were Adivasis, then the meth also would be an Adivasi. In Banma, Bihar, the musahars, who are traditional agricultural labourers, of the village who had come to Trivandrum to work in the road construction undertaken by Punj-Lloyd go together for work often choosing their headman as meth. Interestingly, if one or two workers from other communities say yadavs or malekaars, accompany them, the meth continues to be the headman of musaharas who are below the yadavs and malekars in terms of caste hierarchy.

The absence of women in the men's journeys to work sites is viewed by men in terms of their 'inability' to work in hazardous conditions, the need for participating in agricultural work to ensure subsistence and with a gendered disdain and disapproval of women who move and work. It signals to an economy of space which rests on all male labour camps, subsistence activity in the villages and a temporality which circulates these spaces ensuring subsistence and reproduction of labour power.

Accounts of the workers bring to fore a map of the city as a 'labour market' and experiences of everyday life of the worker in the city. These accounts also call for an understanding of migration as a journey for these workers bringing out the element of unfreedom perpetuated by the recruitment process fraught with cheating and inadequate information.

4 SITES OF LIFE AND WORK

A song sung at weddings in the *musahari tola* in village Banma:

"Friends, had I known that he would consume poison and die like this... I would not have married him."

Mukhilal translated the song from Tiruhti (another name of Maithili language). Yet, I did not follow it. Then Mukhilal translated it for me in a different way.

"Suppose Bambholi knew that he is going to die in Trivandrum, would he have chosen to go to Kerala for work?

Translating the song for me meant a creative reconstruction of its meaning and the underlying idiom of counter factuality by fictionalising and defamiliarising the death of Bambholi for me so that I would understand! The translation should be viewed as raising an important question which connects conditions of work and living in the villages and in the work sites and dwelling places in the city. It was also a way of telling me, the field worker, what migration means.

In this chapter I deal with the conditions of work and living in the new spaces of global capital and how these conditions relate to recruitment and migration processes. Section I deals with the spatial organisation of construction in the city of Trivandrum and familiarises the reader with the sites of work. It explores the attempts to order the city and tries to understand the new spatial forms it produces and new social groups it brings in. Section II unravels the work regime in terms of the supervisory structure and conditions of life and work it produces.

I. Producing Order and Disorder

The state views the construction of public infrastructure in Trivandrum as indispensable in projecting Trivandrum as a prime investment destination and in improving the quality of urban life. Urban planning and management are marshalled to re-imagine and re-order Trivandrum as a 'global city' where the existing urban form is considered as an obstacle to be removed. This re-imagination is exemplified in Figure 4.1 that conjures up an image of grim order.

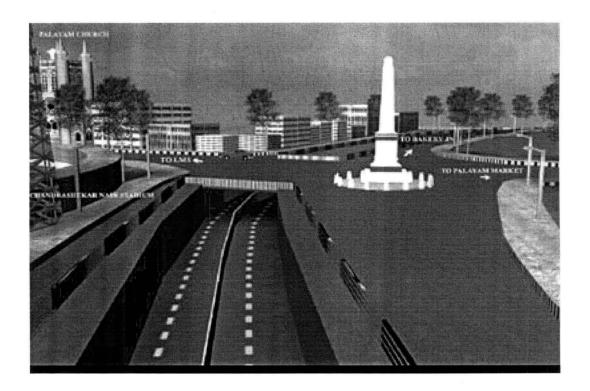


Figure: 4.1

Re-imagining Trivandrum

Source: http://pwd.kerala.gov.in/city.htm (accessed 16.06.06)

Figure 4.1 erases shops which line both sides of the street in this part of the city, hawkers, beggars, pavement dwellers, pedestrians and the Palayam Mosque and the greenery is skillfully used to heighten the effect. There is remarkable continuity in carrying out acts of erasure as the state government led by Left Democratic Front which came to power recently has proposed to ban fish vending and begging in public places as part of a drive to clean the city.

These attempts to re-order and re-imagine Trivandrum also contain an idea of disorder and its meanings as it identifies certain groups and urban spatial forms as disorderly and irrelevant. Brook, Mooney &Pile(2000) note that notions of urban order and disorder are best understood as an elusive rhetorical formulation that mobilizes a range of representations about the conditions of cities around the world, but which also reflect both the power and social relations which are prevalent in cities. Paradoxically, 'disorder' could also be the product of attempts to re-order the city in a specific way. Think of the stigmatised urban ghetto in Trivandrum 'Chenkalchullah', literally 'the brick-kiln', whose inhabitants are mostly the descendants of workers brought from Tamilnadu to build the Huzur Cutchery (the present Secretariate) which was completed in 1867. As I subsequently elaborate, the attempts to build infrastructure in contemporary times also produce 'disorder' by introducing new groups and unintended spatial forms to the city and represent a tension between order and disorder than the mute order the planners have imagined.

A. Construction as Coordination

Thiruvananthapuram Road Development Corporation Ltd. has undertaken the Thiruvananthapuram City Road Improvement Project that includes the following components.

- Widening and strengthening of 42 Kms. of roads
- Flyovers at Bakery junction and Melepazhavangadi and an underpass at Palayam junction
- Geometric improvement 34
- Improvement of 65 junctions
- 2 metre footpath on all the roads
- Road signs, markings and solar based traffic signals
- Provision of storm water drains, new streetlights and tree planting
- 94 Bus bays abutting the roadway
- Reorganisation of existing utilities (telephone, electrical lines etc)- No future road cutting

³⁴ Geometric improvement projects are designed to help cities widen pavements, add or widen shoulders, eliminate steep hills or sharp curves. It usually involves knocking off existing urban forms to realign roads and intersections.

The sites of roadwork represents the point were workers and materials, drawn from sites within and outside city, are deployed. The sized stones called aggregates for laying the road are drawn from the quarry in Mookkunnimala in the south-eastern part of the city. These are brought to the plants situated at the Base Camp near KIMS, Anayara on the north-western part of the city. The Base Camp, in addition to the plants, houses the cement godown of the company and the Central Store, Laboratory and the office of the resident construction manager and other officers. The plants produce concrete and the bituminous mix. Kerbs and slabs are produced at the casting yard in All Saints- Chakka Road near the Sankhumukham beach. These are transported to the work sites in tipper lorries and transit mixers. Transit mixers are carriers that have a drum to rotate the concrete mix to prevent it from getting set while in transit. These plants and carriers alter the labour process considerably and denote a significant shift in the way roadwork was carried out in Kerala.

The 'staff' and 'workers' of Punj-Lloyd, directly employed by the company, live in the quarters near the casting yard. The 'staff' includes managers, engineers and supervisors. 'Workers' denote a wide range of occupations including welders, security guards, machine operators and cooks and washermen of 'staff' ³⁵. There were 104 'staff' and 154 'workers' in July 2005.

The workers recruited through labour sub contractors live in two camps situated in Akkulam and Sankhumukham on the western part of the city. These workers do not figure in any of the documents on 'manpower' as employees of the company. Workers are dispersed from the residential quarters and labour camps to the plant and casting yard as well as to the construction sites. The quarry in Mookkunnimala has living spaces in its vicinity for the workers it employs.

Unionised *malayali* workers are employed to load and unload materials at the work site. A company document on preparations before the commencement of work mentions the negotiations with the head load workers union on loading and unloading materials³⁶. A chat with Ramanan, an office bearer of the head load workers' union (CITU) in General Hospital junction in Trivandrum where PLL carried out a lot of construction work revealed that the possibility of getting such

³⁵ Manpower statement as on 31.07.05 in TCRIP monthly progress report for July 2005 submitted to Kerala Road Fund Board accessed from PLL.

³⁶ Internal Presentation on Status of TCRIP site accessed from PLL.

employment was sparse as the tipper lorries used by the company are mechanised to load and unload on their own. He remembers having unloaded thirty-six pipes for Rs.25 per pipe which required the labour of four workers.³⁷

Figure 4.2 shows the movement of materials and workers to the roadwork site from the plants and places of living.

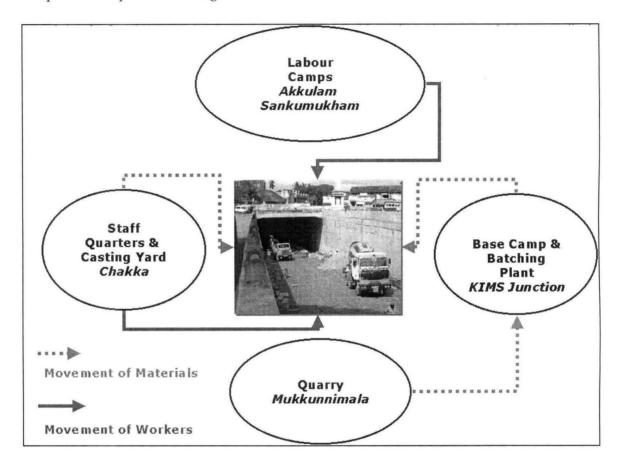


Figure 4.2

Movement of Materials and Workers to the Sites of Road Construction

A careful examination of Figure 4.2 tells us that road construction, if not an assemblage, is a coordination of various processes, activities and things. The figure should be seen as a depiction of the various movements that facilitate the construction; the 'temporal' and the 'spatial' these movements suggest should not be missed.

³⁷ Ramanan feels that CITU cannot take up the issue of loss of work due to mechanisation in the construction sector after the entry of global capital as this would only help to worsen their image as anti-development and as problem-creators.

B. The Tin Shed Lives On

The labour camps and residential quarters too represent a coming together of and synthesis of various activities and processes like cooking, cleaning, surveillance and transportation. The experience of living in one the 'labour camps' called *Bhoot bungalow* is recounted thus by Bindasree Sahni of village Banma, District Saharsa, Bihar.

In Kerala, we went to a quarter quite near to the sea. In that quarter, Bambholi died. And then Sudo too. We saw tablets there. The place we stayed is called Bhoot bungalow and there were already five people dead in that place. It is a haunted building. It is mrutuk walah quarter (quarter of the dead). Some body went to sweep the quarter and saw a cache of tablets. The people who died were the workers of the same company for which we worked. The people living nearby told us this. There used to be sounds at night. Dhanak dhanak marta tha, Inhen dhakka deta tha unhen dhakka deta tha. (It used to hit dhanak, dhanak. Pushing this one and that one). We were very scared.

Meanings galore in this dense description of their space of living as a space of dying. The bungalow appears as having a life of its own, scaring off workers, showing off its innards full of tablets and strange sounds and taking lives. Bambholi Sahni and Sudo Pandit died due to malaria which could have been triggered off by the inadequate food and long hours of arduous labour. The misfortune of falling ill and having to encounter the health system in an alien land is dreaded so much that the workers of Banma when they went to work in the Delhi metro took the village healer, called *guruji*, who does massaging besides ritual forms of healing, mainly to ease body pain felt after long hours of hard work. A quote from my field journal dated 20.03.2006:

Guruji is a handicapped person and has a tri-cycle. He does not work at the site. He lives off the fee he gets when he does healing. He gets food for free from the common kitchen of the workers from the village.

Bhoot Bungalow, skeletal and dilapidated, is said to have once belonged to the erstwhile Travancore Rajah. At the time of my visit in November 2005, there were around 100 people staying in the camp. This was immediately after two workers died of malaria. Fifty workers stay in the bungalow and the rest in the tin sheds in the back yard. This includes workers from West Bengal (District North Dinajpur), Jharkhand and Bihar. A worker told me that there were Malayali workers too who

used to do the same kind of work they do, that is, even earthwork at the site though they had left the camp at the time of my visit. Workers living there worked at the site as well as in the casting yard.

The workers who work at the construction sites masons, helpers and 'unskilled workers' live in the camp in Akkulam. My field journal of 26.09.05 reads:

The camp is situated on a hill overlooking the Akkulam lake. The land is owned by KK Verghese, who also owns the quarry from where Punj-Lloyd procures aggregates. A steep climb awaits you at the entrance of the camp. There is the buzz of the generator on your left hand side. Sometimes a water tanker awaits you on the climb which comes twice a day to fill water to the two syntex tanks and a cement tank from which the workers take water to drink, cook and bathe and wash. The toilets are lined on the left hand side and the open bathing places on the right hand side. There is an open drain cutting the camp into half. A little up starts the lines of tin sheds. Each shed houses at least 30-40 workers. The lowest rung houses the workers from Malda. Three sheds -one which you can see straight up as you enter and two on the left hand side. On the right were the workers of Daharu Saha from Sahibganj, Jharkhand. In that shed, as also others, there is brisk cooking happening. There is rice and potato curry. I was offered some. It had much too salt to my taste. The cooked rice was kept on top of wooden planks propped up and spread with plastic sacks cut open. The beds were plywood sheets put up on bricks.

The next rows of shed were all inhabited by Jharkhandi workers. There weren't even the wooden bed. They were all sleeping on the floor. The floor was not cemented. There were mosquito nets hung on. Cooking was going on. In a shed I saw movie posters, some of them were posters of Malayalam adults only movies (pushpa saram). There are three more lines. That is there are 5 lines of sheds. The uppermost is mostly the worst type and is sparsely inhabited where mostly new groups of workers from Jharkhand live.

The spatiality of the dwelling places of workers in the Akkulam labour camp reflect ethnicity and the hierarchy at the work site. The *munshis* and the head *munshi* live in a concrete house across the road leading to the camp. The *dafadars* live in a brick and mud house situated in the middle of the camp. While the Muslim workers from Malda who are directly employed by Sayed Ali inhabit the better sheds, Adivasi workers from Jharkhand and their *dafadars* live farther away and up the hill.

The workers' dwelling places in the quarry in Mookkunnimala too displayed a spatial organization on the lines of region and language which effectively separate workers from each other and make control of labour at work easier. Field journal, dated 30.08.05:

The labourers are from Tamilnadu, West Bengal and Assam. All workers, except 6-7 "skeleton employees", are from outside Kerala. The recruitment is through labour contractors. Verghese says that the workers are difficult to control and are 'mischievous'. So it is easier to operate through contractors. The workers from Assam who work in the drilling and blasting section live at the topmost part of the hill. Varghese says that they eat squirrels and monkeys and take bath only rarely. Malayali workers take bath thrice a day, you know. The Malayalis and Tamils live close to the office room, farther down the hill live Bengalis and other North Indian workers in tin sheds.

When the everyday life in the 'labour camp' recreates kinship ties and cultural correlates of caste and religion, it reinforces the nuanced hierarchy of *munshis, meths* and dafadars at the worksite which manages and controls labour. The burden of stigmatised identities follows the workers even at these sites of global capital. Excerpt from my field journal dated 02-08-2005:

I asked them about the food in the camp. They all liked the food. They get chicken, fish etc for lunch and dinner sometimes. Since it is a holiday today because the underpass in Palayam was being inaugurated, there'll be chicken and *kheer*. While we were talking about food, especially meat, Sanjay Sharma, a water tanker driver who is directly employed by PLL and lives in its residential quarters, said that "Yeh log chuha khate hain" (These people eat rats). Then the workers took it as an offence and strongly opposed the suggestion. Then somebody said that there were people who ate rats (they used to get them at the sites), but they have left. Sanjay Sharma is from Himachal Pradesh.

The ways of structuring the dwelling places reflect a particular rendering of the relationship between social relations and space. The identities of religion and caste mobilized in the recruitment process are structured over space in a particular way to reinforce and reiterate these identities, to be mobilized again at the work site.

The entry of newer social groups to the society is noted by the state as the following newspaper excerpt shows:

Thiruvananthapuram, March 4: Photograph-affixed identity cards will be made mandatory for the contract labourers from other states who come to the district seeking work. The district administration on Friday announced steps to keep an eye on the burgeoning migrant labour population in the district. This was decided at a meeting of the District Intelligence Committee called by District Collector N. Ayyappan.

Top district officials who attended the meeting voiced concern that at least a few labourers who sought work here were likely to have links with "terrorist" outfits. Thousands from Tamilnadu, West Bengal, Orissa, Bihar and even from Nepal seek work, especially in the construction sector, in the district. The Collector said that some of the labourers were involved in *criminal* cases, including thefts. (Emphasis added).³⁸

A close reading of the news clipping reveals the scrutinizing gaze of the state and bureaucracy on migrant workers and the tendency to ghettoize, criminalise and to put in place mechanisms of surveillance and policing. Though all this is hardly surprising, it brings to fore the shifting matrix of competing meanings of urban order and disorder and the constant tension between them. Attempts to order the city in a specific way brings in 'disorder' in terms of new social groups and urban spatial forms like labour camps and tin sheds. Brook, Mooney &Pile (2000) stress that urban (dis)orders cannot be understood in isolation from inequality, social divisions, and power relations and that urban landscapes are etched with highly uneven social and power relations and this is reflected in social-spatial differentiation and segregation in the urban context.

These 'disorderly' groups and places, at the same time, bring with them a vibrant culture of music and constantly size up, mock and unsettle me, the fieldworker, and her intentions and notions.

Then a worker from Jharkhand sang songs and another played a *bansuri* (flute) improvised out of a leaf. The song was about a woman who told her son that he was too young to get married.

Then they said *time ho gaya*, it is time for them to go to the site for the night shift. Somebody said what I can do is to leave the tape recorder here and they will have song sessions at night when all the workers come together and sing with the accompaniment of *thalis* and other instruments improvised out of buckets and vessels. I can take it in the morning. It is not good for a woman to come at night and listen. 10 o' clock the lights are switched off. 9 o'clock they come back and then take bath and then eat and sleep.

³⁸ *Indian Express*, Thiruvananthapuram Edition, dated 05. 03. 2006, news report titled 'Photoaffixed ID cards for migrant labourers'

During the course of my fieldwork, I became very confused about the supervisory hierarchy, the kinship network operating in the recruitment process and the functions of *dafadar* and *meth* and used to pester the workers to explain things to me. The following passage is from my field journal for 12.08.05:

While discussing this hierarchy, a man with shaved head came to the washing place and started cleaning his teeth. He said referring to the hierarchy, that we must include *Sayed Ali ka baap* too. Everybody said that he is high on Ganja. I asked him his name. He said *Pani* (water) is his name. Everybody laughed. He claimed that Isu is his son, but Isu said that *Pani* is his *chacha*. Paani's name is Mohammed Khayyum Sheikh. He is a mason. He was very adamant that Isu is his son and asked him 'Don't you remember having come out of my belly?' and showed his stomach.

II. Regimenting Work

I had mentioned earlier that the early history of road building is entwined with the history of empires and their military expeditions. Accessibility in the enemy territory was an important element in strategizing and planning of military expeditions and road building was undertaken to ensure easy accessibility. The vestiges of military vocabulary in the language of road construction testify to the closeness between the military and road building. The tin makeshift room at the site, where the higher officials of the company sit to manage construction, is called a bunker. It connotes the shifting and unsettled nature of road construction and the all-male nature of the workforce like in military.

A. Hierarchy of Supervision

Though a management apparatus exist in road construction sites, they are different from the classic factory shop floor inasmuch as the process of work involves a lot more contingent and non-uniform tasks depending on the terrain and nature of machinery-like in war. For example, while making a culvert to drain water away from a road, one might find out that the area is waterlogged and there are natural springs welling up which obstructs construction. Then even if the rest of the operations like concreting and tarring are highly mechanized, the draining of water from a pit formed while building the culvert might need the labour of two workers. In a culvert-building site in Trivandrum, two workers were draining water from a pit using a bucket improvised out of a paint can. The workers were removing the water by swinging the bucket back and forth. There are unforeseeable contingencies like a

water pipe bursting under ground or the sorting of stones as reusable after demolishing the boundary wall of an existing sewage drain and loading and unloading them at a different point in the site which requires patience and arduous manual labour. The increased mechanization of construction activity and the resultant reduction of labour is by no means compensated by this contingent use of manual labour.

The following is an excerpt from an interview with an engineer on 30.07.05.

According to Binulal, paver-finisher³⁹ cuts down 'manpower' in a major way. The only 'manpower' required is that of the machine operators and perhaps one or two workers. To lay a stretch of 10 meters, the new technology cuts down 'manpower' by 15 workers and saves time by 3 hours. The paver finisher can programme the thickness and slope of the road. The roller can apply a pressure of 15 kilo Newton since it has hydraulic vibrators inside the wheel. All the machines here use hydraulic technology.

I shall now focus on the control of labour process. This requires detailing the supervisory structure and the division of labour between the corporation and labour sub-contractors in controlling labour, which is acted out both at the work site and the 'labour camp'.

The workers, especially the 'unskilled' workers, come for 52 days involving a work regimen of two shifts of 12 hours. Workers at times end up doing both the shifts for which no overtime wages are paid.

The supervisory hierarchy at the site can be understood from the following list of occupations and designations at the site.

- 1. Resident Construction Manager
- Managers
- 3. Deputy Managers
- 4. Site engineers
- 5. Supervisors
- 6. Foremen
- 7. Time keepers
- 8. Head munshi
- 9. Munshis
- 10. Masons
- 11. Dafadars
- 12. *Meths*
- 13. Workers known as 'labour'

³⁹ A machine to lay and pave the road with bituminous mix.

The seven occupations listed first are held by workers directly employed by the company and are engaged in supervising the site. Supervisors and foremen manage the site and supervise the work assigned by site-engineers and managers. The time-keeper keeps track of the machines -- when did they start working, how long etc.-and workers-how many workers were engaged in a particular task in a site and for how long etc. In the absence of the supervisors and foremen, he assigns work. The *munshis*⁴⁰, *dafadars*⁴¹ and *meths*⁴² are engaged by the labour sub-contractor to control and supervise the workers known as *labour*.

BN Bhola, supervisor, has been working with Punj-Lloyd for the last three years. He supervises the labour. Every evening the engineers lets him know the task for next day and they estimate the number of labourers required. He arranges for that much number of 'labour'. Then in the morning, he along with the *munshi* assigns the task to the worker. If the task involves digging a drain along a road, then he has to ensure that it is dug along the required level and slope. If labour does some *badmash* (mischief) that is, going away without telling in the guise of drinking water, taking rest etc., then the *munshi* takes care. Thus *munshi* does the difficult part of labour control, according to Bhola.

Dafadars who play an important role in the recruitment process by mobilizing the workers from the villages does supervisory work at the site. Then what is the difference between a dafadar and a munshi at the work site? Siddique, a dafadar from Sahibganj district in Jharkhand who brought 25 Adivasi workers explained that

Dafadar is the malik of the workers he brought. Itna hi farak hai ki Sayed Ali ka munshi hai, voh site dekhne keliye or ham log jo daffadar hai labour dekhne keliye (This the difference, Sayed Ali's munshis are to look after the site and we, the dafadars are to look after labour). They see whether the labour they have brought turns up for work, their food, transporting them and taking them back to the villages. They do not work at the site. Munshi is higher than dafadar, there are 16 dafadars. The munshis will not undersatand the language of adivasi workers. But dafadars will. They make the workers work. But munshis just need to tell the work and assign it and keep the workers haziri which is given in writing by the saab log of the company. The dafadar takes care of the expenses of the workers. He also keeps a register in which he writes who went for work and who didn't and how much money spent on medicines etc. Then he showed me the notebook he keeps. He also writes the amount spent on provisions and keeps the bills given by shopkeepers. He gives these receipts to Siddique who works for Sayed Ali. Sayed Ali gives Siddique the money. He gets money for his expenses here through Lalu, Sayed Ali's head munshi. Lalu lifts (udhaten hain) the money from company on behalf of Sayed Ali.

⁴⁰In Hindi, *Munshi* means a clerk or a teacher.

⁴¹ Dafadar is a low-ranking officer in the army according to a dictionary. Dafa means a section in a code of law

⁴² Meth in Hindi means a foreman.

This account becomes intelligible if one knows that all *Munshis* belong to Malda district and play no part in the recruitment while all *dafadars* in the camp belong to Sahibganj district in Jharkhand and recruit mainly Adivasi workers. *Meths*, on the other hand, are a leader of the workers from his village *belonging usually to the same caste* and work alongside workers at the site and negotiate with the contarctor and *dafadars* on behalf of the workers. The workers from Jharkhand, since there is an additional intermediary involved, get Rs. 3500 or less whereas workers from Malda employed directly by Sayed Ali get Rs. 4000 for the same amount and kind of work for 52 days. The workers from Malda are mostly masons. If not, they are engaged in heavy works like loading and unloading heavy stones and metal. The Adivasi workers from Sahibganj get to do only 'light' work like earthwork. Even if the Malda workers do earthwork, they get more wages. The assignment of work and division of labour depends on caste and regional identities as much as the wages which reflect the segmented nature of the 'labour market' in question.

The hierarchy is visually communicated at the site by assigning different colours to the helmets of different workers. Workers ('labour' and masons) wear yellow helmets and the managers, engineers and supervisors sport white helmets made of plastic. According to VP Saxena, senior manager, health, safety and environment, helmets serve two purposes a) Safety at the work site by preventing head injuries b) helps to identify workers. Interestingly, *munshis* do not wear a headgear of any colour.

B. Conditions of Work and Living

An excerpt from my field journal dated 30.07.05 illustrates how a typical work-day starts

Forty-eight to fifty people came in a truck at 7 am. They marched in a line to the site and sat on the dividers and sides of the newly built underpass. The security guards and the *munshis* were writing down the number of workers who came.

Then they were taken to assign different tasks. Around 28 people were taken to the bakery junction where a fly over is being built. Seven-eight were taken to KIMS.

Only cleaning and some minor work are left at Palayam where the underpass is being built. The approach roads are going to be built after the inauguration of underpass on 1st.

Manzur Alam, whom I had met in the camp, told us that sometimes 100 people are stuffed in a truck. He was going back after the night shift. He said they usually have breakfast and come. Lunch is brought in the trucks. Workers themselves bring dinner. We saw many workers chewing pan. Manzur Alam, along with some 30 workers, left by 7.15 a.m. in the same truck.......... At 1 o' clock, there was a break for lunch. The workers were seen having their lunch on the space between the stadium and the underpass and also on top of the way leading to the pavilions of the stadium. There was rice, daal and potato curry. The food was carried in polythene bags and the workers were having food straight from them.

In an internal presentation on safety at the worksite, the company prescribes the following gears to ensure a safe working place.

- Helmet for Head protection
- Goggle for eye protection
- Face Shield for Face Protection
- Mask / Breathing Apparatus
- Ear Plug / Muff
- Hand Glove & Hand Guard
- Apron
- Leg guard
- Safety shoes/ Gum Boot
- Safety Belt / Lifeline belt

Hardly any of these were in sight/site. The workers were found using only the plastic helmet and the rest of the apparels and gears were absent even while engaged in the most hazardous work. The workers working atop rigs were using no safety belt and the welders were not using goggles. The workers engaged in loading and unloading heavy stones were not wearing boots.

The labour camp and the site work in a synchronized way as the *munshis, dafadrs and meths* discharge functions of surveillance, as orderers of life in the camp and as organisers of the economy of the camp. My field journal dated 29.09.05 reads:

Gangaram, a cook in the camp, sang a song for me. It was a song of romance. I have recorded it. "You know about mustard oil. This is about that." He said.

It is something on a rendezvous in a field full of mustard flowers. He was reluctant to tell the meaning. "This is about love marriage. The thing between girl and boy". Somebody said: "why don't you tell her the meaning openly". Then a man came who is a dafadar and said if he got some benefits out of me he would tell me his name and whereabouts. He was defiant. He drove everyone out. He said it is time to bring firewood. Then the workers said he did not even give money to have tea and they refused to go. There was a brief altercation on this. Gangaram has to cook for 55 people. 20 of them are at the site and the rest would go to work at night. So now the cooking has to begin. It was around 5 o' clock. They had got some tree which they will have to cut to make firewood. Otherwise the day-shift workers would have to cut it once they come back who would be tired by that time.

An important occupation which connects the site and the camp is that of the worker who serves lunch at the site in trucks at noon. Ismail, the worker who served lunch at the site, told me about the problems he faces during his work. Field journal of 12.08.05:

But then other workers asked Ismail to share his problem with me. He was going to go back. He served lunch at the construction sites. He put the packets (prepared at the camp) in a truck and distributed at the site.

At the last site, he got beaten up (maarpeed) because of insufficient quantity of food. At the first or second site, munshis inflated the number of workers working under them and asked for more food packets than required. This meant all his calculations went awry. At the last site (usually KIMS at 3 o' clock), there would be only less number of food packets than required and workers beat him up. The managers of the company did not intervene. This has happened two-three times before. So he was fed up. He thought those who ask for more food (munshis) were his enemies. It is all 'dushmani', he said.

But later on the problem was solved after *munshis* and masons talked to him. So he stayed on.

Food appears as a locus of conflict, many times, in terms of its distribution as in the case above or in terms of food habits and religious and caste identities as discussed elsewhere in the chapter. Though the kitchens in the Akkulam labour camp function like a factory in an organised way, the labour camp in the Bhoot bangalow lack such kitchens run by a separate set of workers. A visit to the labour camp after the deaths of two workers revealed that workers had to prepare food after coming back from work and this often resulted in them having no food or stale food. The workers feel that fatigue and lack of food were important in triggering off the attack of malaria.

The conditions of work and living in the sites and the labour camp, quite evidently, is extremely inhuman and grossly violates policies and rules in this regard. The 12-hour work-regimen tampers with the concept of 8-hour work-day. An important piece of legislation to protect migrant workers, Inter-state Migrant Workmen Act, 1979 stipulates that:

- Provision for payment of displacement allowance equivalent to 50% of monthly wages or Rs.75/- whichever is higher.
- Provision for payment of journey allowance including payment of wages during the period of journey
- Provision for suitable residential accommodation, medical facilities and protective clothing as prescribed.

The workers were never paid the displacement allowance and the journey allowance except the money given to the *meth* to cover expenses on food. If they fall ill, Rs. 80 is deducted from their wages. The wages if they work is only Rs. 50 or Rs.55 after deducting Rs.30 for expenses on food and lodging.

There were changes, though cosmetic, in the conditions of life and work, after two workers died of malaria in October 2005. Buses take the workers from the camp to the work site instead of trucks. My field journal dated 02.03.06:

At the entrance there were two water tanks with taps attached. It was written "drinking water" on them. The climb was now made easier with steps; many of the tin sheds were replaced by concrete structures which were still in the process of construction. But one could see the old shed also, still inhabited by the workers. There were clotheslines outside, which was not there before. There was a covered bathing place lined with taps but no separate bathrooms. The generator was also placed in a shed properly covered. There were signs at the bath line showing a gesture of wash like a road sign. Inside the rooms, the beds were made of iron railings and plywood slabs. The rooms looked little more orderly. The open drains had disappeared. In one of the rooms, there was a stand on which the photos of gods were kept. I could see *agarbati* and flowers. The media attention on the camps resulted in more attention and surveillance by the company on the every day life in the camp. One could see a security guard employed by the company and a guardroom. Entry was restricted and I was asked to furnish a proof of identity if I was to talk to the workers.

III. Summary

The attempts to re-order and re-imagine the city brings in 'disorderly' groups and spatial forms representing a constant tension between urban order and disorder and cannot be understood in isolation from inequality and relations of power. The sites of construction are points of culmination of various movements of 'men and materials' drawn from sites within and outside the city and construction should be seen as coordination of various processes, activities and things. This denotes a significant shift in the way road work was carried out in Kerala.

The fieldwork in the spaces of living and work brought to fore a spatial organization of the labour camps reflecting ethnicity and the hierarchy at the work site which signifies a particular relationship between space and social relations. The identities of religion and caste mobilized in the recruitment process are structured over space in a

particular way to reinforce and reiterate these identities, to be mobilized again at the work site through an elaborate supervisory structure, the specificities of which have been discussed in this chapter. The use of immigrant labour helps to minimise conflict between labour and capital by ensuring control of labour process through the supervisory structure. The conditions of life and work were extremely arduous. The work regimen of 12 hours a day was spread over 52 days. The temporality ensures that they do not gain any power to bargain and do not forge alliances with local workers who are highly unionised.

These forms of work and living are imported to Kerala by an institutional matrix drawn up by the World Bank which facilitated the entry of multi-national construction corporations. It is a significant shift in the rules of the game for labour too as it involves replacement of local labour with migrant labour for lower wages and arduous conditions of work and living and a masculinisation of roadwork since from 19th century onwards the roadwork undertaken by PWD involved women workers in considerable number.

AN EMERGENT ECONOMY OF SPACE?

The dissertation was an attempt in mapping the making of urban public infrastructure building in Kerala by focusing on the road construction sites of the multinational Punj-Lloyd Ltd. Trivandrum City. It explored an emergent economy of space that connects these sites of infrastructure building, villages in North and North–Eastern India and a fluid multi-national corporate space. These connections and exchanges were found to be crucial in situating migration of workers from north and northeastern India to these sites. It recognised, therefore, that understanding migration requires looking beyond the push-pull framework which emphasises the specific, local conditions existing at the place of origin and employment. Further, it emphasised, the need to go beyond the economic abstraction that is labour market and to explore the social institutions and networks that comprise it.

A close reading of the documents published by World Bank and the Public Works Department and documentation of their everyday practices revealed that the movements of capital and labour which mediated the construction process take place in the backdrop of a changed institutional matrix where the rules of the game are drawn up by international lending agencies and consultancy companies. This involved a process of 'creative destruction' of the state public works department by superseding the existing institutional framework rooted in developmentalism with new market-facilitating state institutions for coordination of construction activity thus mobilizing the building of urban infrastructure as an arena of accumulation for Whom the global capital displaced, after its entry into road global capital. construction in Kerala, were mostly individual entrepreneurs entrepreneurship was historically shaped in the context of the commercialisation of an agrarian economy under colonial conditions.

Production of road has to necessarily take place at the point of demand. The point of demand may not be a 'cheap labour area'. In such a case capital draws labour from places where it is cheap and deploys them at the point of production/demand.

Unlike the work place in the core countries that Braverman discusses, where scientific management is an important tool of extraction of surplus value, a range of tools are employed in a work site in the periphery. Sub-contracting of labour, drawing labour from remote areas where it is cheap and docile, is a spatial strategy employed by capital in its process of accumulation. The spatial strategy of capital makes use of geographical differentiation and uneven development, particularly in the case of labour sub-contracting, recruiting immigrant ethnic groups to minimise conflicts between labour and capital. These geographical inequalities have been exacerbated by interventions in riverine ecology by the state without reforming the agrarian structure of the regions, particularly in the case of District Saharsa in Bihar. Labour movements that facilitate the capitalist accumulation also are contingent on spatial strategies and geographical orderings as theorised by Doreen Massey and David Harvey. Migration to construction sites in cities and towns across India is not a new phenomenon. The construction sector in Kerala, from 1970s onwards has received migrant workers from Tamilnadu and thereafter from North and North Eastern India. More careful research, however, is required to map these changes in the source of labour for Kerala's construction industry. The present case, however, marks a qualitatively new phase where the movements are being orchestrated by global capital deploying uneven development and ethno-social differences as strategies of accumulation.

Caste and kinship play a crucial role in the recruitment process, though in a contingent manner. For example, in Malda, commissions or contractors are invariably Muslims. Dafadars who recruit workers from the villages are usually Muslims, though occasionally, men from other communities become dafadars as well. Meths, who negotiate on behalf of the workers, would belong to the same community as the workers do i.e. if the majority of the workers were Adivasis, then the meth also would be an Adivasi. In Banma, Bihar, the musahars, who are traditional agricultural labourers, of the village who had come to Trivandrum to work in the road construction undertaken by Punj-Lloyd go together for work often choosing their headman as meth. Interestingly, if one or two workers from other communities say yadavs or malekaars, accompany them, the meth continues to be the headman of musaharas who are below the yadavs and malekars in terms of caste hierarchy.

I have also briefly dealt with the change in the agency and a reordering of lives of non-migrant women whose labour in the fields of landlords in the village ensures subsistence. The absence of women in the men's journeys to work sites are explained by men in terms of their 'inability' to work in hazardous conditions, in terms of subsistence by participating in agricultural work and in terms of a gendered disdain

and disapproval of women who move and work. It signals to an economy of space which rests on all--male labour camps, subsistence activity in the villages and a temporality which circulates these spaces ensuring subsistence and reproduction of labour power.

My fieldwork in the spaces of living and work brought to fore a spatial organization of the labour camps reflecting ethnicity and the hierarchy at the work site which signifies a particular relationship between space and social relations. The identities of religion and caste mobilized in the recruitment process are structured over space in a particular way to reinforce and reiterate these identities, to be mobilized again at the work site through an elaborate supervisory structure, the specificities of which have been discussed in the chapter. Dipesh Chakrabarty (1989) also makes a similar point emphasising the cultural aspects of the formation of class-consciousness by engaging with the recruitment process and conditions work, though without dealing with the spatial question explicitly. The conditions of life and work were extremely arduous. The work regimen of 12 hours a day was spread over 52 days. The temporality ensures that the migrant workers do not gain any power to bargain and do not forge alliances with local workers who are highly unionised. The shared attribute of similar location in the global circuits of capital notwithstanding, this renders the case of the migrant road worker in Kerala different from those of the Puerto Rican sugar cane worker as described by Mintz and the Bolivian tin miner as observed by Nash. Migrancy and roadwork, through their unsettled and shifting nature, renders the spaces inhabited by these workers and their perceptions of these spaces different. The organic relationship and sense of dependency between the mines and miners which shapes consciousness might not be present in the case of road workers.

The experience of migration to sites of infrastructure building calls for an understanding of migrations as journeys. It means centralising spatial narratives-of journeys, labour camps, and city-spaces-in theorising migration as experience and situating recruitment of migrant workers as a spatial strategy of accumulation employed by capital. This dissertation has not directly engaged with the process of globalisation underpinning these journeys, which has transformed the spatial forms in cities and small towns and the nature of movement of workers in the past decade. Cities and urban forms have been the target of major institutional reworking and reorientation in the era of globalisation. The relationships between these spatial forms, social relations of production and migration in the context of globalisation could be as an area of further research.

The reordering of space is not confined to the cities. In the whole of Kerala, commodification of land and other natural resources is occurring at a fast pace. The rhetoric of globalisation identified sectors like tourism and information technology as engines of growth and many of the projects were real estate deals camouflaged as projects indispensable to the development of the state. Seashores, lakes and hills became contested spaces as they were increasingly commodified. The plots to reorder these spaces were not left uncontested and counter plots emerged as resistance from marginalised groups like Adivasis and fish workers mounted. The struggles of Adivasis to reclaim alienated land and the campaign against Express Highway by environmental organisations could be viewed as contesting and destabilising these attempts to reorder the economic geography of Kerala.

A possible related theme for research is the formation of migrant subjectivities in the context of globalisation. How does this emergent 'global' space constitute 'disposable subjectivities' though collective identities of ethnicity and caste inscribe them? The dissertation has not conceptualised the labour forms involved in these sites of construction in terms of the unfreedom and bondage involved in them and has not engaged with debates on neo-bondage. Future research could also examine the exchanges between 'Kerala model of development' and new labour forms in terms of exclusion of certain groups from its egalitarianism and perceptions of trade unions and 'civil society groups' about migrant workers and their labour. The fieldwork also brought to fore the urgent need to implement already existing laws regarding conditions of work and living and to formulate policies to free the recruitment process from fraudulent practices of sub-contractors and to ensure safe places of work. This requires recognizing migrant workers and their rights instead of the current practice of ghettoising and policing them. Policy makers have to start rethinking their own notions of citizenship and whether these workers come within those notions. The highly influential trade unions in Kerala have not made any attempt to unionise these workers or to critically examine implications of migration for local labour. It also throws up interesting questions on the formation of classconsciousness in Kerala which perhaps recognises only a malayali as a thozhilali (worker).

BIBLIOGRAPHY

A. BOOKS

- Braverman, Harry.1974. Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century New York: Monthly Review Press
- Brook,C, Mooney, G & Pile, S. 2000. *Unruly Cities? Order/ Disorder* London: Routeledge
- Chakrabarty, Dipesh. 1989. Rethinking Working Class History: Bengal 1890-1940. Delhi: Oxford University Press
- Das, Arvind N.1992. The State of Bihar: An Economic History without Footnotes. VU University Press: Amsterdam
- Gregory, JW. 1931. Story of the Road: From the beginning down to AD 1931. London: Alexander Maclehouse & Co.
- Jeffrey, Robin. 1976. The Decline of Nayar Dominance: Society & Politics in Travancore, 1847-1908. New Delhi: Vikas Publishing House Ltd.
- Marcus, GE& Fischer, Michael MJ.1986. Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences. Chicago and London: The University of Chicago Press.
- Massey, Doreen.1995. Spatial Divisions of Labour: Social Structures and the geography of Production. London: Macmillan.
- Mintz, Sidney W. 1960. Worker in the cane: A Puerto Rican Life History. New York. London: WW Norton & Company.
- Mintz, Sidney W.1985. Sweetness and Power: The Place of Sugar in Modern History. New York: Viking.
- Nash, June. 1993. We Eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines. New York: Columbia University Press.
- Risley, HH. 1981(1891). *Tribes and Castes of Bengal: Ethnographic Glossary* Volume II. JMukherjee. Firma Mukhopadhyay: Calcutta.
- Wallerstein, Immanuel. 2004. World Systems Analysis: An Introduction. Durham and London: Duke University Press

B. JOURNAL ARTICLES

- Appu, PS. 1973. 'Unequal Benefits from Kosi Development: Cost of Bypassed Institutional Reform'. *Economic and Political Weekly*: Vol VIII No 24. June 16
- Brenner, Niel & Theodore, Nik. 2002. 'Cities and the Geographies of Actually Existing Neoliberalism'. *Antipode* 34, 3: 356-386.
- Ghosh, Asha.2005. 'Public-Private or a Private Public? Promised partnership of the Bangalore Agenda Task Force'. *Economic and Political Weekly* Nov 19.
- Harvey, David.1998. 'The Geography of Class Power' *Socialist Register 1998* Edited by Panitch and Leys . Calcutta: KP Bagchi & Company.

- Marcus, George E.1995. 'Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography'. *Annual Review of Anthropology*. 24: 95-117.
- Soja, Edward W. 1980. 'The Socio-Spatial Dialectic'. Annals of the Association of American Geographers. Vol.70, No.2, 207-225
- Walker, Gilbert. 1956. 'Highway Finance'. The Journal of Industrial Economics.4, 3: 161-178.
- Walton, John.1993. 'Urban Sociology: The Contribution and Limits of Political Economy', *Annual Review of Sociology*, 19: 301-320.

C. WORKING PAPERS

Raviraman, K. 2004. The Asian development Bank Loan for Kerala(India): The Adverse Implications and Search for Alternatives. Working Paper No. 357. Centre for Development Studies, Thiruvananthapuram.

D. THESES AND DISSERTATIONS

- Anand, S. 1986. Migrant Construction Workers: A Case Study of Tamil Workers in Kerala. Unpublished M.Phil Dissertation, Centre for Development Studies.
- Harilal, KN. 1986. Kerala's Building Industry in Transition: A study of the Organisation of Production and Labour Process. Unpublished M.Phil Dissertation, Centre for Development Studies.
- Rammohan, KT.1996. *Material Processes and Developmentalism: Interpreting Economic Change in Colonial Tiruvitamkur*, 1800 to 1945, Unpublished Ph.D. Thesis, Centre for Development Studies.
- Singh, Bright D. 1944. *Financial Developments in Travancore* (1800-1940 AD). Unpublished Ph.D. Thesis submitted to the Travancore University.
- Varghese, Preethi Saro (2004) Migration: A Bibliographic Study on Kerala, Unpublished MPhil Dissertation: School of Social Sciences ,Mahatma Gandhi University, Kerala.

D. GOVERNMENT SOURCES

- Carter, MO.1938. Final Report on the Survey & Settlement Operations in the District of Malda 1928-1935. Suptt. Government Printing: Alipore. Bengal.
- Government of Kerala. 2005. Budget in Brief. www.kerala.gov.in/budget2005-6/budgetbrief.htm (accessed on 09.12. 2005)
- Government of Kerala. 2005. *Economic Review*. State Planning Board: Thiruvananthapuram
- Government of Kerala. 2005. Report (Civil) of the Comptroller and Auditor general of India (CAG) for the year ended 31March 2005.
- Lambourn, GE. 1918. District Gazetteer Malda. The Bengal Secretariat Book Depot: Calcutta.
- Public Works Department, Kerala. *Ring Roads in Thiruvanathapuram Capital Region* http://pwd.kerala.gov.in/city.htm (accessed 15.07.2005).

E. CORPORATE SOURCES

- Infrastructure Leasing and Finance Ltd.(IL&FS). Shareholding pattern of IL&FS. http://www.ilfsindia.com/financials.asp?section_id=3&child_id=11 (accessed 21.06.06).
- Punj-Lloyd Ltd. 2004. Presentation on Status of TCRIP Site.
- Punj-Lloyd Ltd. 2005. Thiruvananthapuram City Road Improvement Project (TCRIP) Monthly Progress Report for July 2005 submitted to Kerala Road Fund Board.
- Punj-Lloyd Ltd. *Operational structure of Punj-Lloyd*. http://www.punjlloyd.com/main.asp?p=profile.htm (accessed 21.06.2006).
- Punj-Lloyd Ltd. Shareholding Pattern of Punj Lloyd Ltd. as on 30.03.2006.

F. OTHER SOURCES

- Bob Jensen 'What's Right and What's Wrong With SPEs, SPVs, and VIEs' http://www.trinity.edu/rjensen/ at Trinity University
- Bushnell, Horace. 1846. The Day of Roads, a pamphlet published in 1846 in Connecticut, USA, as cited in http://www.rootsweb.com/~ohhamilt/histhc/221.html (accessed 22.06.06).
- Kerala Government Contractors Association. 2004. *Kerala Kararukar Avasyappedunnu*. Kerala Government Contractors Association: Trivandrum.
- Queiroz, Cesar & Bousquet, Franck. 1995. Introduction of Competitive Bidding for Road Works in the Former Soviet Union. Infrastructure Notes. World Bank. http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1119275973157/td-rd19.pdf (accessed on 24.10. 2005).
- Tiwary, B N. 2003. 'Migration, Change and Folk Culture' *The Inernational Institute of Asian Studies News Letter* 30 http://www.iias.nl/iiasn/newslet.html (accessed 23.05.06).
- UNCTAD, 2003 'A Primer on New Techniques Used by the Sophisticated Financial Fraudster with special reference to commodity market instruments'.http://129.3.20.41/eps/if/papers/0303/0303001.pdf (accessed 07.12.06).
- World Bank, Example of Legislation to Establish an Independent Roads Contractor Company, http://www.worldbank.org/transport/roads/con&main.htm
- World Bank. 2002. Project Appraisal Document of Kerala State Transport Project. Energy and Infrastructure Sector Unit. India. Country Management Unit. South Asia Region.

INTERVIEWS

26.07.05	VP Saxena, Senior Manager, Health, Safety Environment, Punj-Lloyd Ltd., Worksite at Palayam, Trivandrum.
30.07.05	Binulal, Site Engineer, Punj-Lloyd Ltd., Worksite at Palayam, Trivandrum.
30.07.05	BN Bhola, Supervisor, Punj-Lloyd Ltd. Worksite at Palayam, Trivandrum.
02.07.05	Ainul Sheikh, worker, labour camp, Akkulam, Trivandrum.
07.08.05	Sadanandan & Krishnamma, road workers, State Convention of Construction&Road workers Union(AITUC) at TV Smarakam, Trivandrum.
12.08.05	Mohammad Ismail, worker, labour camp, Akkulam, Trivandrum.
14.08.05	Mohammad Samjuddin, worker, labour camp, Akkulam, Trivandrum.
21.08.05	Khuda Bukaz, worker, worksite at All saints', Trivandrum.
25.08.05	Aditya Soni, Senior Engineer, Punj-Lloyd Ltd., Base Camp, KIMS Junction, Trivandrum.
27.08.05	Manibhushan, Supervisor, Punj-Lloyd Ltd., Batching Plant, Base camp, KIMS Junction, Trivandrm.
27.08.05	Nambisan, Senior Engineer, Plant and Equipment, Punj-Lloyd Ltd., Batching Plant, Base camp, KIMS Junction, Trivandrm.
30.08.05	KK Verghese, KK Rocks& Granites, Mookkunnnimala, Malayam, Trivandrum.
05.09.05	Ganapat. Time keeper, Punj-Lloyd Ltd., worksite at General Hospital, Trivandrum.
06.09.05	Ramanan, Head Load Workers' Union (CITU), General Hospital Junction, Trivandrum.
12.09.05	Varghese Kannampalli, Kerala Government Contractors Association at Nandavanam Road, Trivandrum.
26.09.05	Daharu Saha, Meth, labour camp, Akkulam, Trivandrum.
28.09.05	Ismail Sheikh, Dafadar, labour camp, Akkulam, Trivandrum.
03-04.10.05	Dr. MC George, Parameswara Kurup, Sunny John, Contractors, Construction Summit organised by Kerala Government Contractors Association at Hotel Windsor Palace, Kottayam.
03-04.11.05	Brij Mohan & Kapil dev , workers, Bhoot Bang low- labour camp at Sanghumukham, Trivandrum.
05.11.05	Mukhilal, Surendar Malekar, Pappu Yadav, workers, Medical College Hospital, Trivandrum.
20.12.05	Ansar, Asst. Engineer, Kerala Road fund Board, Public Works Department, Public Office, Trivandrum.

05.01.06	Officials in PWD, SMEC International, Institutional Development Workshop, Public works Department at PWD Rest House, Thycaud, Trivandrum.
18-23.03.06	Mukhilal Sada, Surendar Malekar, Kakhridevi, Ramvilas Ram, Jalo Sada, Bindasree Sahni, Mangal Sahni, Bindasree Sada, Jaykishoe Mahasy in village Banma, District Saharsa Bihar.
28.03.06	Prof. Ratan Das Gupta, Malda Town, West Bengal.
29.03.06	Ismail Sheikh, worker, Kaliachak, Malda District, West Bengal.
29.03.06	Sayed Ali, Labour Contracor, Kaliachak, Malda District, West Bengal.

