

Labour and Ethnicity in ‘South Chotanagpur’: Emergence of Iron Ore Mining Industry, 1910-60

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MASTER OF PHILOSOPHY

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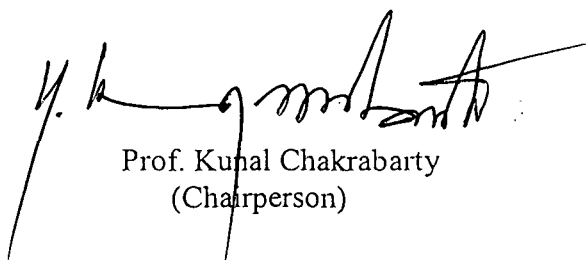


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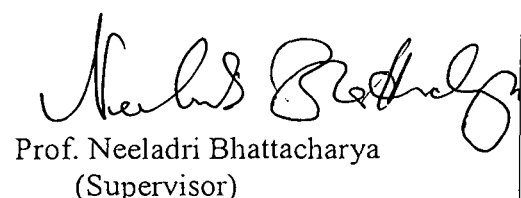
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List of Abbreviations

BISCO	Bengal Iron and Steel Company
BLEC	Bihar Labour Enquiry Committee
BNR	Bengal Nagpur Railway
BSA	Bihar State Archives
CNTA	Chota Nagpur Tenancy Act
GSI	Geological Survey of India
IISCO	Indian Iron and Steel Company
TISCO	Tata Iron and Steel Company

Chapter 1 Introduction

In this dissertation I have tried to discuss labour relations, working conditions and social composition of the labour force in the iron mines of 'South Chotanagpur'. I have looked at the connection between labour and ethnicity in this predominantly tribal region of south Chotanagpur and have tried to problematize the concept of 'working-class' and 'class-consciousness' in this context. As Ira Katznelson and Aristide Zolberg point out "Class" as a term is too frequently used in a 'congested way, encompassing meanings and questions that need to be separated from each other'. They suggest that in capitalist societies class is a concept with four connected layers: structure, ways of life, disposition and collective action¹. Recently labour historians are trying to use a more open ended conceptual category of 'laboring poor', which challenges orthodox definitions of the working class.²

With the establishment of Tata Steel Plant, Jamshedpur developed as an important industrial centre of India. But the Steel Plant was made possible only because of close proximity of Jharia Coal Mines and Singhbhum-Mayurbhanj Iron Mines. In comparison to the steel plant itself and the Jharia Coal Field, the iron mines under Tata Iron and Steel Company (TISCO) have not been paid much attention. In most of the case labour in Tata Steel Plant has been studied in isolation from the iron mines under TISCO.³ I have moved away from factory to look at mines as workplace to draw a comparison between two different worksites in terms of the nature of work

¹ Ira Katznelson and Aristide R. Zolberg, *Working Class Formation: Nineteenth Century Patterns in Western Europe and the United States* (Princeton: Princeton University Press, 1986) pp. vii.

² Sabyasachi Bhattacharya, 'Paradigms in the Historical Approach to Labour Studies on South Asia', in Jan Lucassen (ed.), *Global Labour History: A State of Art* (Berne: Peter Lang, 2006) pp. 147-59. See also his 'Introduction' in Rana P. Behal and Marcel Van der Linden (eds.) *India's Labouring Poor: Historical Studies c. 1600-2000*.

³ Vinay Bahl, *The Making of the Indian Working Class: A Case of the Tata Iron and Steel Company, 1880-1946* (Delhi: Sage, 1995). Dilip Simeon makes only passing references to labour situation in TISCO iron mines in his work *The Politics of Labour Under Late Colonialism: Workers, Unions and the State in Chota Nagpur, 1928-1939* (Delhi: Manohar, 1995). One reason may be that the militancy which one finds in Tata Steel Plant, during the labour movement of 1930s was lacking in the iron mines or that the Trade-Unions of the Steel Plant made no effective attempt to involve the workers of iron mines in their movement to improve labour conditions.

and labour under the control of the same company (TISCO in this case).⁴ Again since TISCO had iron mines both in a princely state-Mayurbhanj and British India-Singhbhum, I have tried to compare economic and labour policies in both the places. I have restricted myself to the detail discussion of labour in the mines of two companies- Mayurbhanj mines (Gorumahisani, Badampahar and Suleipat) and Noamundi in Singhbhum under the control of TISCO and Gua and Manoharpur mines in Singhbhum under Indian Iron and Steel Company (IISCO).

Coal Mining by virtue of its scale of expansion, number of labourers employed, large scale migration, nature of work itself (mostly underground mining prone to fatal accidents) has received significant scholarly attention.⁵ As Raphael Samuel points out, "Coal miners are the only class of mineral worker to have lodged themselves in the historian's consciousness".⁶ This is partly because of numbers, partly because of records, partly because of trade union strength. In his words, 'its [coal] importance has riveted the attention of posterity'. In case of Britain, Samuel attributes this 'neglect of posterity' of metalliferous miners to the sharp chronological break which took place in the 1860s and 1870s, when foreign competition destroyed the profitability of metals like copper, tin and lead.⁷ The progress of capitalism was intimately bound up with the exploitation of mineral wealth, not only of coal but also

⁴ An impressive comparative study of work, culture and politics of labour between miners of Kolar Gold Field and labourers of Bangalore mills in the princely state of Mysore has been done by Janaki Nair in her book *Miners and Millhands: Work, Culture and Politics in Princely Mysore* (Delhi: Sage, 1998). Her work also gives insight into labour situation in a princely state where most of labour laws of British India were not implemented. Another important work on Kolar Gold Field is Colin Simmons, "The Creation and Organization of a Proletarian Mining Labour Force in India: The Case of the Kolar Gold Fields, 1883-1955" in Mark Holmstrom (ed.) *Work for Wages in South Asia* (Delhi: Manohar, 1990)

⁵ Lot of works have been done on different aspects of coal mining industry. Colin Simmons, 'Recruiting and Organizing an Industrial Labour Force in Colonial India: The Case of Coal Mining Industry 1880-1939', *Indian Economic and Social History Review*, Vol.12 No.4 (1976), Vertical Integration and the Indian Steel Industry: The colliery establishment of TISCO 1907-50 *Modern Asian Studies* Vol.11 No.1(1976). Dilip Simeon, "Work and Resistance in the Jharia Coalfield" in Jonathan Parry, Jan Breman and Karin Kapadia (eds.) *The Worlds of Indian Industrial Labour*. Delhi: Sage(1999), Prabhu Mohapatra, "Coolies and Colliers: A Study of the agrarian Context of Labour Migration from Chotanagpur, 1880-1920", *Studies in History*, 1,2 (1985). Dietmar Rothermund and D.C Wadhwa (ed.) *Zamindars, Mines and Peasants: Studies in the history of an Indian Coalfield and its Rural Hinterland* (Delhi: Manohar, 1978). Gerard Heuze. *Workers of Another World: Miners, the Countryside and Coalfields in Dhanbad*, (Delhi: Oxford University Press, 1996)

⁶ Raphael Samuel (ed.) *Miners, Quarrymen and Saltworkers* (London: Routledge and Kegan Paul, 1977) pp.3

⁷ Ibid p-1-5

of tin and copper, iron ore and lead, sand, clay, salt and all the different varieties of stone.⁸ In Britain Samuel shows that mining and quarrying activities diversified during the early and middle years of the nineteenth century, and it took long time for these activities to acquire a settled character. The scale of enterprise was extraordinarily uneven. Quarries varied in size from an 'irregular chasm in a field' with an area of a few square yards where few persons were employed to giant faces of rock.⁹

Jharia Coal Field remained the epicenter of labour struggles and Trade-Unionism in Chotanagpur, even in postcolonial period. Workers' struggle in the coalfields of independent India got linked up with larger Jharkhand Movement, due to efforts of leaders like A.K Roy, Sibn Soren and Binod Bihari Mahto. Even in colonial period visionary trade union leader like Abdul Bari had tried to link up labour struggle in Jharia coal fields and Jamshedpur steel plant. But we have very few evidence of labour struggles in iron mines in 'South chotanagpur' region. It is clear that dynamism/volatility of labour movement in two important economic phenomenon in Chotanagpur-Steel Work and Coal mines, is in sharp contrast to comparative 'peace' in iron mines. 'Militancy' then is a relative phenomenon, varying in different regions and at different conjecture of time. There are hardly any study on large iron fields in the border of Bihar and Orissa. What should be the task of historian in such situation, if we have to theorize the concepts of "Working Class" and the nature of "Indian Industrialization". Should a historian engage in finding traces of 'collective action' with magnified lens in the archive, to provide evidence of Class in the process of making or shall one account for this 'relative peace'?

This dissertation begins with the discovery of iron ore deposits of 'South Chotanagpur' in the wake of setting of steel plant by TISCO which marked the beginning of capitalist mode of extracting and mining in the region. It ends with the end of second five-year plan when efforts of mechanization gathered momentum.

⁸ Ibid pp. 5 Sand is basic raw material for glass making, clay is the material of pottery and bricks, salt is an alkali for cement industry as well as primary item in household use

⁹ Ibid p-17

This introduction is divided into two sections. In the first I delineate the trajectory through which Labour History and Sociology have undergone and will try to locate my study within the existing frameworks of these disciplines. I have reviewed relevant literature on certain thematic issues. In the second section, I have discussed the historical background to administrative divisions of the region and have given an overview of the chapters. I have also mentioned the kind of sources used for this dissertation.

I

Identifying the Problem

In this section I have tried to clarify my approach and methodology. I am entering the history of this region in general and iron ore mining industry in particular from the perspective of Labour History, where I am placing the issue of labour within broader socio-cultural movements of the region. This effort is beset with difficulty because, till very late this industry was not important in colonial discourse on labour. One of the major labour reports of colonial period – *Report of Royal Commission on Labour* – did not find this industry significant enough in terms of labour, to record its various facets. By looking at iron ore mining, I have tried to draw out the difference that we can notice between the work culture of factories and mines. This difference arises due to differential operation of capital in the two workplaces. Whereas factory is basically the site of organized production, mines are the site of extraction of ores and minerals. These raw materials are converted into finished product in the factories. Even polishing, refining, washing, dressing, sintering of ore/minerals/raw material are not done in a single place. Thus there is a phase of transition between ‘extraction’ and the final ‘production’ of the product. It is not sufficient to say that everything is linked by ‘world capitalism’, the specificities of linkages have to be drawn out. The nature of work and the way in which capitalism operates defines the ‘work-place’. As Ira Katznelson writes, “economic development occurs not just in theory or in capitalism in general, but in real places at actual times. If capitalism is structured everywhere in

coherent ways, it is also structured in different particular manners”.¹⁰ Any attempt to theorize ‘Indian Industrialization’ on the basis of factory centered understanding of work-place is problematic, when large number of mines and quarries and the so called ‘informal sector’ of economy are beyond the purview of this consideration. Similarly, attempts to understand mining in terms of ‘dangerous work’, automatically tilts the focus towards underground mines, where there was a complex interplay of work, precarious lives, production related accidents, which demanded administrative control. Spatial demarcation between mines on the ‘surface’ and ‘below ground’, which was there in underground mines was absent in ‘open cast mines’. The definition of the term ‘mine’ was deeply contested during colonial period. It was the degree of depression underground, which became the parameter to define various categories of mining/extraction – ‘Underground mines’, ‘Open Cast Mines’/ ‘Surface Workings’, ‘Quarries’.

Historiography of Indian Labour

Dipesh Chakrabarty uses Marx’s notion of real labour i.e labour power as it exist in the personality of the labourers to study the particular history of both culture and material conditions of largely migrant labourers in jute mills of Calcutta. He discusses a set of paradoxes - the silence of factory records about discipline in the jute mills, the weakness of trade unions despite militancy of workers, large number of attacks on the person of the European mill managers rather than on the system, the recurrent switch between class-struggle and sectarian strife. Chakrabarty narrates all these as a peculiar manifestation of the failure of the European idea of the working class to realize itself in the jute mills of Calcutta. These paradoxes are unravelled as history of capitalism in a society marked by a relative absence of bourgeois notions of “equality” or “individualism”. In the history of Calcutta jute workers there was persistence of pre-bourgeois culture of hierarch and community consciousness. By doing so Chakrabarty argues for a rethinking of working class histories based on the irreducible notions of

¹⁰ Ira Katznelson, ‘Working-Class Formation: Constructing Cases and Comparisons’, in Katznelson and Zolberg ed. *Working Class Formation: Nineteenth Century Patterns...* pp. 15

culture of equality and the idea of citizen.¹¹ As such Chakrabarty's effort has been to show particularities or rather specificities of 'Indian Working Classes'.

The fact that migrant labourers remained embedded in their community relationships and organizations which hindered the growth of a class consciousness, can hardly be denied. But, that does not mean that the workers were not conscious of their social situation. As Chakrabarty has shown, they were perfectly aware of their poverty, conscious of the power relations in the factory and dissatisfied about their subordination in jobs. At various occasions there were attempts to turn the power structure in the factory upside down. Yet their anti-employer mentality or their sense of being a worker or poor people was often enmeshed with other narrower and conflicting identities. Hence the religious, caste, ethnic divisions kept the working class divided horizontally, and often the employer took advantage of this to weaken industrial action. Communal riots between the Hindu and Muslim workers occurred regularly in the industrial neighbourhoods. The workers' actions, it is argued were thus motivated more by "community" consciousness than class consciousness, which can be explained, according to Chakrabarty, in their manifestation of "pre-capitalist culture". In the jute worker's mind, Chakrabarty argues, "the incipient awareness of belonging to a class remained a prisoner of his precapitalist culture, the class identity of the worker could never be distilled out of the precapitalist identities that arose from the relationships he had been born into".¹² This was most evident in the limited growth of trade unionism, although there was no dearth of industrial actions. "So much militancy, yet so little organization", Chakrabarty argues, constituted a "paradox" of working class history.¹³ This was because the concept of trade union as a "bourgeois-democratic organization" was alien to the culture of Indian workers. Even their relationship with the middle class trade union leaders was entangled in a hierarchical structure of "*babu-coolie* relationship".¹⁴

¹¹ Dipesh Chakrabarty, *Rethinking Working Class History: Bengal 1890-1940*, (Delhi: Oxford University Press, 1989)

¹² *Ibid* pp.218

¹³ *Ibid* pp.123

¹⁴ *Ibid* pp.145

The Indian Working Classes were highly fragmentary, but their sectionalism has been perceived as a symptom of its pre-industrial economy, by Chakrabarty. As Raj Chandavarkar suggests, their differentiation did not simply derived from the village and the neighbourhood, cast and kinship, rather these were accentuated by the development of industry.¹⁵ Chakrabarty has rightly pointed out the futility of the expectation that the Indian workers ought to have a working class consciousness like that of their European counterpart. Historians of Indian labour have pointed out interesting nuances in working-class politics. In many cases what appeared as “communal riots” were not entirely communal in character. In many of the riots, the principal targets of attack were the police, and there were instances of cooperation across religious lines. And in Plague disturbances of 1900, which was cause by the enforcement of Plague Regulation, which compromised the religious codes of privacy, the main grievance was against intruding state. On the other hand Dilip Simeon in his study of labour movement in Jamshedpur, shows that the workers often used their informal community ties and religious institutions like mosques and gurudwaras to forge inter-community class solidarities to further their class interests and demands and at times of confrontation used religious idioms and slogan to boost flagging morale.¹⁶ Also there is no reason to assume uncritically that the working-class mentality was always governed by “pre-capitalist” culture. As Janaki Nair’s work on Kolar Gold Field suggests that there was growing influence of rationalism and atheism among workers.¹⁷ Recently, Chitra Joshi has reiterated the leveling effects of the urban workplace which led to the undermining of older loyalties and to bonding of new connections.¹⁸ Identities of class and community, Joshi argues, were continuously negotiated within changing historical situations. Categories of community with which workers identified were not pre-given and primordial, they were actively created and given new meanings. A worker had different identities and some of these were in conflict with each other. The assertion of any one identity at a

¹⁵ Raj Chandavarkar, *The Origins of Industrial Capitalism in India: Business Strategies and the Working Classes in Bombay, 1900-1940* (Cambridge: Cambridge University Press, 1994) pp.13

¹⁶ Simeon (1995) pp. 332

¹⁷ Janaki Nair, *Miners and Millhands: Work, Culture and Politics in Princely Mysore* (Delhi: Sage, 1998)

¹⁸ Chitra Joshi, *Lost Worlds: Indian Labour and its Forgotten Histories* (Delhi: Permanent Black, 2003)

particular moment meant “misrecognition” of other identities.¹⁹ Workers had multiple identities and conflicts within these were part of the process of identity formation. If there was persistence of “pre-capitalist” culture in workers’ lives in new industrial set-up, “moments of solidarity cutting across community lines also marked and shaped the lives and consciousness of workers”. Even in recognizing the multiplicity of identities in worker’s consciousness, historians are still caught up in the debate of principle identity of a worker as a class. It reminds of ‘Transition Debate’ of 1950s which hinged on the question of ‘prime mover’ in transition from feudalism to capitalism.

I point out few problems in the historiography of Indian Labour which needs to be considered in future research. First, historians have mostly focused on cities, urban based factories and mills.²⁰ Secondly, works on mines and miners have largely overemphasized on only one kind of mine that is Coal mines and more broadly ‘underground mines’. There has been no major works on ‘Metallic mines’ like Mica, Copper, Manganese and Iron mines. Except Stuart Corbridge’s one article on labour development in iron ore mines, I have not been able to trace any other work on this industry²¹. Thirdly, overemphasis on long distance migration- Indenture Migration and Migration to Assam Tea Plantation, largely ignores internal mobility and fluidity of a region. Often in looking at Chotanagpur and Orissa as catchment area or recruiting ground for ‘tribal’, in the development of the “market of aboriginality”, Chotanagpur and Santhal Pargana is looked as a homogeneous entity, overlooking multiple experiences in terms of ethnicity.

¹⁹ Ibid

²⁰ Obviously there are exceptions. I point out works of Janaki Nair and Dilip Simeon as example of exception.

²¹ Stuart Corbridge, “Industrial Development in Tribal India: The Case of Iron Ore Mining Industry in Singhbhum, c.1900-1960”, in Nirmal Sengupta (ed.) *Fourth World Dynamics: Jharkhand* (Delhi: Authors Guild Publications) pp.40-62. I was able to trace one article on Mica mining industry. See Keshabananda Das, “Growth and Decline of the Mica Industry in Nellore, 1911-1950”, *Indian Economic and Social History Review*, 28, 4 (1991) pp.393-416. Recently postcolonial development of Aluminium industry has been studied by Felix Padel and Samarendra Das, which they declare as anthropology of mining industry. See Felix Padel and Samarendra Das, *Out of this Earth: East India Adivasis and the Aluminium Cartel* (Delhi: Orient Blackswan, 2010)

There is a need to critically look at terms such as: mines/quarries, coal mining/metallic mining, underground/open cast mining. How does Mines Acts define 'mine' and 'quarry' in colonial and post-colonial India? We will see that the definition of 'mine' was a contentious issue in colonial period. Too much emphasis on Coal Mining in existing historiography of Indian Labour does not give any theoretical perspective to understand Open cast Mines and Quarries, which has largely remained unexplored.

Different labour regimes-factories/mills, plantations, mines and quarries developed during colonial India. But as Prabhu Mohapatra points out, "practically all of the written works on labour history have concentrated on the large industries and mines and plantations, very little is known of the vast majority who worked in smaller workshops, handicrafts, domestic industries or whole range of occupations in informal sector"²²

In labour history, there has rarely been an effort to draw inter-connection between different labour regimes. In the case of Chotanagpur, the Jamshedpur Steel plant has been mostly looked in isolation from its backward linkages – namely coal mines, iron ore mines and limestone quarries. Though Dilip Simeon and Colin Simmons have looked at linkages between steel factory and coal mines in economic and labour terms, the other two backward linkages – iron ore and lime stone – have largely remained unexplored. We need to look at different forms of production if we have to develop a complex perspective on the nature of capitalist development and industrialization in Chotanagpur. Dilip Simeon's effort to look at the labour movement in the militant inter-world-war period in Jamshedpur steel plant and Dhanbad coal mines, leaves a couple of questions unexplored: why was the repercussion of militant labour and trade union movement not felt in iron ore mines and limestone quarries in South Chotanagpur? Why labour leaders/trade union leaders made no efforts to organize these mines and quarries? Such silences will remain if we look at labour history only through a focus on militancy and strikes. Such an approach

²² Prabhu Mohapatra, "Regulated Informality: Legal Constructions of Labour Relations in colonial India 1814-1926" in Sabyasachi Bhattacharya and Jan Lucassen (eds.) *Workers in Informal Sector Studies in Labour History, 1800-2000* (Delhi: Macmillan, 2005) pp.70

has given misleading picture of TISCO as a unified, homogenous entity, making it synonymous to Steel factory. In this study I have stressed on economic linkages to have a better understanding of the system as a whole.

There are various dichotomies which are used in economic and labour studies, like Factory/Mines, Core/Periphery, Rural/Urban, Formal/Informal Sectors. There is need to study these binaries critically. I argue that whereas factories have been sites of production, mines are basically sites of extraction. Mines are to be abandoned by capitalists when the source/reserve exhausts. Mines are basically 'backyards' of factories. As Mumford writes:

The fact proved a sinister one as soon as the methods and ideals of mining became the chief pattern for industrial effort throughout the western world. Mine, blast, dump, crush, extract, exhaust- there was indeed something devilish and sinister about the whole business. Life flourishes finally in an environment of the living.²³

Raphael Samuel distinguishes factory labour and mining and quarrying and other classes of mineral workers in terms of labour intensity and industrial discipline and need of supervision. First and foremost he argues that mining and quarrying were distinguished from factory/mill labour by the fact that they were "sweat and muscle jobs", and little happened in the nineteenth century which could impair their "labour intensive character".²⁴ The nature of industrial discipline in mines and quarries was very different from that in factories and mills. Samuel attributes this to closed, compact, institutionalized structure of factory and dispersed or diffused character of mines and quarries. As he writes, "There were no...built premises to wall the workers in, but endless galleries, scattered excavations, or open-fronted sheds". Detailed supervision was difficult because of the open air (open-cast mines and quarries) or underground (as in case of coal and gold mines) nature of work. 'Miner's freedom', owed a good deal to secluded location. Further he argues that even the employer did not necessarily see a need for it as, "there was nothing which would go up in flames on a clayfield, nothing which the worker might 'take home' or trade rivals be tempted

²³ Lewis Mumford, *Technics and Civilization* (London: Routledge and Kegan Paul, 1967)

²⁴ Raphael Samuel, 'Mineral Workers' in Samuel (ed.) *Miners, Quarrymen and Saltworkers* (London: Routledge, 1977) pp. 34

to pinch , there were no valuable raw materials to husband , no need for elaborate stocktaking or police”. One of the chief tasks which the mining inspectors pursued in Britain after the Quarries Act of 1894 was to force the owners to put up fences.²⁵

The specificities in which mines were integrated or linked to overall capitalist economic production have to be explored. There are very few economic studies on linkages between mines and factories. Colin Simmons has studied the integration of TISCO coal mines with steel work in Jamshedpur, which he terms as “Vertical Integration”.²⁶ While it is impossible to deny that the world economy impinged upon social relations and economic development in India, it is important to ask how Indian society shaped and channeled the impact of the west. Chandavarkar has stressed on the need to situate the development of capital-labour relations in Indian industry within the context of world capitalism as well as the country’s economic history.²⁷

In the dual conceptualization of economy as rural and urban, contrast is made between countryside and town or city, and the identification of the rural with the agrarian. In this approach, urban agglomerations are seen as the location of all other economic activities, which are then divided into formal and informal sector of employment. The concept of ‘informal sector’ or ‘unorganised sector’ was used to draw attention to the disparate, irregular and fluid labour system functioning in the lower ranks of the economy. Jan Breman points towards problems in using this concept. First, the suggestion that the informal sector is part of urban economy, secondly, the lack of clarity concerning its size and dynamics, and finally, the assumption that self-employment is the principal mode of employment.²⁸ In much of the discussion on informal sector, the focus remained on the urban milieu. Breman argues against the restricted use of formal-informal distinction only for urban labour. According to him the concept loses its practical relevance when it is not simultaneously applied to the rural economy, including agricultural employment. His

²⁵ Ibid pp. 48

²⁶ Colin Simmons “Vertical Integration and the Indian Steel Industry: The Colliery establishment of TISCO 1907-50”, *Modern Asian Studies* Vol.11 No.1(1976)

²⁷ Rajnarayan Chandavarkar, *Imperial Power and Popular Politics: Class, Resistance and the State in India, c. 1850-1950* (Cambridge: Cambridge University Press, 1998) pp.327-350

²⁸ Jan Breman, *Footloose Labour: Working in India’s Informal Economy* (Cambridge: Cambridge University Press, 1996)

works of labour sociology has shown that if we take the totality of economic activities as point of departure, only a small the portion of the working population were in the formalized sector in the past, or even in the contemporary times, when there has been a move towards informalization in the context of globalization.

There has been attempts by historians to situate the concept of 'informality' in historical context²⁹. Dilip Simeon has pointed out the existence of multiple forms of 'informality'- casually employed labour, seasonality of labour, contractors' labour, employment of women and children in the case of Jharia Coal Fields and its crucial role in keeping labour cost as low as possible. Minimal state regulation, mediation of jobbers/sardars, lack of recognition in 'official-view', ethnic stereotyping to mark out some groups as destined for informal employment, and discrimination on the basis of ethnicity, gender and age were some features of 'informality' in the coal mines.³⁰ I carry forward his argument of 'informality' in the case of coal mines to iron mines as well, as many of the features were similar. This 'informality', in fact, increased in the case of iron mines as most of the mines were dispersed in the dense forests of South Chotanagpur and in the absence of Trade Unions and Organization till early 1950s, which was due to wide prevalence of contractor system in this industry. Recent works have shown that the figure of the free, male wage worker, who worked in a factory and was a member of a given trade-union, was in fact even historically a minority figure in industrialized west. As the binaries of free-unfree, wage work- non wage work, formal-informal are becoming more obscure, labour historians are looking for 'new nodes of comparison that take into account the multidisciplinary of relationships, locations and temporalities that undergird the labour forms within which the individual worker is embedded'.³¹

The labour movement in Tata Steel Plant, Simeon demonstrates was fraught with ambiguities that marked the development of class identity in a colonial setting.

²⁹ See Sabyasachi Bhattacharya and Jan Lucassan (eds.) *Workers in the Informal Sector: Studies in Labour History 1800-2000* (Delhi: Macmillan, 2005)

³⁰ Dilip Simeon, "Calibrated Indifference: Understanding the Structure of Informal Labour in India" in Sabyasachi Bhattacharya and Jan Lucassan (ed.) *Workers in the Informal Sector: Studies in Labour History 1800-2000* (Delhi: Macmillan, 2005) pp.97-120

³¹ Prabhu Mohapatra and Marcel Van der Linden (eds.) *Labour Matters: Towards Global Histories* (Delhi: Tulika, 2009) pp. xii

Multiple identities of ethnicity, democracy and national sentiments of workers also came into forefront during labour movement. Workers were not exclusively concerned about their class position. He convincingly demonstrates, running through the contradictory and turbulent history of trade union politics, that there was a deep structure of democratic aspiration amongst the workers. This was reflected in their struggle to choose their own representative, in their resistance to racial domination and in their efforts to change the conditions of work. The democratic tendency of the labour movement infused the contemporary national movement with a special character and widened the arena of politics where the subordinate classes could play an increasingly larger role.³²

Anthropological Perspectives on Labour

The assumption that social groups have common interests which derive from their broadly similar relationships to the means of production led to the quest for its manifestation in the development of class consciousness, the processes by which classes recognized and realized the interests which they shared in common and in opposition to others. Anthropologists and sociologists, with their privileged access to participant observation of everyday and routine life of workers, have been concerned to explain the gulf between political expectation based on class and their real shortcomings in practice. They have accounted for not only the failure of revolutionary movements but also absence of militancy and condition of peace. Anthropologists have moved away from dramatic moments when the 'world was turned upside down' to draw attention towards 'everyday forms of resistances'.³³ With their fascination with specificity and particularity, anthropologists have done micro-studies to question many universal 'truths' and apriori assumptions. But as Chandavarkar points out focus on resistance still retains the distinction between 'exploiters' and 'resisters'. He suggests that it is misleading to think that 'resistance'

³² Dilip Simeon, *The Politics of the Labour Movement: An Essay on Differential Aspiration*, Working Paper, Writing Labour History Series, (Noida: V.V Giri National Labour Institute)

³³ James Scott, *Weapons of Weak: Everyday forms of Peasant Resistance* (Yale, 1985)

flows naturally from the social condition of the subaltern classes. He argues that the lines of exploitation moved in complex ways in society and that exploiters and resisters were not simply characterized by consistently oppositional relationships. In his study of Bombay mill workers he shows that the subordinate groups were drawn into competitive relationships with each other and at the same time rivalries and factions within dominant classes limited their ability to exploit and weakened possibility of hegemonic control over workers. Between subordinate and dominant groups there were complex layers of intermediaries who in different situations, identified in either category and who, in each case, facilitated the process of both exploitation and resistance.³⁴ He further suggests that commonality, mutuality and collective action were produced by specific historical context. Interests of social groups were shaped by specific historical circumstances which were themselves constantly in flux. Therefore our concern should be not only on why working classes failed to realize the expectations theoretically imposed on them but also on the question why at specific historical moments they came together at all.³⁵

Anthropologists like June Nash and Michael Taussig have studied rituals, beliefs, folklore and world views of workers to try to understand the way they relate to their work and their attitudes towards life and new work conditions and in what way they make sense of their being as a worker or wage earner in the process of proletarianization. The broader question is whether it is sufficient to conjoin the methodologies and techniques of two taken for granted disciplines. As Brian Axel has argued, "In all the bustle to try and figure out how history and anthropology can use each other's techniques, what most often goes without comment is the presumption that history and anthropology are whole and complete in themselves".³⁶ As a historian interested in anthropological practices, E.P Thompson defines his position as belonging "not in model building, but in locating new problems, in seeing old problems in new ways, in an emphasis upon norms or value systems and upon rituals,

³⁴ Chandavarkar, *Origins of Industrial Capitalism in India: Business Strategies and the Working Classes in Bombay, 1900-1940* (Cambridge, Cambridge University Press, 1994) pp. 14-15

³⁵ Ibid

³⁶ Brian Axel, 'Introduction: Historical Anthropology and its Vicissitudes', in Axel (ed.) *From the Margins: Historical Anthropology and its Futures* (Durham: Duke University Press, 2002) pp.13

in attention to expressive functions of forms of riot and disturbance, and upon symbolic expressions of authority, control and hegemony". By arguing this he was departing from positivistic or utilitarian categories, which had penetrated into economistic tradition of Marxism.³⁷ He suggests that paying attention to the forms and gestures of ritual can be a significant addition to historical knowledge. And certain forms can only be fully understood if we recover the beliefs of the customary culture. The importance of rituals lies in the fact that, they offer a signpost to a community's norms. He argues that these norms/forms are of importance not as Levi-Straussian suggestion as universal structures but because the immediate functions of rituals change over time. He resists anthropological emphasis on trans-cultural significance of rituals. He raises further questions. If what goes on within the forms changes, the forms still remain important and the forms themselves deploy symbolism which derives from the ulterior cognitive system of the community, there is need to understand the process of 'othering', the ways a boundary is set upon a norm. Thompson argues for an insistent need for a dialogue with anthropology to answer these questions³⁸. In trying to understand the cultural and social constraints on economic development and technological innovation, Sabyasachi Bhattacharya had advocated for using the conceptual tools of anthropology way back in 1965.³⁹ Economic historians of India took some time to fully utilize the potentiality of his plea.

Anthropologists concerned with labour relations in India were initially preoccupied with caste and economic interdependency that strongly affected the relationships between castes and sub-castes within village economy. Alternatively the focus was on the interactions between landowning castes and landless agricultural labourers, a relationship characterized by bondage and beset with 'patronage and exploitation'. These studies focused on interrelationship between socio-economic

³⁷ E.P Thompson, "Folklore, Anthropology and Social History" *Indian Historical Review* Vol. III No.2 (1977) pp- 247-266

³⁸ Ibid

³⁹ Sabyasachi Bhattacharya, "Cultural and Social Constraints on Technological Innovation and Economic Development: Some Case Studies", *Indian Economic and Social History Review*. See also his "Iron Smelters and the Indigenous Iron and steel Industry of India: From Stagnation to Atrophy", in Surajit Sinha (ed.) *Aspects of Indian Culture and Society* (Calcutta: The Indian Anthropological Society, 1977)

structure and ideology and the way they combine to maintain status quo.⁴⁰ In a series of studies based on field work spanning over forty years, Jan Breman has investigated the links between the village economy and surrounding urban centres, focusing on flows of labour migration and labour relations in the formal and informal sectors of industrial towns, thus providing long term perspective on the process of proletarianization. Two contribution of Breman are worth mentioning. The first is his critique of the formal-informal sector divide. He has demonstrated empirical untenability of three overlapping conceptual dualisms: rural-urban, agricultural-industrial and informal-formal. His extensive research has shown how the Indian countryside is involved in both agrarian and industrial activities, but also how the huge diversity of urban activities and occupational patterns invalidate any simple division of the Indian urban economy into distinct informal and formal sectors. He has argued against the representations that depict the informal sector as homogenous in terms of employment relations and politics. He has questioned the definition of informal sector employment primarily in terms of self-employment by drawing attention to the sharp rise in casual labour, drop in the percentage of independent workers and the progressive marginalization of women workers.⁴¹ A second contribution of Breman lies in his subtle discussions of caste and class relations. While his earlier work on the Halapatis in South Gujarat showed how caste, buttressed by powerful patron-client relationships, was a highly divisive relationship for the development of class consciousness among the rural poor⁴², his study of migrant workers to industrial centres reveals that there has been shift from largely vertical to more horizontal forms of social organization. Caste can move from being a divisive force in one context to platform for wider collective solidarities in another. In his words, "caste consciousness can undergo scale enlargement in such a way that it

⁴⁰ Jan Breman, *Patronage and Exploitation: Changing Agrarian Relations in South Gujarat* (Berkeley: University of California Press, 1974). Gyan Prakash, *Bonded Histories: Genealogies of Labour Servitude in Colonial India*. (Cambridge: Cambridge University Press, 1990)

⁴¹ Jan Breman, *Footloose Labour: Working in India's Informal Economy* (Cambridge: Cambridge University Press, 1996) pp. 3-11

⁴² Jan Breman, *Beyond Patronage and Exploitation* (Delhi: Oxford University Press, 1993)

approaches class consciousness: recognizing members of other sub-caste as fellow sufferers and feeling solidarity with them".⁴³

Geert de Neve adopts a micro-perspective to examine everyday labour politics in three informal sectors of south Indian economy by focusing on handloom, powerloom and dyeing industry which together form main productive activities in and around Bhavani and Kumarapalayam in Tamilnadu.⁴⁴ By doing a comparative analysis of these three sectors he shows that the informal sector politics are remarkably diverse, and can be mediated by union activity, politics of debt bondage, or practices and discourses of kinship. Furthermore, the relationships between employers and workers are not only shaped by the particularities of shop floor interaction but also by wider processes such as changing organization of industry, fluctuations in market demand and the upward mobility of certain social groups. The history of the Weavers' Union in Bhavani Handloom sector provides evidence of weavers' ability to organize themselves into lasting union, to undertake sustained action and to bargain for substantial concessions. Success of this localized union challenges the assumption that workers in informal economy lack the ability for collective action and that their acts of resistance seldom make a lasting impact. In this case collective action emerged from a shared consciousness rooted in perception of skill, a craft identity and the experience of work in shop floor. Rather than caste being a limiting factor for the development of class consciousness, in this industry where Vanniyars constitute the majority of the workforce, Neve shows that caste solidarity facilitated the growth of class awareness. Vanniyar social identity as poor and exploited labourers was opened up to accommodate weavers from other cast backgrounds and helped to promote a shared awareness that joint action was needed.⁴⁵ On the other hand, labourers in powerloom factories in Kumarapalayam have been able to avoid union militancy mainly because of a politics of *baki*, that is, the practice of giving cash advances to workers on recruitment. This practice was introduced by Gounder factory owners, who entered the industry in 1970s, in order to recruit

⁴³ Breman, *Footloose Labour* pp.257

⁴⁴ Geert de Neve, *The Everyday Politics of Labour: Working Lives in India's Informal Economy* (Delhi: Social Science Press, 2005)

⁴⁵ *Ibid* pp.310

sufficient labour for their newly-established units. The practice soon spread throughout the industry and became part of a more general attempt by employers to bind labourers through debt. *Baki* being highly individualized and variable in nature, divided the workforce and encouraged the workers to follow more individualized strategies of negotiation, resistance or withdrawal. *Baki* negotiations took place between individual employers and their workers, and thus pre-empt the latter's chance of initiating united action.⁴⁶ Dyeing industry presents a third pattern of labour politics. Vanniyars were almost exclusively employed as wage labourers until 1970s and have been extremely successful and upwardly mobile in this industry. Their mobility through dyeing work is reflected in their success as factory owners and job-workers. The majority of both employers and employee here belong to the same community and many related as kin and neighbours. Thus here the main reason of success is their ability to manage labour difficulty. Here it is neither union nor *baki* but practices of kinship that mediate between employers and workers.⁴⁷ By bringing out the differences in the working of these three informal industries, Neve has been able to demonstrate the everyday politics that mark these industries.

In her brilliant study of Bolivian tin miners, June Nash combines ethnography dependency theory and Marxist analysis of class consciousness, in an interesting way.⁴⁸ In the very beginning of the book, the miners' sense of dependency on the mines for their living and simultaneous sense of exploitation, both in loss of health from lung disease and in the low returns for their labour is brought out in a miner's own words: "We eat the mines and the mines eat us". As Bolivia exhibits extreme characteristics of dependency and underdevelopment in Latin America, the policies of the government are responsive to outside interest. The penetration of foreign capital fostered one of the most exploited working class population, at the same time it is politically responsive to revolutionary ideology. They share a life experience that has given them a strong sense of identity as a community and as a class. In the history of industrial exploitation, they have transformed themselves from a peasant population

⁴⁶ Ibid pp.311-312

⁴⁷ Ibid pp. 313

⁴⁸ June Nash, *We eat the Mines and the Mines eat us: Dependency and Exploitation in Bolivian Tin Mines* (New York: Columbia University Press, 1992)

with a localized world view to a proletariat aware of the world market in which they buy many of their consumption needs. From the very beginning of industrial mining, the workers have endured extreme hardships in the working and living conditions they encountered in the mines. However, workers' collective actions to improve their condition have been continuously suppressed by military force. The history of massacres and the murder and exile of their leaders raised their consciousness of the need for political action.

Nash shows that contemporary ideologies of socialism and communism are combined with beliefs in primordial/pre-conquest mythic forces such that people are not alienated from their cultural roots. Elaborate rituals and sacrifices are offered to the Tio, the devil spirit of the hills so that he will continue to reveal the veins of metal to the workers and help them in their work.⁴⁹ According to her it is the primordial beliefs, customs, rituals and practices which mitigate the sense of alienation in capitalist work process in the mines. Nash criticizes the contemporary political economy stating that, "Despite the exploitative wage system and poverty in the mining communities, I did not find alienated people."⁵⁰ The miners resist alienation is by cleaving to opposed world views, "of upper and lower worlds with Christian deities above ground and pre-conquest spirits operating below."⁵¹ She argues that unless individuals are forced to make choices based on differing ideologies, they may be able to sustain totally contradictory modes of thought. Because the motivation to act derives from multiple and often contradictory sources of consciousness, each act becomes the resolution of internal crisis. One of the basis dualism in the miners' world view is that of upper and lower worlds, with Christian deities active above ground and pre-conquest spirits operating below. Their ability to embrace contradictory systems is based on compartmentalization in time and space. Tuesday and Friday are the days for recognizing indigenous forces, while Sunday and Saints'

⁴⁹ Ibid

⁵⁰ Ibid pp.12

⁵¹ Ibid pp.7

days in Christian calendar are assigned to Christian deities. The ceremonies and symbols appropriate to each category are contained in the separate spheres.⁵²

The expectation of modernization theory that western cultural models will replace native ones is not met here. Nash suggests that pre-conquest traditions have been kept alive in the mines. In their rituals, miners participate in what superficially appeared to be a forgotten world, affirming their solidarity with a tradition which is a rejection of the system under which they live now. The two principle religious concepts which govern this system correspond to the spirit beings Pachamama, a female earth spirit identified with the agricultural cycle and responsible for fertility, and Supay, the lord of the hills, who is identified as the bringer of luck, both good and bad, and who jealously guards the mineral treasures of the mountains. Supay or Tio, is the central focus of many rituals events including llama sacrifice in the mine. His image carved in tin ore, sits at the entrance to each mine where he watches over miners' activities. The miners believe that the veins of the ore are moveable and that Tio may replace the ore that is removed. Thus they refuse to accept the managers' statement that the ore is being exhausted. They propitiate Tio to restore the minerals to the mines and to reveal it to them. They also beseech him not to make them his victims in the frequent fatal accidents in the mines. In Nash's view, neither Pachamama or Tio is the incarnation of pure good or evil as in their supposed Christian cognates, Virgin Mary and Satan/Lucifer/Devil. She points out that the ritual cycle, although apparently revolving around European catholic traditions such as Carnival, is basically geared to the indigenous agricultural cycle. There are aspects of carnival which express hostility towards the conquerors and their church and Nash notes the exuberant finery with which the dancers adorn themselves. She concludes,

It would be simplistic to say that Carnival is a substitute for revolution. It is more accurate to say that it is a reminder to the people of the necessity for revolt when the historical conditions are appropriate, just as it is a denial of the misery and drabness of their everyday lives and expression of what they aspire to.⁵³

⁵² Ibid

⁵³ Ibid pp.147

Although union leaders and political leaders reject the spiritual beliefs of the past when they embrace secular political ideologies, the miners sustain such beliefs and practices along with Marxist-Leninist-Maoist programs, without any sense of dissonance. Nash argues that dissonance arises when choices are made between competitive ends. The sense of dissonance is forced upon them by those who wish to maintain control over a group through a unifying ideology. As such, Nash looks at ideology of miners both as a way of perceiving and interpreting experience and as it influences action.⁵⁴

What does wage labor and capital mean to a peasantry that is subjected to rapid rural proletarianization and what is the basis of that meaning? Michael Taussig looks into an aspect of this question in the light of certain ideological reactions manifested by a South American lowland peasantry as expanding sugar plantations absorb their lands and peasants are converted into landless wage laborers. In the southern extremities of the Cauca Valley, Colombia, it is commonly thought that male plantation workers can increase their output, and hence their wage, through entering into a secret contract with the devil. However, the local peasants, no matter how needy they may be, never make such a contract when working their own plots or those of their peasant neighbors for wages. It is also thought that by illicitly baptizing money instead of a child in the Catholic Church that money can become interest bearing capital, while the child will be deprived of its rightful chance of entering heaven. Analysing these beliefs in their social and historical context, Taussig argues that the lower classes' implicit understanding of the new mode of production is inherently critical and antagonistic and that the axiomatic basis of this antagonism rests on their conscious opposition of "use values" to "exchange values"-the opposition of the satisfaction of natural wants, on the one side, to the limitless search for profits and capital accumulation on the other.⁵⁵ He discusses the metaphysical and moral bases underlying the lower classes' understanding of capitalist relations of production and exchange, in which their folk mysticism is contrasted with that form

⁵⁴ Ibid pp.7-8

⁵⁵ Michael Taussig, 'The Genesis of Capitalism amongst a South American Peasantry: Devil's Labour and the Baptism of Money', *Comparative Studies in Society and History* Vol.19 No.2 (1977) pp. 130-155



of capitalist mystification to which Marx gave the name of "commodity fetishism." Evaluation of this contrast is enhanced by an analysis of the mode of reasoning utilized by the supporters of the use value economy. This reasoning appears to derive from a concept of the universe as an interrelated organism which is understood through the conscious application of animistic analogies, rather than by means of the atomistic causal paradigm which has gained ascendancy in the social sciences since the rise of Newtonian mechanics and the birth of the industrial revolution in the West⁵⁶.

Dhiraj Nite discusses the cult of *Khadan-Kali* popular among miners of Jharia collieries. This process of deification of mines was "part of the miners' effort to negotiate the mines' and their way of making sense of their work". The way in which the cult of mother goddess popular in eastern India was given new meaning in the new economic condition of wage labour, gives us idea about the way workers draw upon the resources of tradition to make sense of realities of present work condition.⁵⁷ He also uses rich collection of folklores depicting various aspects of miners' lives. Over time, a two-fold tendency evolved in Jharia collieries: the reification of collieries as the womb of the goddess Kali and compensation struggle in the aftermath of the colliery accident. The reification of underground labour and the propitiation of otherworldly spirits such as *Khadan Kali* served as insurance for miners against accidents. He argues that the belief in spirits of the underground did not fully occlude concerted endeavours to prevent the chance of accidents, it existed with the miners' knowledge of and engagement with the politics of compensation. It was the miners' knowledge that served to 'normalise' the industrial order, which was ridden with hazards and made for a very precarious existence for miners.⁵⁸

Economic anthropologists have often used autobiographies as a means of analysing the development of consciousness among workers. In recounting and interpreting past events, the subjects reveal the unconscious values that motivated

⁵⁶ Ibid

⁵⁷ Dhiraj Kumar Nite, *Work and Culture in the Mines: Jharia Coalfields 1890s-1970* (Unpublished Phd Thesis Jawaharlal Nehru University, 2010) pp. 198-205

⁵⁸ Ibid p-131

their actions. Collecting narrative accounts of workers and peasants are of special importance to anthropologists because their actions in daily/quotidian life are not usually recorded by historians. Life history reveals the process of the formation of consciousness regarding the changing world into which people were thrust. Decisions taken during various stages of life reveal the multitude of circumstances that enter into comprehension of life conditions. Also the reflexive view of the elicitor/editor is an essential ingredient in collecting personal testimonies.⁵⁹ Advocating the necessity of collecting life histories and family autobiographies, June Nash writes:

Most discussions about class are metatheories that put the conditions observed in a set of propositions the theoretician would derive if they were experiencing those conditions. Or they derive notions about what workers should think from a theoretical construct that proposes what their historical role should be. The family autobiographies give a sense of the actual ideas people hold about class. They reveal the contradictions workers experience in their daily lives as they try to respond to the demands that class allegiance pose at the same time that they balance the claims put upon them by their family responsibilities seriously.⁶⁰

Mohammad Talib in his ethnographic study on stone quarries of Delhi from 1980s onwards tries to bring out experiences of survival of labourers working in the bottom of capitalist economy at mere subsistence level. He says that his effort is to analyse the life of working people from the perspective of the workers' own experience, rather than in "outsider's terms of social class, or of any pre-determined trail of class consciousness". According to him an effort to capture experience of labour through their own narrative acknowledges the subjectivity of workers as agents negotiating the conditions of their lives.⁶¹ The stone quarry workers represent the other side of the 'Organized sector' of Indian economy. He argues that he workers' life and work activities may not always be visible but the products of stone quarrying are almost ubiquitous. Be it the physical layout of an industrial unit or a residential building, or roads and bridges, all ultimately draw upon the mining or quarrying of sand, gravel,

⁵⁹ June Nash, *I Spent my life in the mines: Story of Juan Rojas, Bolivian Tin Miner* (New York: Columbia University Press, 1992)

⁶⁰ Ibid

⁶¹ Mohammad Talib, *Writing Labour: Stone Quarry Workers in Delhi* (Delhi: Oxford University Press, 2010) pp. 1-2

silica stone, marble, etc. The major consumers of this material remain the government departments- Public Works department (PWD), Railways, Municipalities and local government like Zila Parishads. Beside there is huge building and construction industry which needs sand and stones. Talib uses the term 'Quarry Worker' as a broad category of different workers employed in various capacities in the task of quarrying-extracting and breaking stones. He shows that the conditions of life and work among the quarry workers are usually characterized by various uncertainties of work and wage, as well as scant support of government or access to 'rights'.⁶² In reality stone quarrying as a business venture involves a minimum of capital investment in the actual work and its administration against a maximum of profiteering and capital augmentation. The entire activity depends upon a group of workers equipped with simple tools- a chisel and a hammer, and sometimes needing dynamite before use. From the point of view of labourers, the stone quarrying entails maximum expenditure of human energy with great risk to life. The associated risk is further tied to working condition offering workers bare subsistence wages. An assessment of this two-sided arrangement can only reveal a distinct advantage for capital and a conspicuous disadvantage for labour, argues Talib.⁶³ The Government support for stone quarries is very inadequate. However, he refutes the image of labourer as the passive victim of the irresponsible state machinery, unregulated market, the informal regime of law and planned social change, which ignore the agency in labour. He demonstrates that local knowledge, containing both conforming and adopting critical perspectives on society, is embedded in routine and everyday life experiences of the workers.

Ethnicity and Labour

Labour historians have not paid much attention to the role played by the question of ethnicity in forming a worker's identity. It is seen as one of the 'primordial' / 'pre-capitalist' attribute that lingers in the world-view of urban labourers, thus limiting the

⁶² Ibid pp. 23-24

⁶³ Ibid

formation of class consciousness. The kind of discussions that have been generated among historians regarding village connections, rural ties of urban workers has mostly centred around the persistence of caste in social life of labourers. Thus historians have shown how caste connections were important in getting a foot hold in urban milieu and finding work there. On the other hand discussions on ethnicity for a long time focused exclusively on recruitment of 'tribals' for indenture labour in Assam tea plantations and various forms of indentured labour.⁶⁴ Here attention was paid on the role of 'ethnic stereotypes' in certain recruitment patterns. Recent works have started paying attention to recruitment of 'tribal' labour also in various War Frontiers during World War I.⁶⁵ But generally speaking concerns of labour historians and historians studying 'tribal' societies have moved in different directions and have rarely converged.

Kaushik Ghosh points towards the paradoxical combination of colonial obsession with the 'primitive', which led to reifying it through classification on the one hand and fetishizing the same aboriginality as a magical solution to the colonial demands for labour.⁶⁶ Dhangar was the term commonly used in nineteenth century Bengal along with host of others-Jungli or Kols-to refer to 'tribals', whose essential identity was as a hired labourer or their capability to work. The transformation of primitive raiders into docile wage labourer-Dhangar, contained the logic of the civilizing mission of colonial capitalism. It was not only the lack of caste or civilization that defined the utility of Dhangar, but its docility and in meeting the demands of plantation discipline. Demand for cheap labour and the discourse on race and primitivism fetishized the Dhangar into solution to labour crisis of Assam tea plantations. Aboriginality was the new language for classifying and measuring the

⁶⁴ See Crispin Bates and Marina Carter, 'Tribal Migration in India and Beyond', in Gyan Prakash (ed.) *The World of the Rural Labourer in Colonial India* (Delhi: Oxford University Press, 1994). Also Crispin Bates and Marina Carter, 'Tribal and Indentured Migrants in Colonial India: Modes of Recruitment and Forms of Incorporation', in Peter Robb (ed.) *Dalit Movements and the Meanings of Labour in India* (Delhi: Oxford University Press, 1993)

⁶⁵ See Radhika Singha, 'Finding Labour from India for the War in Iraq: The Jail Porter and Labour Corps, 1916-1920' *Comparative Studies in Society and History*, 49, 2 (2007)

⁶⁶ Kaushik Ghosh, "A Market for Aboriginality: Primitivism and Race Classification in the Indentured Labour Market in Colonial India", in Gautam Bhadra, Gyan Prakash and Susie Tharu (eds.) *Subaltern Studies X: Writings on South Asian History and Society*, (Delhi: Oxford University Press, 1999) pp.8-48

fitness of tribal labour for plantation work. To be 'pure aborigine or jungli' defined the 'first-class coolie'.

Prabhu Mohapatra has shown how 'ethnic stereotypes' operated as the basis of recruitment in different labour regimes. Whereas Chotanagpur coolie called 'Dhangar or Junglee' was preferred in tea plantations and 'up-country and North Western Provinces coolie' was least sought after, in case of Jharia coal fields, 'Gorakhpuri' and 'Bilaspuri' labour outstripped the local population in the labour market. He argues that the basis of the contradiction in colonial racial stereotypes of labourers lay in the different requirement of work process in the coal mines and the tea gardens.⁶⁷ Work process in coal mines could not be strictly regimented. Recruiting Sirdars performed the task of supervision, but "once inside the pit, the miner was left to himself to cut coal in any manner he chose, since he was to be paid by piece rate per tub". Local 'semi-aboriginal' labour was marked by their 'spasmodic work habits' who, "worked for 6 or 7 days at a stretch and then return home for a week's rest, and others who came from nearby villages and stayed for a day in which they spent 18 hours working underground".⁶⁸ Thus here 'laxity of work discipline' combined with limiting purpose of employment, getting sustenance during agricultural slack period, prevented local tribal labour to work in controlled regulated fashion throughout the year. In the tea plantations on the other hand, the labour process had to be necessarily regimented. The strict watch over cost of production due to the falling tea prices, and the necessity for the planters to switch from fine to course plucking in anticipation of short term price fluctuation made it imperative that the labour should be not merely plentiful but also of "a particular type liable to a great degree of control". The uprooted tribal labour was subjugated to strict control of the planter. Apart from their long tradition of jungle clearing and their passive adjustment to the rhythms of plantation life was the main reason for their being the planter's favourite, argues Mohapatra.⁶⁹

⁶⁷ Prabhu Mohapatra, "Coolies and Colliers: A Study of the Agrarian Context of Labour Migration from Chotanagpur, 1880-1920", *Studies in History* 1,2 (1985) pp.261-266

⁶⁸ Ibid pp.265

⁶⁹ Ibid pp.265-266

Colonialism transformed the society, polity and economy of the tribal areas in three crucial ways: through the imposition of alien structure of government, through unequal integration into larger capitalist process, and through creation of sociological and epistemological categories and state organized activities such as census records, gazetteers, ethnographic surveys and land-tenure records. Characterization of the 'tribe' or 'tribal' in India as elsewhere drew on evolutionary classifications based on race and anthropometry. Tribes were basically understood as kinship based societies and they were characterized by their perceived primitiveness of mode of production. But the Indian 'tribe' was further understood to be different from 'caste' in terms of religion and culture. The colonial enterprise of knowing native people emphasized on studying customs, practices and institutions of communities. 'Tribe' in the colonial thinking was defined by its characteristics of being isolated, self-contained, little affected by civilization. For the colonial ethnographers the tribal communities were caught in a frozen, changeless time of past. By the mid nineteenth century, colonial officials started distinguishing between caste and tribe. Ajay Skaria argues that the distinction between caste and tribes drew on and was made possible by colonial construction of 'wildness'. Anachronistic thought was intimately linked to evolutionist thought and theory, which located primitive societies as survivals from a past, separated from present by time. The association of forests with wildness was so strong that many colonial officials recommended that forests be cleared, that these communities be removed from forests as a way of civilizing them or that they be introduced to "humanizing tendencies" of settled agriculture.⁷⁰ Money & market were introduced in tribal areas to act as agent of 'civilizing process'. Lack of money and market was important in the making of colonial perception of 'Primitive', argues Prathma Banerjee. The 'Primitive', therefore had no idea of means and mediation, no idea of money, no grasp over mediatory entities like state. Thus money emerged as abstract mediator, negotiating unbreachable time lag between the 'historical' and the 'primitive'.⁷¹ The Santhals claimed in the second half of nineteenth century that they

⁷⁰ Ajay Skaria, "Shades of Wilderness: Tribe, Caste and Gender in Western India", *The Journal of Asian Studies* 56,3 (1997)

⁷¹ Prathma Banerjee, "Debt, Time and Extravagance: Money and the Making of 'Primitives' in Colonial Bengal" *Indian Economic and Social History Review* 37,4 (2000) pp.423-445

had become lazy once money entered their world. They no longer manufactured things but bought readymade commodities from the market. And once they began buying things instead of making them, they fell into a cycle of perpetual debt to money lenders from outside. The absence of money/credit sensibility was seen as analogous to the absence of anxiety about time beyond the present, among the santhals. The santhal experience of money was thus primarily an experience of indebtedness. Money/interest always appeared to santhals as something that is owed to other. Indebtedness and the other became co-terminus.⁷² The term Diku literally means outsiders in Santhali. The otherness of the Diku was constituted by his being as outsider and his being as an exploitative money lender. From santhal rebellion of 1855 to post-independence Jharkhand movement, economic exploitation and marginalization of people by the outsiders, form the core background of tribal movements.

Revisionist historians have tried to provide a critique of the practice of anthropological research, putting the 'ethnographic present' into perspective, providing social phenomenon with contextual meanings, and restoring to the societies under study the time depth that ahistorical variants of anthropological analysis have denied them. Advocating for application of a historical perspective to anthropological research on 'tribal' societies, Sussane B.C Devalle writes,

Much of anthropology has conceived of [tribal] societies as being without past, while at the same time it has constructed their present in the image of what they are supposed to have been in the past. Both the past and present of 'object-societies' have been situated at the margins of history. As a result, these societies have emerged as passive 'objects' that are defined only in essentialist terms. Among these anthropological 'objects' are the 'tribes'. It is not surprising that societies so de-contextualized often continue to be studied through their languages, material culture manifestations, religion and customs, without these aspects being related to the social evolution of the societies in which they are present. By restoring historicity to the

⁷² Ibid

societies that anthropology studies, their dynamism and their presence in the current of social events- all denied by fixed categories and typologies-are acknowledged.⁷³

According to Devalle, “ethnicity cannot be understood unless issues of social differentiation, processes of class formation and development of class conflict are considered in the context of their articulation with processes of ethnic differentiation”. Adivasis live in a class society and in an economic formation where the capitalist mode is dominant. ‘Tribe’, therefore, argues Devalle is ‘an ill-suited sociological category to analyse the structural position of adivasi, either in past or present’. ‘Tribe’ as a fixed and timeless category, is an inadequate concept to understand the adivasis as a social agent. There is nothing called ‘tribe’ in Jharkhand, but the construction of tribe which helps in the reproduction of structures of inequality⁷⁴. He emphasizes to categorize the indigenous communities basically as agrarian in view of their historical evolution. For him the main issue is to search for circumstances under which “class consciousness takes precedence over ethnic consciousness and becomes the leading force in popular movements”. He uses ethnicity as a process combining both continuities and discontinuities.

Most trenchant critique of the unchanging or primordial nature of the category ‘tribe’ has come from the writings of Sumit Guha, who argues that tribes cannot be defined independently of the state systems with which they were associated. He argues ethnicity as “ranking and ordering system”. Identities profoundly affect destiny, and are, “imposed and rejected, sought and shunned accordingly”. Ordered inequality based on ethnicity requires mechanisms of boundary definition and enforcement. Ethnicity was one of the ordering principles of precolonial period. Woodland ‘niches’ were utilized as bases for social, economic and political initiative, therefore the transgression of their boundaries, and the flow of personnel and resources into and out of them was ‘constitutive and not an accidental process’. Identities and ethnicity in the precolonial past was fluid. However admitting mobility and fluidity in precolonial past, argues Guha, does not diminish the element of

⁷³ Sussane B.C Devalle, *Discourses of Ethnicity: Culture and Protest in Jharkhand* (Delhi: Sage, 1992).

⁷⁴ Ibid

violence and exploitation in that period. It is wrong to believe that the weakness or absence of the state and the complete autonomy of local communities resulted in social harmony. He thus puts the category of 'indigenous peoples' or 'aboriginals' under critical scrutiny. As such he challenges the ideology of authentic indigenism and environmental virtue. He points out the difference in the meaning of two terms-tribals and aborigines, tribal refers to the political organization of a community, while aborigine means one present from the beginning. The equivalence of tribal and aboriginal originates in nineteenth century racial theory, which argued that certain 'races', were incapable of progressing beyond 'tribal' organizations, unless forcibly integrated into societies dominated by 'superior races'. Taking a *longue duree* approach to history, he shows that supposedly isolated tribal people were active participant in the politics of their region-a participation curtailed by the centralizing drive of the colonial state in comparatively recent times. The divergent destinities of different forest communities in the modern era are related to their previous history and social role. Communities located in specific environmental niches specialized in particular activities. Thus different communities as components of integrated political economy were marked by a specialization. Guha describes this process of social differentiation as having both political and economic aspects:

Forests, seasonal pastures, cultivated fields all provided resources exploitable by specialists, and the various communities were constituted by their specializations. However, neither the composition nor the location of a particular community was fixed. Lands were cleared for agriculture-but lands also became covered with jungle, trade routes were opened but trade routes were also abandoned, cities were founded but cities vanished...Similarly, herdmen settled to till or to tax the tillers, but cultivators shifted to herding, swidden farmers took to plough but ploughmen fled into forests. Certain habitats and habituses persisted through time-but their geographical locations and human occupants were in recurrent flux.⁷⁵

The integration of forest folk into regional political economies according to Guha is, "not the same as assimilation, specialization requires difference and such differences

⁷⁵ Sumit Guha, *Environment and Ethnicity in India, 1200-1991* (Cambridge: Cambridge University Press, 1999) pp.28-29

become in turn organizing principles in inter-community relations”.⁷⁶ Political and economic changes did not leave woodland communities unaffected as, “an ethnic mosaic would easily be transformed into an ethnic hierarchy”. It was through diverse socio-political trajectories by which various communities arrived at their modern situations. Guha defines his position as to remove “social and ecological stasis from the woodlands of the world and to propose the reinstatement of the contingent, the political and historical therein”. According to him, there was no single historical trajectory from “freckles forager” to “provident peasant” or from “happy savage” to “miserable proletarian. He argues that twentieth century isolation of ‘remote jungle tribes’ was an artifact of colonial rule rather than survival of some remote epoch. Colonial forest policy led to shrinkage of forest cover from nineteenth century onwards due to large-scale destruction and burning down of forests. Thus isolation and loss of political power of forest dwellers was due to colonial forest policies, argues Guha.⁷⁷

In the context of Central Provinces, Archana Prasad has looked at the concept of ‘original inhabitants’ and ‘ancient rights and practices’ that are generally used to justify the tribal demand for land and right of residence in forests.⁷⁸ She challenges the assumption that tribals always lived in forests and practiced shifting cultivation from the time immemorial. The marginalization of the Gonds into forests was the result of two stage process. The first was the process of colonization of fertile agricultural lands by caste Hindu peasants who were brought into these tracts by Maratha rulers. Second, with the intervention of the British in the region and introduction of Permanent Settlement of agriculture ensured that the movement of tribals between the highlands and plains stopped forever. This resulted in the settlement of tribals in remote forests, their livelihood patterns undergoing significant change.⁷⁹ She further argues that the centrality of shifting cultivation in the Baiga identity was more a result of their integration into colonial capitalist system and less

⁷⁶ Ibid pp.199

⁷⁷ Ibid pp.130-149

⁷⁸ Archana Prasad, *Against Ecological Romanticism: Verrier Elwin and the Making of an Anti-Modern Tribal Identity* (Delhi: Three Essays Collective, 2003)

⁷⁹ Ibid

as a representation of their harmonious relationship with the nature. This was particularly true in the context of the ban on shifting cultivation and the formation of Baiga Chak or reserves for the practice in Bastar. In this sense she reevaluates the dominant perception that shifting cultivation always preceded sedentary plough cultivation in the evolution of agrarian societies. In her analysis she makes a critique of Madhav Gadgil and Ramachandra Guha who look at the settlement of tribal people in the forest area as a process of adjustment and not as a process of exploitation and marginalization by caste Hindu societies.⁸⁰

Maurice Godelier points out that the issues of identity are not merely theoretical concerns in people's lives, problems hinging on an abstract on an abstract definition that historians or anthropologists, tracing their origins and comparing the facts, regard as suitable or fictional. The identity to which people lay claim is "true" or "false" to them because it is the reason they live the way they do and often act the way they act to change their life. How, therefore, could their identity be false? More importantly we should keep in mind that groups or individuals always define themselves by reference to 'others'. It is in this more fundamental sense that no identity, whatever one thinks or wishes, is closed in on itself, and closed to the outside.⁸¹

David Hardiman argues that the term adivasi relates to a particular historical development, that of subjugation during the nineteenth century of a wide variety of communities, which before colonial rule had remained free or relatively free from control by outsiders. The experience generated a spirit of resistance which incorporated a "consciousness" of the adivasi against the "outsider". As Hardiman notes, the term was used by political activists in Chotanagpur in the 1930s, with the aim of forging a new sense of identity among different 'tribal' groups. This process took the form of Jharkhand Movement.⁸²

⁸⁰ Ibid

⁸¹ Maurice Godelier, *In and Out of the West: Reconstructing Anthropology*, (London: Verso, 2009) pp. 12

⁸² David Hardiman, *The Coming of Devi: Adivasi Assertion in Western India* (Delhi: Oxford University Press, 1987) pp.15

II

Specifying the Region

In this section I have try and explain the historical background of political administration of the South Chotanagpur region, the area that this study focuses on. Prabhu Mohapatra in his studies on various aspects of agrarian economy of Chotanagpur, makes clear the regional distinction between North Chotanagpur, comprising districts of Palamau and Hazaribagh and South Chotanagpur comprising districts of Manbhum, Ranchi and Singhbhum on the basis of institutional factor-landlord tenant relation or larger socio-economic structure. In my definition of the region 'South Chotanagpur', I have included Singhbhum and surrounding feudatory states of Mayurbhanj, Keonjhar, Bonai, Gangpur, Sareikela and Kharsawan. I have removed Manbhum and Ranchi from my analysis for practical reasons. First, Manbhum was primarily a coalfield region, where coal mining was an important economic phenomenon. Iron Ore mining developed in Singhbhum and adjoining feudatory states. Here I argue against coal industry and underground mines as representative of mining activity, thereby laying way for theoretically understanding of 'Open Cast Mines', where there was more complex interplay of forests, agrarian structure, hills and economic activity of mining. Second, ethnic composition of Ranchi and Singhbhum was very different. Whereas Ranchi was a Munda and Oraon dominated area, Singhbhum was dominated demographically by Hos followed by Santhals. In neighbouring feudatory states, ethnic composition was even more complex. But Mayurbhanj which figure out significantly in my study, was a Santhal dominated area, particularly in Bamanghatty subdivision where TISCO's iron mines were located, Santhals were found in majority. I have focused on the ethnic particularity of the region, which has basically determined historical trajectory of collective action and socio-religious movements, rather than clubbing everything under the category 'tribal'. Third, this ethnic particularity of Singhbhum was recognized in special administrative and juridical division of Kolhan Government Estate carved out as special 'home' for Hos, in the historical background of Kol

Rebellion of 1832-33. It was under such situations that paternalistic role of colonial masters got legitimized. In Kolhan estate, comprising half of Singhbhum District, government policy was out and out protectionist, sales, mortgages and transactions of land rights were absolutely prohibited. The Deputy Commissioner had the power to summarily eject outsider transferees.

On the other hand, in spite of pleas to the contrary by leading officials, the rights of bhuinhars demarcated during the 1869-1880 survey in Ranchi district were made saleable, no restrictions being placed either on mortgaging or leasing of bhuinhari land. The government argued that its intension in securing bhuinhari rights was to protect 'a class of land not any class of people'.⁸³ Prior to the promulgation of the Chotanagpur Tenancy Act of 1908, colonial state intervention in the land market was of a different order. The periodic interventions largely affected the market for tenures and estates. The earliest of such intervention was in the form of Wilkinson's Rules of 1839 by which sale, purchase or transfer of tenures and estates required the permission of the commissioner of the division. The background to these executive rules was the Kol insurrection of 1832. It was thought that the displacement of traditional chiefs and headmen from their proprietary rights was the main cause of disaffection amongst tribals. The rules were often circumvented by sales of under tenures and permanent leases. The Chotanagpur Encumbered Estates Act of 1876, gave legislative sanction to the executive rule prohibiting transfer of rulers on account of debt. Instead the government undertook to manage the estates directly and pay back the debt from the earnings of the estate. However, this act specifically protected only those tenures and estates held by traditional and hereditary chiefs and left out the account of numerous estates and tenures which were created in the recent past and which became saleable for recovery of debts from 1882 onwards. Wilkinson's in his dispatch of 1833 clearly mentioned 'the object of the rule is to prevent sale, transfer or

⁸³ Prabhu Mohapatra, 'Land and Credit Market in Chotanagpur, 1880-1950', *Studies in History*, 6, 2 (1990) pp. 166

mortgages of land, whose owners....could make an effort to recover the lands by violent means',⁸⁴

I have delineated the complex trajectory of historical developments of boundaries and borders – the complex play of administrative divisions - Government Estates and zamindaries and Feudatory States/Tributary States in this region.⁸⁵ I discuss this region as 'Frontier Zone'. Borders and boundaries kept on changing throughout nineteenth century, necessitated by practicality of administration. Complexity of boundaries, which arose due to British efforts to administer and understand the region and differential play of political power, defies any efforts to name the region. It has to be kept in mind that feudatory states of north Orissa, which are focus of my work, were not in administrative division of Chotanagpur, except Sareikela and Kharsawan. In this region there is a commonality in terms of ethnicity and cultural continuity, being primarily tribal dominated and loosely integrated politically by Oriya Chiefdoms in precolonial period.⁸⁶ Even Singhbhum, the major focus of this work, only district under direct British administration, was under Porahat raja till 1857, when he rose in rebellion, supported by Hos. But little earlier in 1830s, direct British intervention followed 'Kol Revolt' of 1832-33, when Hos and Mundas jointly rebelled.

Most importantly, geology and geography of 'Iron Range' itself defies these divisions. Most of the iron ore mines are located in just the border of Singhbhum in present day Jharkhand-Orissa Border. The binding factor of this dissertation thus is the economic and labour development of iron ore mining industry in this region. I have taken 'iron ore industry' and 'iron field' of colonial Bihar and Orissa as a whole as my object of analysis. Even in the case of Singhbhum, British administration was not unified. Thus we find that Kolhan Government Estate was developed as special

⁸⁴ *Final Report on Survey and Settlement Operation in Ranchi District 1902-1910* (Calcutta, 1911) pp. 28

⁸⁵ I emphasize that it is necessary to understand complexity of administrative divisions properly, because borders and boundaries have influenced the political developments of the region. Historians sometimes unable to appreciate this have fallen into trap of generalization and oversimplification. Vinay Bahl declares Kolhan as a princely state, whereas historically it was first to be incorporated into British administration as a Government Estate. This is a grave mistake. See Bahl (1995) pp.100.

⁸⁶ For overview of precolonial state formation in the region, see Surajit Sinha (ed.) *Tribal Politics and State Systems in Pre-Colonial Eastern and North-Eastern India* (Calcutta: K.P Bagchi & Co, 1987)

home for Ho tribe where special rules were applicable to prevent alienation of tribal land to outsiders. But the paradox of mining in colonial and post-colonial India is that most of the minerals are located in tribal dominated and forested areas.

Singhbhum comprised the Government estate of the Kolhan in the south east, the revenue-paying estate of Dhalbhum in the east and the revenue free estate of Porahat in the west, while the States of Saraikela and Kharsawan lie in the north, wedged in between Porahat and Dhalbhum. The District forms part of the southern fringe of the Chota Nagpur plateau, and the western portion is very hilly especially in the north where the highest points have an altitude of more than 2,500 feet and in Saranda pir, comprising one of the dense Sal forest, in the south west, where the mountains culminate in a grand mass which rises to a height of 3,500 feet.⁸⁷

A brief outline of administrative and juridical boundaries of the region is necessary. From 1912 onwards the whole region came under the Province of Bihar and Orissa till 1935 when Bihar and Orissa became separate provinces. Mayurbhanj, Keonjhar, Bonai, Gangpur, Saraikela and Kharsawan were princely states during the colonial period. Most important iron mines of Singhbhum were situated in Kolhan Government Estate (KGE). Chotanagpur was the site of intense struggle against British and zamindari rule throughout the nineteenth century, due to peasantry's indebtedness to moneylenders, loss of control over land and other resources, and erosion of local authority. A series of agrarian uprising, beginning with the Kol Rebellion of 1831-32 and culminating in the Birsa Munda movement of the 1890s, resulted in the formulation of tenancy laws and regulations that attempted to protect the rights of local tribal inhabitants. After the Kol Rebellion of 1831-32, the colonial government passed Bengal Regulation XIII of 1833, while the Chotanagpur Tenancy Act (CNTA), 1908 was a product of the Birsaite rebellion at the turn of the century.

⁸⁷ W. W Hunter, *Imperial Gazetteer of India* Vol. 23 (Oxford: Clarendon Press, 1908) pp-1.

By mandating the creation of a specific record of rights for each village, the tenure acts afforded a great degree of decentralization and recognition of local specificities.⁸⁸

When Hos and Mundas joined hands in the rebellion of 1831-32, Thomas Wilkinson, who was then appointed Agent to the Governor General for the newly formed non-regulation province of the South-West Frontier, recognized the necessity of a thorough subjugation of the Hos. A force under Colonel Richards entered Singhbhum in November 1836 and within few months all the refractory headmen had submitted. Twenty-three Ho pirs were then detached from the States of Porahat, Saraikela and Kharsawan and these with four pirs taken from Mayurbhanj were brought under direct management under the name of the Kolhan, and a Principal Assistant to the Governor-General's Agent was placed in charge of the new District, his title being changed to Deputy Commissioner after the passing of Act XX of 1854. There was no further disturbance until 1857, when the Porahat Raja rose in rebellion and a considerable section of Hos supported him.

By Bengal Regulation of 1833, Kolhan was made a 'non-regulation' area, which means that regulation in force in the other areas of Bengal were not applicable to the Kolhan. No sale, transfer or mortgage of any landed property was allowed without the permission of Governor-General's Agent. The basic assumption in the 1833 Bengal Regulation was that tribal dominated or scheduled areas are best governed by a paternalistic and personalized administration with special and fewer rules than those that apply to non-tribal areas.⁸⁹

Dhalbhum Estate of Singhbhum was originally part of Midnapore and when the District of the Jungle Mahals was broken up by Regulation XIII of 1833, it was included, with the majority of estates belonging to it, in the newly formed District of Manbhum. It was transferred to Singhbhum in 1846, but in 1876 some 45 outlying villages were again made over to Midnapore. Dhalbhum was permanently settled in

⁸⁸ Within the different regions of Chotanagpur-Kolhan, Dalbhum, Ranchi, Santhal Pargana, and among the different communities, there were historical variations in terms of 'customary' natural resource use, management and legal rights.

⁸⁹ Nandini Sundar, "Law, Policies and Practices in Jharkhand" in Sundar (ed.) *Legal Grounds: Natural Resources, Identity and the Law in Jharkhand*. (Delhi: Oxford University Press, 2009) pp 1-29

1800 for Rs 4,267 per annum, plus a police contribution of Rs 498. Porahat was a revenue free estate, but paid some amount as a police contribution. This estate, including its dependencies of Anandpur, Kera, Bandgaon and Chainpur were surveyed and settled in the first decade of twentieth century. The Kolhan Government estate was first settled in 1837 at a rate of 8 annas for every plough and the total assessment amounted to Rs 8,000. In 1853 this rate was doubled. In 1867 the estate was resettled after measurement for a term of thirty years, only embarked rice land was assessed, at a rate of 12 annas per acre, and the total land revenue demand was fixed at Rs 65,000. The major settlement operation took place in 1898. Uplands were assessed, for the first time, at a nominal rate of 2 annas per acre, and outsiders were made to pay double rate of assessment. The extension of cultivation occurred in large scale during last decades of nineteenth century.⁹⁰

Overview of the Chapters

The dissertation begins with an examination of the traditional forms of iron making in nineteenth-century India as a background to understand the modern 'iron and steel' industry. Chapter 2 deals with the nature of iron ore mining industry. It discusses the structural features of steel plants which work on the integrative mechanism as they try to capture 'captive mines' to secure their supply of raw materials. Political economy of steel production was marked by close collaboration of colonial government, princely states and private capitalists like Tatas. Most visible aspect of the assistance was in laying of railway networks to facilitate exploitation of minerals which is discussed as beginning of 'new circulatory regime'. Mining laws were revised by the beginning of twentieth century which greatly benefitted private entrepreneurs. Legality of land acquisition for mining was more complex in regions like Kolhan where special rules were there to prevent alienation of land of tribals. Colonial government was caught up between its paternalistic behavior towards the tribals and the utilitarian idea of mining as 'public good'. Land acquisitions were not without

⁹⁰ W. W Hunter, *Imperial Gazetteer of India* Vol. 23 (Oxford: Clarendon Press, 1908) pp. 9-10

resistance though it did not taken the form of open agitation. The emergence of steel as the symbol of national strength during Nehruvian economy is discussed in this chapter. Differential location of factories and mines were marked by different spatial practices of urban planning.

The Chapter 3 begins with a discussion of the process of agrarian expansion in Chotanagpur and different modes of mobility and migration in the region. Ethnic composition of the region is discussed along with social composition and modes of recruitment of labour in iron mines. In this chapter I have tried to place the industrial development of the region within wider social and political movements in the region to understand social movements as an organic whole. Industrial and agrarian agitations during 1920s were synchronous. I will show how TISCO management collaborated with the ruler of Sereikela State to restrict the influence of the militant trade union leader of Jamshedpur-Maneck Homi to prevent agitations of workers and tenants in their respective domains. What is really remarkable about Homi is that he did not restrict his sphere of influence only to industrial sector but also tried to unite peasants against oppressive taxes imposed by rulers of princely states. By looking into socio-religious movements among Hos of Singhbhum, Santhal Rebellion 1917 in Mayurbhanj and development of solidarity among Santhals and Hos around the question of language and script, I have shown how over the period of time the boundaries of ethnicity and community were constantly redefined by tribal groups of this region.

In Chapter 4, I begin with problems in understanding work process and workers' view point in the case of iron ore mines. In this chapter, I have tried to draw a picture of work and social conditions in iron ore mines by focusing on wage structure, 'morphology of accidents', drinking culture, working of mining regulations. By looking at the problem of protest and organization in these mines, I have tried to problematize the concepts of 'working class' and 'class consciousness' in this context.

Use of sources

When it comes to probing the history of the labour force in iron mines, our efforts are seriously restricted by disappointingly little relevant documentation. Underground work, risk factor, accidents and labour agitation necessitated regulation, control and administration of coal mines and the production of large archival material on underground mines like coal mines. Absence of these factors in the case of iron mines means lack of archival material to reconstruct its history. This thesis draws on several types of sources: published government reports like labour reports, administrative reports, census reports, settlement reports and gazetteers. Use of archival source is restricted to discussion of agrarian movements of 1920s in south chotanagpur and santhal rebellion of 1917 in Mayurbhanj. Beside these I have used missionary records, and ethnographic works to understand socio-economic life in the region as well to reconstruct certain features of miners' life and socio-religious movements during the period of our analysis.

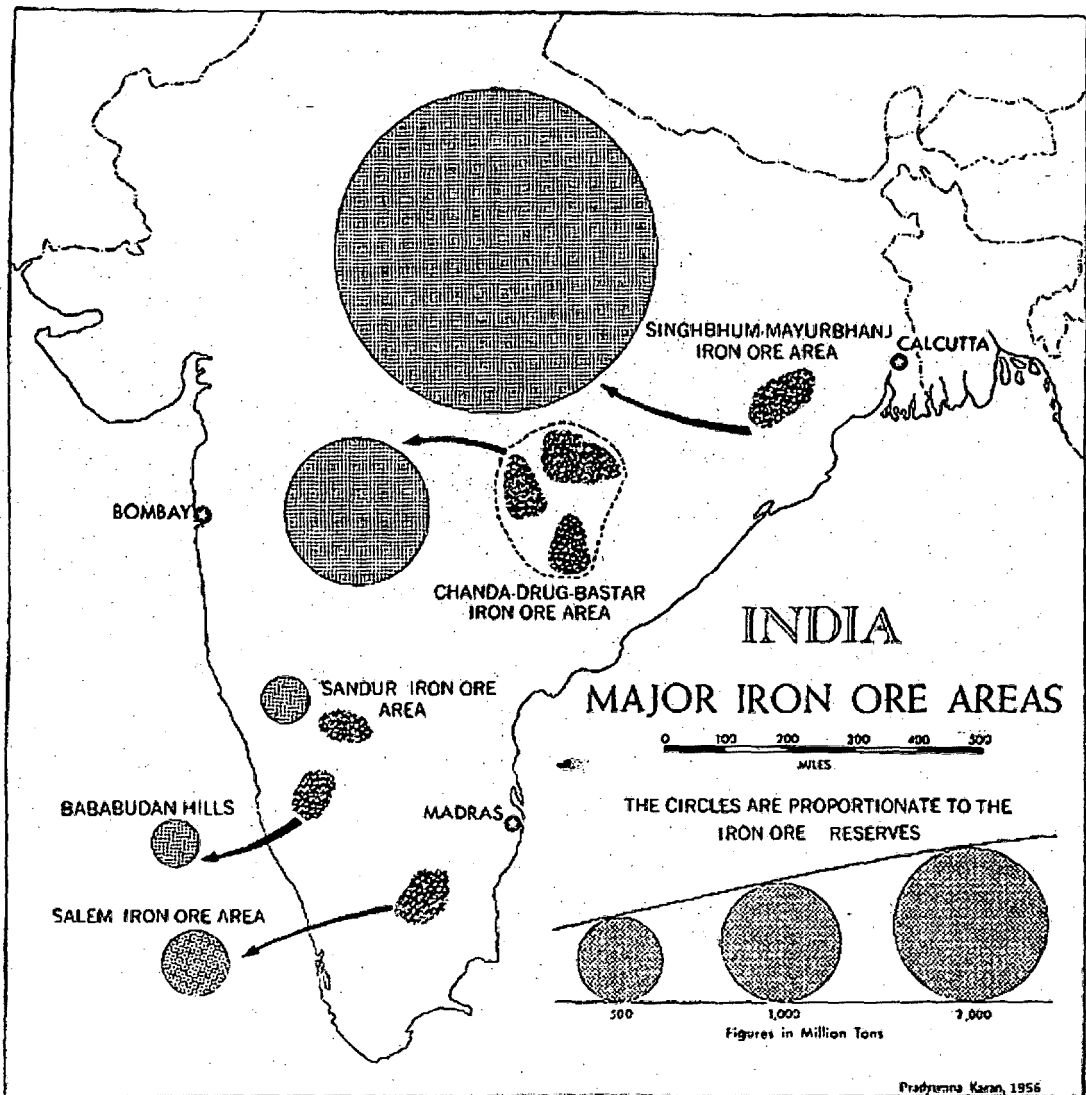


FIG. 1. Iron ore areas of India. (Source: M. S. Krishnan, *Iron-Ore, Iron and Steel*. Bulletins of the Geological Survey of India, Series A—Economic Geology, No. 9, 1954.)

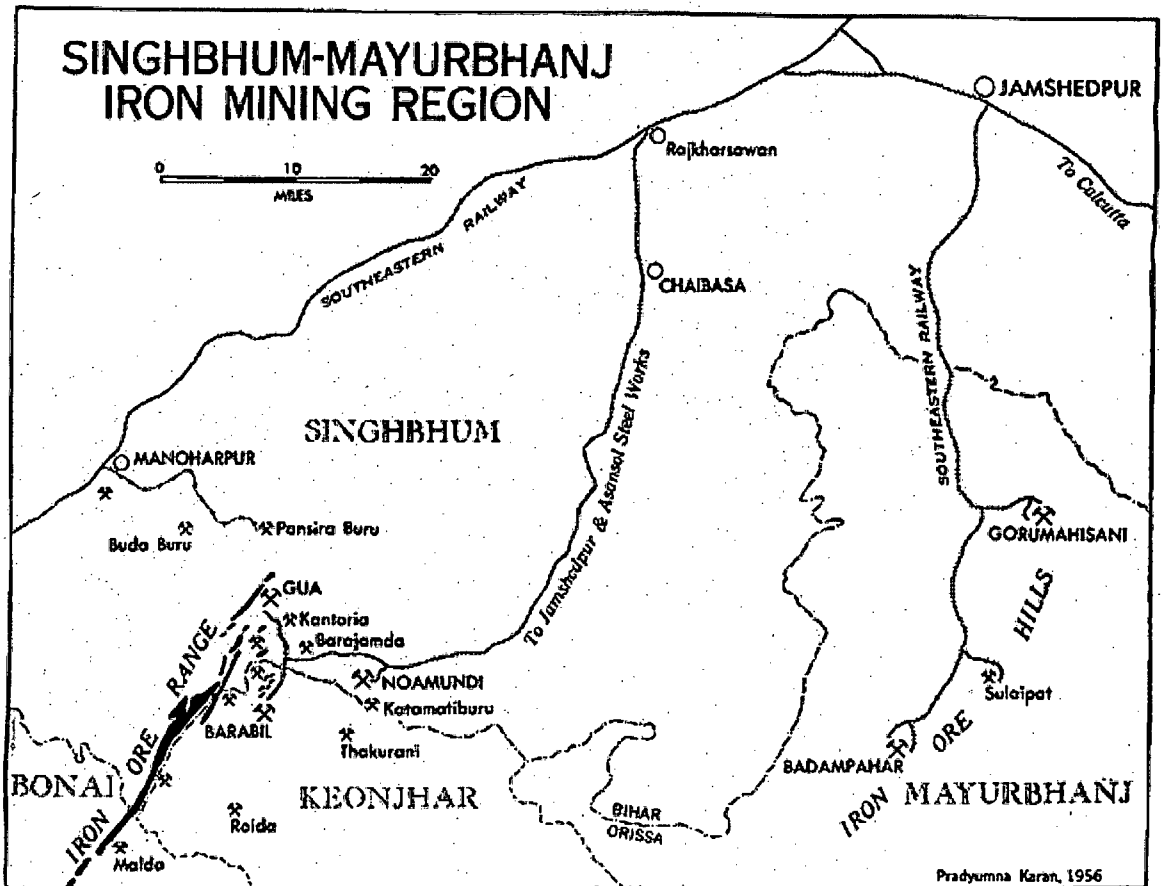


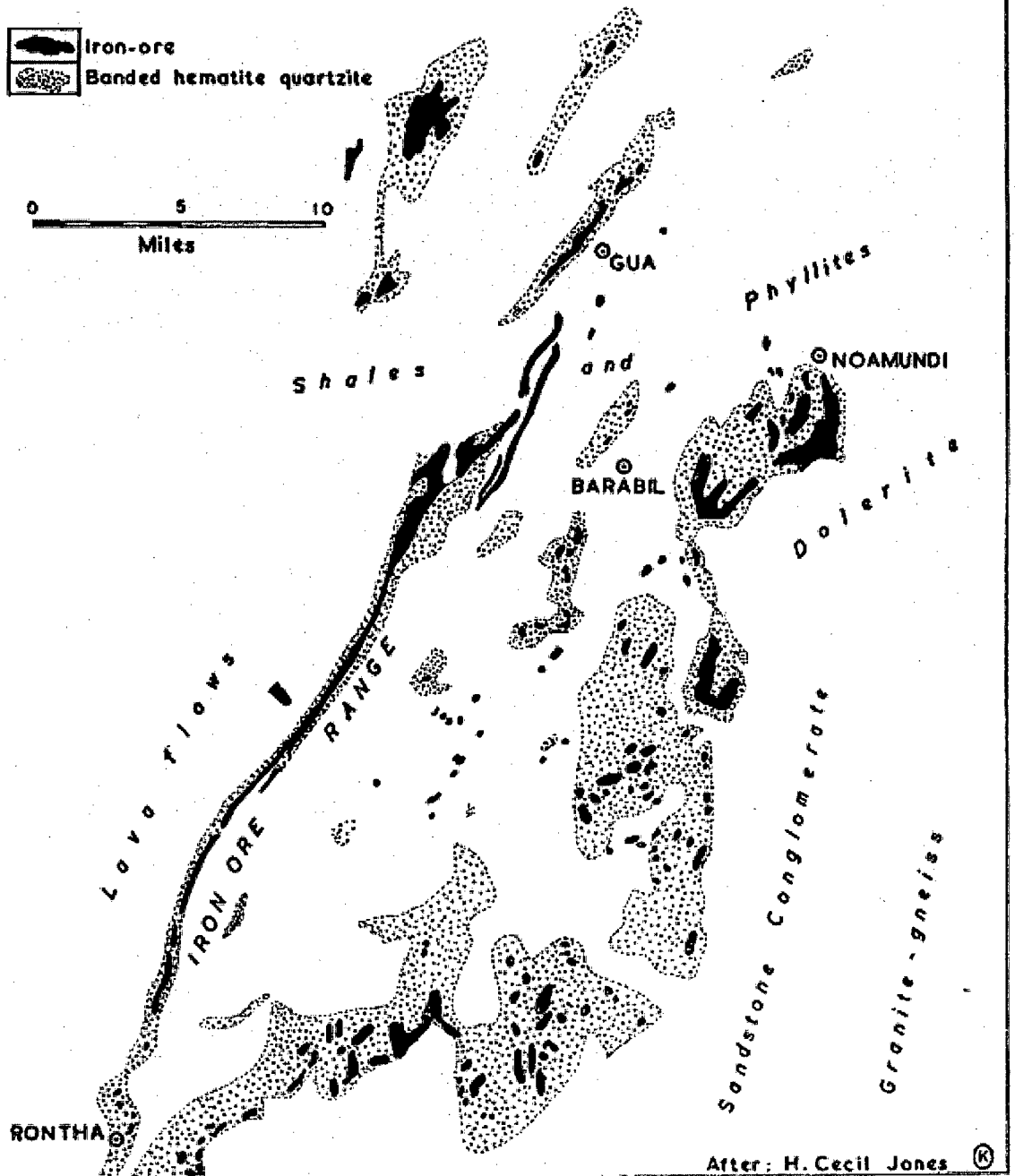
FIG. 2. Principal iron mines in Singhbhum-Mayurbhanj Region. (Source: *Directory of Indian Mines and Metals*. Compiled by P. K. Gosh. Published by the Mining, Geological and Metallurgical Institute of India, 1952.)

GEOLOGY OF THE IRON ORE RANGE

MANOHARPUR

Iron-ore
Banded hematite quartzite

0 5 10
Miles



After: H. Cecil Jones (R)

FIG. 3. Geology of the Iron Ore Range, Singhbhum-Mayurbhanj Region.

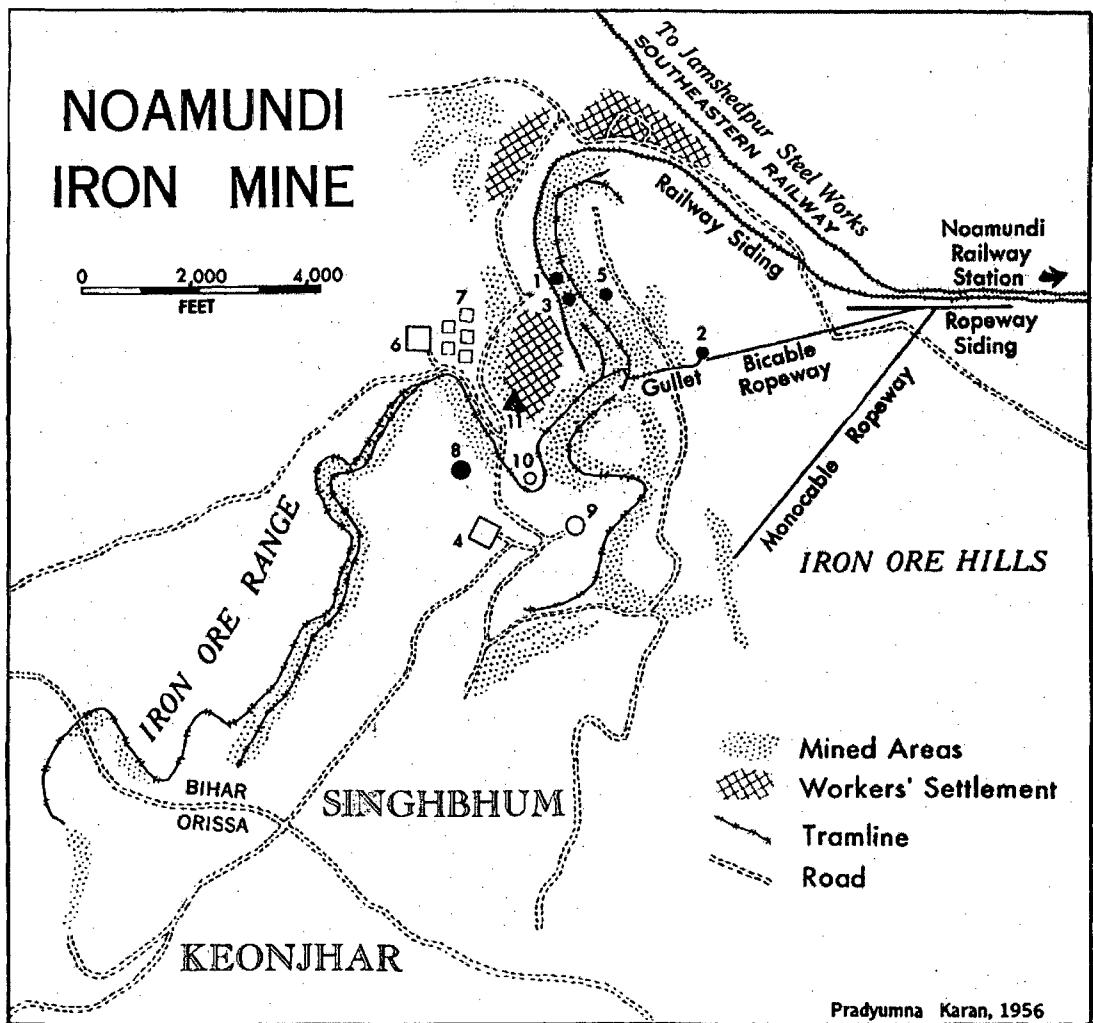


Fig.4. Sketch map of Noamundi Iron Mine. Numbers refer as follows: (1) loading plant and crusher; (2) washing plant; (3) workshop; (4) mine director's bungalow; (5) office; (6) guest house; (7) Balijor rest house; (8) water works; (9) quartzite tank for locomotive water supply; (10) swimming pool; (11) hospital (Based on Pradyumna P. Karan's field reconnaissance during 1953).

Source: Pradyumna P. Karan, "Iron Mining Industry in Singhbhum-Mayurbhanj Region of India", *Economic Geography*, 33, 4 (1957)



Patharia Agaria bringing ore out of the pit.

Figure 5 Agaria digging iron ore out of pit

Source: Verrier Elwin, *The Agaria* (Calcutta: Oxford University Press, 1942)

Chapter 2 Mining Ore Producing Steel

It was in the Iron-fields of 'South Chotanagpur' in the province of Bihar and Orissa, that modern Iron Ore mining industry emerged in the first half of twentieth century. The major deposits of iron-ore was/is evenly divided between the Kolhan Government Estate of Singhbhum district and the adjoining feudatory States of Mayurbhanj, Keonjhar and Bonai. The deposits of the region were found to be remarkable for enormous quantities of extremely rich ore, which was declared by the contemporary geologists to be "amongst largest and richest in the world".¹ Ore of the region was estimated to have very high iron content of 60 percent and above. Samples from the better parts of the ore-deposits yielded as much as 68-69 percent iron. Percentage of impurities such as sulphur and phosphorous was relatively low. As a result production cost of pig-iron was low in India. The iron-ore usually occurred at or near the top of the hills or mountain ranges, but near Jamda in the south of the Singhbhum district and in the parts of the Keonjhar State it was often found at very low levels and in some case in the plains itself. Large quantities of 'float-ore' usually occurred with the ore-bodies. Practically whole of the ore in this region was haematite and no magnetite occurred in the ore-bodies. The prospecting and mining operations carried out by the various companies over the years indicated that the solid haematite often gave place to an unconsolidated micaceous powdery variety at varying depths from 80 to 100 feet below the surface.²

Development of iron ore mining industry in 'South Chotanagpur' was the result of immediate requirement of raw material for emerging 'Iron and Steel' industry. This emergence of modern extractive industry was facilitated by active cooperation between indigenous capitalists like Tatas, Colonial state and Princely States and led to corresponding decline in indigenous iron smelting industry. During

¹ "Quinquennial Review of the Mineral Production of India for the Years 1929 to 1933", *Records of the Geological Survey of India* Vol. LXX, October, 1935 pp.141-144

² L. Leigh Fermor, "The Mineral Resources of Bihar and Orissa", *Records of the Geological Survey of India* Vol. LIII, 1921 PP. 271-280. H. Cecil Jones, "The Iron-Ores of Singhbhum and Orissa", *Records of the Geological Survey of India* Vol. LIV, 1923 pp.203-214

nineteenth century most efforts of introducing modern methods of smelting failed due to lack of government support in terms of mining concessions and railway networks. By the beginning of twentieth century, however the situation had changed as colonial government was more inclined towards private capitalists. Modern 'Iron and Steel' Industry worked on integrative mechanism as private companies tried to capture 'Captive mines' to secure their supply of ore for production of steel, which often ended in search for new ore deposits and hence opening of new mines. There was 'Westward Shift' of mining frontier from Mayurbhanj to more richer deposits of Singhbhum starting from mid 1920s. Iron ore mining had no independent existence during colonial period, it was subsumed under broader category of 'Iron and steel', hence it was not conceived as a separate industry till very late. Iron ore being raw material its ultimate fate was in its conversion to finished products-'pig iron' and steel. This partly explains the lack of relevant information about this industry on crucial aspects of its working and labour conditions. Production of ore during colonial period was mainly for internal consumption in steel mills. Export of iron ore became crucial only during planned economy of Nehruvian era when 'targets' were set for certain amount of production every year. Differential location and operation of capitalism in factories and mines were marked by different spatial practices in both the sites. While steel mills gave rise to rapid urbanization and hence need for urban planning, mines were left unplanned, they remained in transient phase as operation of capitalism demanded that mines be worked to exhaustion and finally abandoned.

Traditional Forms of Iron Making in Nineteenth Century

In this section I have tried to situate capitalist mode of mining of iron ore in the background of traditional methods of iron making (mining, smelting and smithy) by tribal communities, which was a vibrant economic process till late nineteenth century and was slowly displaced by 'modern Iron and Steel' industry. We have to differentiate the mining activities as practiced by traditional indigenous communities till late nineteenth century and the vast, well-organized capitalist mode of extraction of minerals that characterized 'modern mining'. Thus 'mining project' that began in

late nineteenth century was not just extraction of minerals. It encompassed the entire set of institutions that were responsible for sustaining mining activity- *capital and labour intensive economies*. Nineteenth century saw mad scramble for minerals. If there is a single theme that marked 'modern mining', is its scale of operation – the increased scale of exploration, labour intensified mining, extraction and refining, increase in ore movement. Tracing the history of mining, Lewis Mumford points out that from the very beginning men have been engaged in mining and quarrying and till modern times 'mining remained technically one of the crudest of occupations, the pick and hammer were its principal tools'. He further points the way primitive mining underwent considerable specialization under the pressure of commerce and war:

The primitive mining and the primitive metallurgy goes on as it had existed for long in the past, but presently, the simple arts of the miner and the smith break up into a score of occupations. This process proceeds at an accelerating speed as commerce expands andas war becomes more mechanized and the demand for artillery, and for the sinews of war expands.³

In India traditionally, iron-making retained its links with the mining of ore, and concentrated in regions that had supplies of iron ore and charcoal occurring together. Because of the lack of a large market for ore, mining of ore occurred on a small scale, on the surface by the smelters. Iron workers-Smelters and Blacksmiths, were located near the ores, usually found working within traditional institutions such as the household and were operating in small-scale units. Smelters supplied for a local market, usually for agricultural tools. The art of smelting iron with the help of charcoal was known to the people of the areas where iron ore was found, and as long as iron was used only for agricultural implements and traditional weapons there was a sufficient and probably cheap supply of this metal available, because the traditional communities who did the iron smelting bartered away their product. The iron they produced was soft and malleable and therefore very well suited for the purpose for which it was required in India. The basic problem of the Indian-smelters was that they relied on charcoal. This fuel contributed to the soft and malleable quality of the indigenous iron but it could not provide for the hardness needed for construction of

³ Lewis Mumford, *Technics and Civilization* (London: Routledge and Kegan Paul, 1967) pp. 65

railways. Furthermore the supply of charcoal was limited. But the shift to the use of coal (of which there were such rich deposits) was never made, which would have fundamentally changed the technology of Indian smelters.⁴

Artisanal manufacturing of iron in the nineteenth century was predominantly done by semi-nomadic itinerant communities like *Agarias* and *Lohars*, who performed mining, smelting and smithy in the ore regions. Groups tended to be itinerant for two reasons. Firstly, charcoal had to be procured from a wide area. Secondly, being sometimes blacksmiths themselves, their market was dispersed over many villages. *Agarias* were the tribal group who were miners as well smelters.

Verrier Elwin is perhaps the only anthropologist who recorded the process of mining among the primitive smelters and the rituals, beliefs associated with the process with great sensitivity. Otherwise in the most cases colonial officials were dismissive of the process, their attention being focused more on the process of smelting. Elwin describes the various beliefs prevalent among *Agaria*, through which they discovered the best places to dig for iron. Sometimes *Lohasur* sent them a dream- in the old days he came as a little child and indicated the place just as he shows them where to build a new smithy. They then went to find the place. *Agaria* could recognize by the colour of the soil, a good digging site as very often ore was found on surface.⁵

In case of *Asurs* of *Netarhat* in *Chotanagpur*, *K.K. Leuva* found that by observation and experience they were able to locate a site for the ores. They discover the ore by observing some of it on the surface, and then follow veins or beds which seem to be nearly horizontal. The veins are from one to five cubits thick and never seem to extend in one direction. He dismisses the role of dream in the guiding the location for the search of ore and describes it as natural feeling of worry of human being if one's 'economic activities do not produce the desired result'. He ascribes this

⁴ D. Rothermund, "The Coalfield-An Enclave in a Backward Region" in Rothermund and Wadhwa (eds.) *Zamindars, Mines and Peasants: Studies in the History of an Indian Coalfield and its Rural Hinterland* (Delhi: Manohar, 1978) pp. 1-2

⁵ Verrier Elwin, *The Agaria* (Calcutta: Oxford University Press, 1942) pp. 173-77

to the general shortage of iron ore, in search of which these itinerant groups kept moving from one place to another. Since on this raw material their entire occupation depended, inability to locate proper ore required for smelting, created anxiety among them.⁶

The conception of ore was deeply entrenched in their myths, idioms and world-view as it played intimate role in their work process. Let us take following example:

Just as rats live in their holes and come to the surface sometimes, so Lohasur lives deep in the earth and comes burrowing his way to the surface and we find the pit near the iron- holes.

The iron comes up to graze. Lohasur comes too as an Ahir comes with cattle and when the Agaria go to find a pit and call on Lohasur, he brings one stone to show them. They don't notice it at first and then he brings a whole pile and they realise what it is.⁷

The pits of iron ore worked by Agarias were small, generally not much deeper and usually situated in impenetrable jungle. It was worked mostly by men, though in Mandla women also accompanied the group and spent their time sorting and cleaning the stones. Searching for ore and actual mining of ore was highly ritualistic. Before working out a new pit, the party observed strict chastity the preceding night. Each steps towards reaching the ore pit and actual digging, were marked by some rites and rituals and propitiation to deities like Lohasur:

Lohasur Baba, we take refuge in thee. O Mother that givest increase we seek refuge in thee. From *shortage may there be double*. Twelve dozen times twelve dozen generation after generation depend on thee. Lohasur Baba we take refuge in thee. Heed not what others say. We dig earth may it bear gold. I take the name of Agar Sai, Sabar Sai, Logundi Raja their son, from whom I spring. Show me thy greatness. Then will I worship thee.

Go and see! Baghesur Pat, Nagbansi Pat, go before and stop the enemy in the way. Loha Sumarni, Lohasur Baba worship where the virgin iron is born. Go and see!

⁶ K.K Leuva, *The Asur: A Study of Primitive Iron-Smelters* (Delhi: Bharatiya Adimjati Sevak Sangh, 1963) pp. 147

⁷ Elwin *The Agaria* pp.173-77

Logundi Raja has a bow and a red arrow. Kariya Kuar shoots it, where it falls there the iron pit is found. This is the order of Lohasur Baba.

Accept this Dharti Mata, Lohasur Bhawani! Help us, Dharti Mata, Lohasur Bhawani! Help us, Dharti Mata, Banaspati Maharaj. If we get good ore, I will give in the third year chandua pig and a black chick.⁸

After these preliminary rituals, one of the Agarias got into the pit and started digging with his *kudari*. A basket was handed down to him and he fills it with earth and stones and heaved it up to others. They emptied it and the ore sorted out from the contents. The stones were cleaned and sorted on the spot and carefully parched into baskets. The process continued till they had enough to carry the ore back home. Elwin argues that there was absence of private ownership or village ownership in the pits. In one place, he found three different villagers coming to dig in the same place.⁹

The mining efforts of the Agarias like the technique of their smelting were criticized by the colonial government for their use of soft ore. C.S Fox, Director of Geological Survey of India, commented that the quality of material/ore used by Agarias, “would not even be glanced at by an iron-smelter in Europe”, for it required far too much picking and breaking. He suggested that if Agaria furnaces were to be improved, they have to “extend the range of ores that they could use”.¹⁰ The native technology was often projected as inferior to European technology in these discussions. This is how P.N Bose describes his encounter with primitive smelters during geological exploration in Mayurbhanj:

There are a good many families of smelters in the [region].. and the iron they turn out is held in high estimation by the people. But the furnaces are the smallest and the bellows the least powerful of any I have seen in use anywhere in India. The smelters, therefore, select the softest ores, which are generally very far from the best. When I showed them a few pieces of magnetite, they pronounced these to be *mere stones and quite useless as iron ores!*¹¹

⁸ Ibid

⁹ Ibid

¹⁰ Cited in Elwin *Agaria* pp. 76-77

¹¹ P. N Bose, “Notes on the Geology and Mineral Resources of Mayurbhanj”, *Records of the Geological Survey of India* Vol. XXXI, 1904 pp.167-173

This shows that conception of ore of indigenous communities of India was in sharp opposition to that of modern geologists. The concept of 'useful ore' differed between Indian Iron smelters and that of European Iron workers. From the above description it is clear that what modern geologists considered as 'Iron ore', for most of the 'primitive' iron smelters these were 'mere stones'. Their preference was different which was attuned to local circumstances and demand. Soft ore was used to produce malleable iron used to make agricultural implements.

What was the situation in Singhbhum. Iron also played significant role in lives of Hos. One of the mountain in Singhbhum was named Bichaburu which meant-The Iron Mountain. Gerald Dickson describes this during his travel and tour around Saranda pir of Kolhan,

...the Bishop and I re-cross the Koel [river] into Anandpur in order to revisit the village of Rangamati.After prayers we return and cannot but admire the great hill Bichaburu on the northern side of the Koel. Bichaburu means the Iron Mountain. It is now forest clad to the top, but doubtless one day it will be exploited for its mineral wealth.¹²

It is probable that Hos knew the existence of iron ore in the hills of Singhbhum. But we do not know how they conceived these ores. Their lifestyles as recorded by colonial anthropologists do not show any connection with iron-ore.

The indigenous furnaces, built of mud and stone, were five to six feet in height and were thicker at the base (three to four feet in diameter) and tapered towards the top. The inside of the furnace-the crucible, was a truncated cone measuring about fourteen inches in diameter at the base and four inches at the top. The inside wall of the crucible was lined with cowdung and mud. The iron ore was broken into very small pieces, mixed with charcoal in proportion of 1:5 and poured into the heated furnace from the top. The blast, produced by bellows worked manually, was continued for twelve hours without break. After closing the tuyere holes the furnace was tapped to let off the slag. The wall of the furnace was broken open and the metal,

¹² Diary of Anglican Missionary Gerald Dickson, St. Augustines' Church, Manoharpur. His entry for 22nd Feb. 1911

in the form of a lump or cinder, was removed and hammered and rolled about on the sun-hardened earth. The entire operation which took about 14 to 16 hours produced only twenty to twenty-five pounds of impure iron.¹³

Sabyasachi Bhattacharya has studied the various efforts to improve the indigenous methods of iron smelting during 1870s and the social and cultural constraints on technological innovation and economic development in this case.¹⁴ By doing so he argues for bridging the gap between history and anthropology and the use of conceptual tools of anthropology and sociology to study economic history. Slow diffusion or outright rejection of new technology introduced by colonial authorities was explained by contemporary observers in terms of “native character” or “primitive inertia”. Bhattacharya shows that there were two schools of thought about improving iron manufacture in nineteenth century India. E.T Dalton¹⁵, the Commissioner of Chotanagpur, who combined in himself the role of administrator and anthropologist, represented the group which believed that western techniques should be introduced at once instead of making piece-meal improvements in the indigenous method of production. In 1872 he wrote, “I believe it would answer better to start civilized methods at once”.¹⁶ The other school of thought was represented by British mining engineers employed in Geological survey of India like M. Fryar, J. Donaldson and W. Olpherts. They were proponents of “engrafting” modern techniques on the indigenous methods by slow degrees. It was expected that engrafting of European techniques on Indian methods, “ascending gradually in magnitude of works, from elementary appliances, to the higher and more expensive mechanisms”, would be “a process of sound education” to the native workmen. The mining engineers believed that the demonstration effect would spread new techniques more rapidly than any formal training or propaganda. The technical improvement suggested by W. Olpherts was the replacement of the belows with a fan, worked by a 10-horse-power engine. Such a fan

¹³ Sabyasachi Bhattacharya “Cultural and Social Constraints on Technological Innovation and Economic Development: Some Case Studies”, *Indian Economic and Social History Review* Vol.3 No.3 (1966) pp. 252-253 See also Hiteshranjan Sanyal “The Indigenous Iron Industry of Birbhum”, *Indian Economic and Social History Review* Vol.5 No.1 (1968) pp.101-108

¹⁴ Bhattacharya “Cultural and Social Constraints ”

¹⁵ Dalton was also the author of celebrated *Descriptive Ethnography of Bengal*

¹⁶ Cited in Bhattacharya, “Cultural and Social Constraints” pp. 253

would provide blast simultaneously to 16 furnaces which would be placed in a row along the air-channel from the fan. He also suggested improvement in method of iron work by hammering by importing steam powered double acting hammers. J. Donaldson suggested that iron bloom might be procured from the native iron smelters and worked in government workshops into simple agricultural implements and household items which would be easily marketable. These were suggestions of minor improvements based on the theory of "engrafting". With these improvements it was expected to increase output and save labour by seventy-five percent. These efforts failed completely.¹⁷

The problem with Olpherts' innovation was that it would have disturbed the existing work-groups. The supply of blast to the indigenous furnace was a labourious process and the mechanical fan would have saved this trouble. But smelters and blacksmiths worked as a family unit. This is evident from the traditional folk songs of the Agarias. In one of the love song the boy sings to the girl: "Come to the forest and cut a green tree. Come to the furnace and blow the bellows for me". Agaria folk-songs also described companionship in work: "She presses down the bellows with strength of her heels. He wields the hammer with all his might".¹⁸ The new technique would disrupt the pattern of relationship established as a result of the family functioning as a work group within a system of well defined division of labour. Moreover, the use of mechanical fan and hammers would not have been feasible unless a dozen or more furnaces were worked in the same place. Thus large number of iron smelters would have to work in one workshop. Agarias were unaccustomed to such mode of working. Their way of life was marked by constant mobility. They used to build their furnaces in their native jungles wherever iron ore was easily available and they often abandoned the mud and stone furnace and moved elsewhere in search of ore and fuel.¹⁹

Donaldson's proposal of procurement of iron bloom from the Agarias for manufacture of agricultural implements similarly would have disturbed the traditional

¹⁷ Ibid

¹⁸ These folk songs were collected and translated by Verrier Elwin. See his *The Agaria* pp. 169

¹⁹ Bhattacharya, "Cultural and Social Constraints"

economic relationships. In Central Province and neighbouring districts Agarias and Lohars or blacksmiths were bound in a traditionally patterned reciprocal relationship. Agarias used to pass on the iron bloom to Lohars. Agarias being in a habit of dealing with Lohars would have resisted new customers. And Lohars who had influence over Agarias would have done anything to terrain their monopoly over them. Also as part of village social network, Lohars in exchange of annual contribution of rice from each cultivator, repaired agricultural implements whenever necessary. In some places even Agarias also used to repair agricultural implements receiving grains in return. In such complex networks of social and economic relationships, government sponsored workshops to obtain crude iron from Agarias.²⁰

Indian craftsmanship was certainly hereditary and almost every process was reinforced by categorical imperatives derived from myths. Among the Agaria the methods of the craft were ritualized. They were so “ignorant and superstitious”, wrote E.T Dalton that there was “little hope of their being induced to alter the system which they have worked on since the use of the metal first discovered”.²¹ As we saw in preceding paragraph how every detail of the Agaria operation such as mining of ore, making of charcoal, the manufacture of bellows, the use of a charge without flux was sanctified and established in terms of ancient myths. No operation was complete without invocation to the deities, Lohasur Baba, Kolesur, Agysur and their ancestors, abstinence from sexual intercourse on the eve of important operations, magical tests for finding whether omens were good or not, use of dream and divination for locating iron ore, recitation of mantras before the act of mining to obtain good iron ore etc. were intrinsic part of their economic and social life. The technique was fully entrenched in their myths, therefore it was unquestionable. The myths surrounding Agaria craftsmanship and ‘primitive inertia’ also retarded the diffusion of technical innovation. But as Bhattacharya points out, the routinization of craft operations ensured continuity in skill transmission. It was an essential means of transmission in the absence of literacy and institutionalized technical training outside the caste-kinship network. Moreover, there was sometimes substratum of rationality, although

²⁰ Ibid

²¹ Cited in Sabyasachi Bhattacharya, “Cultural and Social Constraints” pp. 257

it was much overlaid with myths. The myths are the particular idiom of a culture and a lack of empathy makes it difficult for us to judge their meaning in the culture-system to which myths are integral.²²

Among the norms which controlled the peasant or the artisan the most important one was an ethical code inherent in the traditionally patterned interdependence. Bhattacharya shows how the Agarias were unwilling to break up their traditional relationship with Lohars whom they supplied iron bloom. The Lohars and Agarias were virtually village servants in central India, receiving portions of the harvest and rendering services to the cultivators. The economic relationship between the Agarias and the Lohars was not as highly developed as the *jajmani* system. But in both the system we notice some family resemblances in the bases of reciprocity in the discharge of functions of each group. The market forces had an eroding effect on this traditional relationship. The network of economic interdependence gave the village artisan a security that sometimes outweighed economic incentives. Also there were examples of intricate interconnections between techniques.

Also a single innovation had numerous and almost unforeseeable consequences and upset a precarious equilibrium. Sabyasachi Bhattacharya shows that the Port Novo iron-ploughs did not sell in 1840's because of its heavy weight, the low traction power of the cattle, inadequate, feeding of the cattle, problem of carrying the heavy plough to the field. At the sheer subsistence level the necessity of making maximal use of everything produced on the soil made innovation a complex problem, for the primary displacement gave rise to many secondary displacements and the overall result might make the innovation uneconomic from the farm-unit's standpoint. Bhattacharya points out, an inadequate appreciation of secondary displacements often led to everything being attributed to the 'native character' or 'preindustrial mentality'. He suggests innovation in the sphere of productive activity as a "longitudinal wave starting with certain inputs and leading to a predictable result" and the repercussion of introduction of technological innovation in traditional societies as "spherical waves which touch society at remote and widely dispersed

²² Ibid

points and cause disturbances which are almost unforeseeable". As such, he argues for multi-dimensionality in all social behavior including economic activity in folk societies of which Agaria way of life was an example.²³

By the late nineteenth century, however, the craft of iron-smelting was in decline. The new Forest regulations prevented the people from entering the Reserved Forests. As such, wood for charcoal became scarce. Defying forest laws, they often entered the forest secretly and collected wood, but this could not sustain their occupation for long. In some areas where the government did grant access to the forests, the smelters had to pay high tax to the forest department for every furnace used.²⁴

The effect of knowledge transfer on indigenous methods of iron making was not homogenous. It had differential effect on smelting and smithy-while smelting declined, methods of smithy improved due to new inputs. Tirthankar Roy explores the link between international economic integration and technological capability in colonial India by taking the example of iron industry in nineteenth century. Many new ideas and skills flowed into India from Europe during nineteenth century, but not all met with commercial success. Roy uses the term 'globalization' for this flow of ideas and skill from Europe to India. He uses the concept of 'globalization' in two senses- as historical process of rapidly increasing international transactions in commodity, labour and capital that characterized the nineteenth century and as a theoretical model to understand the effect of international economic integration upon world inequality. He suggests that this process of 'globalization' had mixed and differentiated effect on Indian Industrial capability. Commodity and technology flows weakened some traditional occupations, foreclosed some potentially beneficial choices, and strengthened other spheres of operation by stimulating learning and expanding choices. The nature of the impact of new knowledge varied according to costs and availability of other factors of production. In those fields in which the costs of complementary factors were relatively low, the chance of success was higher. This

²³ Ibid

²⁴ Verrier Elwin, *The Agaria*, (Calcutta: Oxford, 1942)

condition was present in the craft of the blacksmith, in which the main complementary input was abundant craftsmanship, but on the other hand, these conditions were slow to develop in iron-smelting, where the costs of fuel, labour, capital and carriage of ore were initially high. Mining and mass transportation were relatively undeveloped and costly because of the terrain and unevenness of landscape. In short, whereas large-scale smelting was relatively capital-intensive process, smithy was not²⁵. Roy argues that factor costs, as distinct from political variables, explain the link between technological exchange and industrial development better. The outcome of knowledge transfer was not uniform, but a mixed one, because factor costs were sometimes significantly large and sometimes relatively low. The role of the state in the early nineteenth century was evidently minimal, among other reasons because many actors within the state machine understood the barriers that private capitalists needed to overcome. By the late nineteenth century, the prospect of effective state intervention increased as the cost of accessing machines, material and manpower declined. The only remaining barrier to the success of large-scale enterprise was the cost of capital. In this scenario, the attempt of the Tatas to set up a steel factory in 'South Chotanagpur' was happening under favourable circumstances.²⁶

While the indigenous iron smelting industry got marginalized a new extractive mining industry developed in Bihar and Orissa iron field. The indigenous iron industry was source of employment for the indigenous communities, it was decentralized in many small-scale workshops and it was geared to indigenous demand. The new mining industry was imposed on the area, the local people were just marginally involved in it. It was concentrated in major ironfield and it became an isolated 'enclave'. This set the future course of economic development in South Chotanagpur. A threshold of persistent economic dualism separated such enclave from their backward rural environment. In contrast with urban concentration in Steel

²⁵ Tirthankar Roy "Did Globalization aid Industrial Development in Colonial India? A study of Knowledge Transfer in the Iron Industry" *Indian Economic and Social History Review* 46,4 (2009) pp. 579-613

²⁶Ibid

city of Jamshedpur, such enclaves had very tenuous links with their environment because the dominant economic activity here derived from exogenous sources.²⁷

Geological Explorations and the Expansion of Mining Frontier

The Bihar and Orissa iron-ore field was geologically mapped in various phases during first half of twentieth century. In Mayurbhanj, the Gorumahisani deposit was opened in 1910, Sulaipat in 1915 and Badampahar in 1922. In Singhbhum, Manoharpur mines started in 1916, followed by Gua in 1923 and Noamundi in 1925. Thus we can see that in comparison to coal mines, iron mines are of much later phenomenon. Gorumahisani was the first mine to be exploited by the Tatas. Gorumahisani mine along with other two mines of Mayurbhanj, supplied practically the whole of the requirement of the iron ore in Jamshedpur Steel Plant before the opening of Noamundi mine in Singhbhum.

Celebrated geologist Valentine Ball, during his geological expedition to Singhbhum and adjoining princely states in second half of nineteenth century was drawn more towards the existence of ancient copper mines in Singhbhum, the traces of whose ancient excavations, he found in thick jungles and on the top of hills of the district. His curiosity was aroused as to, "who the ancient miners could have been who... left such imperishable evidence of their skill". But he could not get satisfactory answer to his queries as, "no one could make the least suggestion as to who the miners were, and with regard to the age of the mines, the answers were that they had not been worked during the past...four or five generations"²⁸ He also recognized the auriferous nature of river basins of Singhbhum and pointed out *Ghasis* as traditional gold washers of Singhbhum. Though he did not mention anything regarding existence of flourishing native iron smelting industry in Singhbhum, he

²⁷ I have taken this concept of economic dualism and economic enclave from Dietmer Rothermund. See the introduction and chapter one of Rothermund and Wadhwa (eds.) *Zamindars, Mines and Peasants: Studies in the History of an Indian Coalfield and its Rural Hinterland* (Delhi: Manohar, 1978) pp. xix-xxi, 1-19

²⁸ Valentine Ball, *Jungle Life in India or the Journeys and Journals of an Indian Geologist* London, 1880 pp.167-168

found abundant ores of iron and manganese during his exploration.²⁹ He recognized the richness of mineral deposits of Singhbhum and argued that, “a great future may be in store for this country, [if] the project of connecting Calcutta with Nagpur in the central Province be ever carried out”.³⁰

It is clear from the Records of Geological Survey of India, that geologically iron deposits of Central Province were well mapped during nineteenth century mainly because of existence of a vibrant native iron smelting industry. And these deposits were held in high esteem by British geologists. Native communities of iron smelters like Agarias were constant source of ethnographic curiosity during nineteenth century, though they were denounced for their inferior technology and use of inferior ores. Bihar and Orissa Iron field had not been mapped by that time. Most of the geological discoveries had followed the traces of native mining communities. Unexpected set of historical events, however led the establishment of modern iron ore mining industry as well as Steel industry not in the geographical area of vibrant native iron smelters but in different geographical region of ‘South Chotanagpur’. We will see that this was due to locational factors responsible for establishment of Iron and Steel Industry.

It was Mr. P.N Bose, State Geologist of Mayurbhanj princely state whose sensational discovery of the extensive occurrence of rich iron ore in Gorumahisani hills in 1904, became the factor that decided for the location of Tata Steel Plant in Singhbhum, and placed Bihar and Orissa iron field in the geological map of India. This single event led Geological Survey of India to take Bihar and Orissa Iron field seriously and map it thoroughly. Detailed geological explorations were conducted not only by Geological Survey of India but by geologists of private companies like Tatas in the first half of twentieth century. Tata’s attempts of geological exploration were directed towards capture of ‘Captive mines’ for secure reserve of iron ore. It was these attempts of Tatas that led to the discovery of Noamundi mines in Singhbhum

²⁹ During nineteenth century most contemporary observers’ attention was drawn towards vibrant native smelting industry in Palamau district of Chotanagpur. Valentine Ball gives detailed description of Palamau works. Published monographs on native iron works don’t give spatial distribution of this native industry throughout Chotanagpur. In case of Bengal see E. R. Watson, *A Monograph on Iron and Steel Work in the Province of Bengal*, (Calcutta: Bengal Secretariat Book Depot, 1907)

³⁰ Ball (1880) pp.166. Valentine Ball’s expectation got fulfilled as Bengal Nagpur Railway was extended to Singhbhum in the last decade of nineteenth century.

and Joda mines in Keonjhar princely state. And these discoveries of richer deposits shifted the focus of iron ore mining from Mayurbhanj towards Singhbhum-Keonjhar-Bonai, during 1930s and 40s. Discoveries of iron ore in the southern parts of Singhbhum resulted in a large number of applications for prospecting licenses and mining leases. Government found it important to geologically examine the 'iron belt'. H.C Jones who was engaged in this investigation found that the iron ore usually occurs at or near the top of hill, the most important being the range running from 3miles south west of Gua to the Kolhan- Keonjhar boundary a distance of about 10 miles. Jones found that good iron ore formed the top of this range of hills almost without a break.³¹

P.N Bose had published his findings in the Records of Geological Survey of India and he informed J.N Tata about his geological exploration, who by that time was looking for a suitable location for the establishment of the steel factory.³² Subsequently, on the possibility of these ores being suitable for the proposed iron and steel works, they were reexamined by Messrs. C.P. Perin and C.M. Weld, who arranged for detailed prospecting rights after securing prospecting rights from the Maharajah. A subsequent examination of the ground by W. Selkirk demonstrated the existence of sufficient ore to warrant operations on a large scale. The Tatas negotiated with the Maharaja of Mayurbhanj, Sriram Chandra Bhanja Deo, for the lease agreement in which P.N Bose played a very important role. Bose wrote in 1933:

³¹ For detailed geological description of Singhbhum and Orissa Iron Belt, see H. Cecil Jones, "Iron Ores of Singhbhum and Orissa", *Records of Geological Survey of India* Vol. LIV, 1923. J. A Dunn and A.K Dey, "The Geology and Petrology of Eastern Singhbhum and Surrounding Area", *Memoirs of Geological Survey of India*, Vol. LXIX, Part 2.

³² P. N Bose, "Notes on the Geology and Mineral Resources of Mayurbhanj", *Records of the Geological Survey of India* Vol. XXXI, 1904 pp.167-173. It is important to note that both the important discoveries of Dalli-Rajhara in Central Province and that in Mayurbhanj were made by P.N Bose. Both these discoveries led to establishment of steel plant in those place. Dalli-Rajhara deposits became the site of Bhilai Steel Plant in post colonial period. P. N Bose was associated with Geological Survey of India. But due to his association with nationalist politics, did not get promotion beyond the rank of Deputy Superintendent. In 1903 he resigned from his post in GSI and took the role of adviser to Mayurbhanj Princely State, where he negotiated the deal of leasing the iron deposit of Mayurbhanj to TISCO. Biographical details of P.N Bose can be found in " Parmathanath Bose and Indian Geology", *The Quarterly Review of Historical Studies*, Institute of Historical Studies, Kolkata Vol. XLVI No.3 &4

The Maharaja of Mayurbhanj left the settlement of the terms and conditions which led to the foundation of Tata Iron and Steel Company to me and I did my best to arrange them so as to be advantageous to it as well as the state. Considering that the TISCO was to be a new industrial venture for India, I readily adopted the suggestion of Mr. Perin... to fix the royalty on a sliding scale.³³

In 1910, the Maharaja of Mayurbhanj granted the mining leases of Gorumahisani, Sulaipat and Badampahar to TISCO over 12 square miles on a royalty scale that was to work out to an average of 2.62d per ton for the first thirty years and 5d per ton for the next following thirty years, on an annual output of 200,000 tons of ore. The firm was to extract ore for the first three to four years without any royalty.

Regarding the negotiations between TISCO and the Mayurbhanj Durbar, P.N Bose wrote:

That negotiations with Messrs Tata and Sons have been practically concluded. Their venture being the first of its kind in India, the Maharaja has granted them very *liberal terms*. But the state will get a fair return not only in revenue but also in numerous advantages incidental to the establishment of an important mining centre within it.³⁴

This gives us some idea about terms of negotiations between TISCO and Mayurbhanj Durbar. But the relationship between the company and the Durbar were not without tensions on the question of the utilization of ore, as the hope expressed by Maharaja Sriram Chandra at the time of discussion of the Tata lease about setting up of a mineral based factory within Mayurbhanj was not fulfilled. Due to strategic location factors the Tatas finally set up the steel plant not in Mayurbhanj but in Singhbhum.

The Gorumaisani hill, with its three prominent peaks the highest rising to an elevation of 3,000 feet above sea level, and its numerous flanks and spurs, formed a conspicuous feature in the topography of the northern part of the Mayurbhanj. The large bodies of iron ore found at this point and their accessible position combined to make it the first point of attack. Tatas were driven by a necessity for constantly maintaining a large and increasing output. Mining was carried on along the northern

³³ *TISCO Review* (April 1933). Cited in Mayurbhanj District Gazetteer(1969) pp. 237-239.

³⁴ Annual Report of the Geological Department, Mayurbhanj state, 1904-5. Cited in Mayurbhanj District Gazetteer(1967) pp.237-39

base of the hill for a distance of about 2 miles. Initial mining operation in this hill revealed that the whole northern slope at the base of the hill was covered by a blanket of 'float ore' ranging from 2 to 30 feet in thickness. Up to the end of 1928, the whole of the ore extracted at Gurumahisani was 'float-ore'. The first deposits *in situ* to be worked were reached only in early part of 1929. Average iron content of ore dispatched from Gurumahisani was about 63 percent. The Gurumahisani ore was to be mined by open cuts, advancing along the ridges in terraces or benches, with gravity inclines to lower the product to the bottom of the hill, where it was loaded in broad gauge railway.³⁵

Suleipat mines were located 12 miles from Gurumahisani mines. Suleipat ore being rich in iron content was used for both open hearth and blast furnace consumption. The main body of ore occurred on the top of the hills which were part of Suleipat-Badampahar range. An extension of the Gurumahisani railway to Badampahar and a four miles long tram-line from the Suleipat mines to a loading siding on this extension was completed in 1922. Badampahar mines were located 8 ½ miles south-west miles from Suleipat deposits.³⁶

Desire to be free of uncertain supplies and fluctuating prices drove private company like TISCO to search for new 'captive mines'. In 1915 the Mining and Prospecting Department of TISCO was formed to continue the process of 'scientific' geological exploration.³⁷ Noamundi iron mines were discovered by its Prospecting Department in 1917. Later Joda East mines in Keonjhar were discovered. Licenses and leases were obtained by the company often on very favourable terms.³⁸ Describing the primitiveness of the region and its native smelters upon the discovery of Joda mines, J.L. Keenan wrote:

our prospectors, pushing inland from the Noamundi mines ...found a rich lode in Joda, seventeen hundred feet above sea level. We were not very far from Noamundi... but separated by jungles and rocky hills, and centuries removed in ways

³⁵ Thomas H. Hollard, "Quinquennial Review of the Mineral Production of India", *Records of the Geological Survey of India*, August, 1915 pp.111-113

³⁶ Ibid

³⁷ Verrier Elwin, *The Story of Tata Steel* (Bombay: TISCO, 1958) pp.47-49

³⁸ Ibid

of life and methods of work. Both were so crude in Joda, so ancient, that watching them I could almost think this very tribe of iron workers.... had been the first to stumble on the art of wresting iron from the earth.³⁹

In much of the official discourse of TISCO, discovery of new mines were often seen as the conquest over nature, the region hitherto untouched, unexplored. It was opening of mines, which was supposed to bring civilization and development upon the region.⁴⁰

During the year 1926-27, TISCO, commenced mining ore at their newly discovered mine at Noamundi in Kolhan Government Estate in Singhbhum district, 156,425 tons being mined that year. Against Mayurbhanj mines, iron ore in Noamundi mines was found below surface. The mine was connected with the Rajkharsawan-Gua extension of Bengal Nagpur Railway by a broad gauge siding from Noamundi station. The ore content of this mine was on the average 62.5 percent iron. Mining was done by manual workers and was slow and laborious process.⁴¹

During nineteenth century, most of the European efforts of setting up iron smelting works were failure. The first scheme which proved to be a financial success was Barakar Iron Works at Kulti, near Barakar in Bengal. The Barakar Iron Works showed no sign of financial success until the agency was taken over by Messrs. Martin & Company in 1889, when 'Bengal Iron and Steel Company' was formed and the plant was completely remodelled. During 1919, the Company changed its title to 'The Bengal Iron Company, Limited' and the change was accompanied by substantial increase in capital. A further change took place in 1932 when the Managing Agents

³⁹ Keenan (1943) pp.17

⁴⁰ See the following description by Verrier Elwin of industrious and adventurous nature of a geologist: "The geologist must be athlete and explorer as well as scientist, he must use his hands and feet as his brains, he is dedicated to untrodden ways. Sometimes Tata men had to work their drills with sturdy tribal bowmen on guard with their bows and arrows against wild elephants. Sometimes the villagers, unused to visitors, were hostile, more often they were afraid, it was hard to get porters. Yet once again friendliness and patience won the day and in many lonely villages there are still warm memories of the Tata visitors, *whose discoveries ultimately brought new prosperity to their homes*". Elwin, *The Story of Tata Steel* pp. 47-48. My emphasis. We don't know what kind of prosperity Tatas brought to lives of villagers whose land were taken for opening mines. It is clear however that efforts of Tata geologists were not smooth and quite often they had to face hostility. But we don't have evidence supported by sources to know these resistances.

⁴¹ Ibid

were replaced by the Company's own office and organization in Calcutta. This company manufactured 196,090 tons of pig iron in 1929. In the following year it was 103,929 tons. The company got success in owning collieries in Raniganj and Jharia coal field, which supplied coal to their works. The production of this work was hampered in nineteenth century due to the use of low quality iron ore. During this period, low quality 'clay-ironstone nodules' from the formation of 'Ironstone Shales', between the coal bearing Barakar and Raniganj series was used. The fortune of this company changed with the discovery of rich and vast deposits of iron ore in Kolhan Government Estate in Singhbhum district. On the principal deposits of Pansira Buru and Buda Buru⁴², Pansira and Maclellan mines were opened. These mines were situated respectively twelve and eight miles south east of the Manoharpur station of the Bengal Nagpur Railway. The total quantity of ore in Pansira Buru was estimated at 10 million tons, while that of Buda Buru was tremendous, roughly estimated at over 150 million tons. It is interesting to note that these mines were discovered by Bengal Iron and Steel Company exactly at the same period when Mayurbhanj deposits were discovered by Tatas. i.e in the first decade of twentieth century. To exploit these newly discovered mines Bengal Iron and Steel Company constructed a narrow gauge, 2 foot-6 inch railway line from Manoharpur station of Bengal Nagpur Railway mainline to Pansira mines, with a branch through the Ankua valley and Saranda forested tract to the foot of Buda Buru where Mclellan mines was located. An aerial ropeway, with a capacity of 40 tons hourly, transported the ore from the top of Pansira Buru to a bin at the foot, from which it was automatically loaded into the railway wagons. A gravity incline, with a capacity of 60 tons hourly, transported the ore likewise from Buda Buru to the light railway at the foot. These mines of 'Bengal Iron Company' were producing 380,034 tons of iron ore by 1930. The ore produced were transported to Kulti works in Bengal.⁴³

The Indian Iron and Steel Company Limited (IISCO), was floated under the managing agency of Messrs. Burn & Company with a capital of Rs. 3,00,00,000 on

⁴² In Ho language as in other languages of Munda family the word 'Buru' means mountain.

⁴³ A. M. Heron, "Mineral Production of India, 1929-33: Iron", *Records of Geological Survey of India* Vol. LXX, 1935 pp. 126-129

the 11 March, 1918 for the purpose of manufacturing basically pig-iron. The Company soon was able to acquire its own iron-ore, coal, and limestone mines, within easy reach of their works at Asansol, 132 miles north-west of Calcutta. The Company owned its captive iron-ore mines at Gua in the Kolhan Government Estate, Singhbhum. Colin Simmons argues that IISCO was not a single entity in the way TISCO was as it was not only the product of two corporate amalgamations –with Bengal Iron and Steel Company (BISCO) in 1936 and the Steel Corporation of Bengal in 1952, but it was also affected by the merger of Martin's with Burn and Company in 1926. Moreover IISCO was taken over by the Indian Government in 1972 while TISCO continued to survive as the non public sector steel plant in post colonial India.⁴⁴ The Bengal Nagpur railway constructed a branch line terminating at Gua to transport ore from these mines to Asansol. By 1935 Gua mines were fully developed and were capable of an output of over 60,000 tons per month. During 1919-1923, Indian Iron and Steel Company was forced to obtain iron ore from the Central Province as they were unable to get sufficient ore from their Gua mines in Singhbhum, mainly due to transport difficulties. These difficulties were overcome in 1924 and production of iron ore in Central Province dropped from 68,361 tons in 1924, to 1,037 tons in 1925, it decreased further to 777 tons in 1933, the whole of this total being used in indigenous smelting industry.⁴⁵

A ropeway having a capacity of 120 tons per hour was constructed in the initial years of 1930s. Feeding into the bunker at the top of the ropeway were two self-acting inclines, one being on the endless rope principle. The ordinary two-ton mine tubs were clipped to the rope at intervals, the descending loads drawing the empty tubs up. The speed was controlled by brakes. An output of 800 tons daily was obtained from this incline. The second incline was operated by eight-ton skips. On this incline the gradient was very severe, and the brakedrums were controlled by eight double-post brakes. Output from this second incline was estimated to be 1,000 tons daily. At the bottom of the ropeway the buckets were emptied into a 2,000 ton

⁴⁴ Colin Simmons, "Vertical Integration and the Indian Steel Industry: The Colliery Establishment of the Tata Iron and Steel Company, 1907-56", *Modern Asian Studies*, 11, 1 (1977) pp. 129

⁴⁵ *Ibid* pp.130-133

capacity bunker. The hopper wagon supplied by the railway was loaded directly from this bunker. An endless rope having self acting incline, 1 ½ miles long, brought the ore from the top of the hills to the railway. This started functioning from February 1929. The tubs from this incline were emptied into a crusher by means of a power driven tippler, the tubs being returned to the incline by means of an automatic traverser. The ore was reduced to 2-inch cube size and then emptied directly into the hopper wagon. In Jhiling Buru part of Gua mines a light railway brought ore mined from the reef at the lower level, the tubs being emptied directly into the wagons.⁴⁶

From 1927 onwards, Messrs. Bird and Company started mining in Keonjhar princely state. The whole of iron ore produced from the Barabil mines of this company was sold to steel works in India. Indian Iron and Steel Company (IISCO) was the main purchaser of its iron ore. The ore of this mine contained 58-60 percent iron. Iron ore mined was partly solid bedded ore and partly float ore. Barabil mines were connected to Barajamda-Barabil branch line of Bengal Nagpur railway. The company also produced low quality manganese ore during manganese mining and dressing operations in the same area and was also sold to steel works for blast furnace additions to give the required manganese content to pig-iron.⁴⁷

Beside these big private companies, there were many private entrepreneurs and Marwari merchants who are moving in these forested tracts and getting lease from Colonial government and Feudatory States of Orissa for prospecting and mining of metallic ores.⁴⁸

The Political Economy of Iron Ore

There was virtual absence of internal market of iron ore and no export trade during colonial period. Extraction of iron ore was completely for internal consumption in the steel plants for the production of pig iron and steel. Ore by itself was not exported but

⁴⁶ Ibid

⁴⁷ Ibid pp. 141-142

⁴⁸ This become clear from annual reports of feudatory states of Orissa like Mayurbhanj, Keonjhar and Bonai. By 1930s these states had separate Geological Prospecting departments.

it was first converted into pig iron and company like TISCO benefited greatly by its export of pig iron to Japan. As production of iron ore was in direct relation to that of steel/pig iron i.e finished product, it was affected by the demand for pig iron and steel. This determined the need for 'captive mines' for companies like TISCO and IISCO. For increased production of pig iron and steel, companies required secure reserves of iron ore. We have to keep this ore-pig iron-steel relation in mind to understand the political economy of ore during colonial period. As late as 1950 almost all the ore was used at home, and in 1954 exports were only 1 million tons. It was only after independence that export of iron ore gained momentum. By 1960 India stood seventh in world in terms of iron ore production with production of 16.6 million tones.⁴⁹ Iron ore ranked fifth largest earner of foreign exchange for India in 1960 after jute goods, tea, cotton textile and sugar, its total export being 9.11 million ton valued at Rs. 32.26 crores. A "Master Plan" for iron ore exports was evolved by the Central Government during Second Five Year Plan which envisaged a total annual export of 30 million metric tons by 1970, valued at Rs. 120 crores (at the average price of about Rs. 40 per ton). Planned economy of Nehruvian period worked on setting 'targets' for production. The 'target' for the Third Plan was set at 30 million tons of which 20 million was expected to be consumed within the country and the rest to be exported.⁵⁰ In postcolonial India large iron mines were opened especially for exporting iron ore to foreign countries like Japan to meet the targets. Kiriburu in Bihar-Orissa 'Iron-field' and Bailadilla in Madhya Pradesh were opened for this purpose.

The economics of ore mining are affected not only by the richness of the deposit but also by its size and location, mining and shipping conditions and by political factors. In remote locations operations must be on a big scale, for the project to be economically viable. Much of the iron ore was 'shaft-mined' globally till 1970s when shift to 'open--cast working' became important. Shaft mining permits all year round working where climate is adverse, but is much less flexible than opencast operations. Bulk transfer facilities, rail, water and handling are essential

⁴⁹ *Report of the Central Wage Board for Iron Ore Mining Industry*, 1967 pp. 4

⁵⁰ *Occupational Wage Survey 1958-59: Industry Reports Vol I-Plantations and Mines* (Labour Bureau, Ministry of Labour and Employment, 1960) pp. 125 and *Report of Central Wage Board* pp. 8

accompaniment of big mining operations. In the post world-war period many new ore-fields came into operation. World iron-making was revolutionized as international ore prices fall. The richness of ores rose as there was a manifold increase in the volume of ore being traded globally.⁵¹

Colin Simmons draws attention towards integrated organizational structure of iron and steel plants which functions by establishing outright ownership of the mines and treats them merely as a department of the enterprise complex itself, hence the need for 'tied mines' or 'captive mines'. Since both TISCO and IISCO were under the control of their respective managing agency houses-Tata Sons and Martin Burn-the policies, management and administrative machinery of the companies and their raw material divisions were theoretically part of a wider industrial network. He argues that the existence of an agency system did not alter the fundamental relationship between the 'captive mines' and the steel works.⁵²

Pradyumna Karan argues that adjustment to geological conditions explains only one feature of the mining pattern, equally important is the demand for iron ore of blast furnaces, Jamshedpur and Asansol being the only large ore consumers during colonial period. These blast furnaces seldom used ore containing less than 60 per cent iron. Hence all the mines were located on deposits of high-grade ore. Therefore he argues that the requirements of the blast furnace largely determine which and what deposits to be mined and partly explain spatial distribution of iron mines in Singhbhum-Mayurbhanj region.⁵³ He further argues that iron ore being bulky, transportation cost is important in determining the value of mineral deposits. Within the iron mining region 'westward shift' shift of mining began in late 1920s as production of Mayurbhanj mines declined, giving way to larger and richer ore in Singhbhum concentrating around Noamundi. This westward expansion had important social implication as Mayurbhanj mines lost ground and Singhbhum gained

⁵¹ Kenneth Warren, *World Steel: An Economic Geography* (New-York: Crane, Russack Co, 1975) pp. 291-92

⁵² Colin Simmons, "Vertical Integration and the Indian Steel Industry: The Colliery Establishment of the Tata Iron and Steel Company, 1907-56", *Modern Asian Studies*, 11, 1 (1977) pp. 127-128

⁵³ Pradyumna P. Karan, "Iron Mining Industry in Singhbhum-Mayurbhanj Region of India", *Economic Geography*, 33, 4 (Oct, 1957) pp. 353

importance. Karan argues that as the region came to be dotted with more iron mines and traversed with railways, forests disappeared slowly and a striking cultural landscape associated with mining appeared.⁵⁴

Cost of mining iron ore was very low for TISCO in Mayurbhanj due to the nature of occurrence of iron ore. Nature was so bountiful in Mayurbhanj, wrote Lovat Fraser, the first biographer of Jamshedji Tata, that ‘hundred of acres of rich “float-ore” [were] lying loose on the surface, *which required no mining*, and simply had to be *picked up by unskilled labour*’.⁵⁵ For him, “The explorers were in the presence of a treasure house far more potentially valuable than most gold mines”.⁵⁶ Till 1928, the whole of ore produced from Gorumahisani was “float-ore”. Only from the beginning of 1929 that actual process of ‘mining’ started. High iron content of the ore and less percentage of impurities further reduced the cost of production of ‘pig-iron’. Thus capital investment in mining was very less for Tatas in Mayurbhanj. Morris D. Morris argues that Mayurbhanj’s mines in and about Gorumahisani furnished iron ore at “less than one-half the cost of production of any other major ore-producing district in the world”, since ‘Open-Cast’ mining, required little capital and predominantly “unskilled” labour.⁵⁷ But this process of just “picking up” of ore required no small amount of labour. Lovat Fraser tells us that even before starting of steel production in 1911, the company had, “as many as 8,500 people working at Sakchi, and another 10,000 *gathering* float ore at Gorumahisani”.⁵⁸ I argue that “picking up” and “gathering” required different rhythm of work but was also a form of wage labour. Finding labour to work in mines was not difficult as the region fell under the “catchment area” for Assam tea plantation. As Fraser describes, “Sakchi is on the edge of the district from which the tea planters of Assam obtain much of their labour. The supply of unskilled labour has therefore always been ample. The unskilled

⁵⁴ Ibid pp. 354

⁵⁵ Lovat Fraser, *Iron and Steel in India: A Chapter from the Life of Jamshedji N. Tata*, (Bombay: The Times Press, 1919) pp. 44-45. Emphasis mine

⁵⁶ Ibid

⁵⁷ Morris D. Morris, “The Growth of Large-scale Industry to 1947”, in Dharma Kumar (ed.) *The Cambridge Economic History of India Vol. II c.1757-2003* (Delhi: Orient Longman, 2005) pp. 589

⁵⁸ Lovat Fraser, *Iron and Steel in India* pp.65

Indians are Santhals and Khols, who represent the *best coolie labour* in India”.⁵⁹ Here we can see classification of labour in terms of race, where “aboriginality” becomes the criteria for determining the best class of labour. Also there is a simultaneous process of fetishization of ‘tribal’ labour as mere commodity in labour market in the fact of their being “unskilled”.⁶⁰ But for Fraser, “cheapness of coolie labour” was not the main issue. The real test for him was not, “the rate of wage, but the amount of work done in a given time”.⁶¹

TISCO was one of the exceptionally successful industrial enterprises of colonial India. The indigenous firm, which was incorporated in 1907 by Tata Sons and Company, a managing agency of the House of Tata, grew to become one of the biggest industrial enterprises in terms of paid-up capital (Rs. 103.2 million in 1922-1923) and manpower (25,923 in 1922-23). In course of its development, TISCO, the only steel-producing company until the mid-1930s, raised annual production of steel from 55,000 tons in 1910-1911 to 443,000 tons in 1930-31, having achieved an increasing self-sufficiency rate (rate of domestic production to net domestic demand) for steel in colonial India from almost zero in 1910-1911 to 45 percent in 1930-31.⁶²

The exceptionally successful growth of TISCO has been attributed to several factors like government supports such as guaranteed purchasing contracts for steel rails and tariff protection, proper technological transfers from USA and Germany, the huge demand created as a result of World War I and sale of “pig” iron to the Japanese and flexible and appropriate transformation of corporate organization and the entrepreneurship of the company⁶³. The company embarked on a Great Extension Scheme in 1916 which considerably increased its capacity. Vinay Bahl’s work has

⁵⁹ Ibid. My emphasis.

⁶⁰ Kaushik Ghosh, “A Market of Aboriginality”

⁶¹ Fraser, *Iron and steel* pp. 65

⁶² Chikayoshi Nomura, “Selling steel in the 1920s: TISCO in the Period of Transition”, *Indian Economic and Social History Review* 48,1 (2011) pp.83-116

⁶³ These various factors have been examined by various studies. Sunil Kumar Sen, *The House of Tata, 1839-1939* (Calcutta: Progressive Publishers, 1975), Rajat K. Ray, *Industrialization in India: Growth and Conflict in the Private Corporate Sector, 1914-47* (Delhi, 1982), Morris, “The Growth of Large Scale Industry”, Vinay Bahl, *The Making of the Indian Working Class: A Case of the Tata Iron and Steel Company* (Delhi: Sage, 1995)

shown that the pressure of the nationalist movement was as important as the pressure of competition in the world market in ultimately leading to the decline of British hegemony, and in the rise of Indian steel industry. She refutes the claim that there existed an independent Indian capitalist class because the emergence and development of the steel industry was mainly possible with the colonial government.⁶⁴ What were the reasons that impelled the colonial state and the nationalist leaders to take a deep interest in the success of Tata Steel, such that an informal alliance developed between these contradictory forces while dealing with the workers' struggle at Jamshedpur? The rise and growth of the Indian steel industry and its workers' struggle –were shaped as much by the interaction of labour and capital as by the interaction of historical, political and social forces inside and outside of India.

During the planning and construction phases, the TISCO received extensive assistance of colonial government, not available to any other private company—geological surveys, reduced transport costs, eased access to land and water rights, simplified import arrangements for construction materials, and an agreement that the state would buy 20,000 tons of steel rails annually for ten years at import prices. To assure the necessary quality, the government provided a laboratory at the new plant and an English metallurgist to operate it.⁶⁵ During the First World War, the import of British steel into India declined dramatically because of war demands in Europe. As a result the Indian Railways turned to TISCO for supply of rails. As the war dragged on for several years, TISCO had to produce shells and carriage wheels for the war. By 1919 the colonial government was buying 90% of the steel manufactured by TISCO.

In a recent article, Chikayoshi Nomura has shown how TISCO developed its business strategy in order to expand suitable sales networks in 1920s, when the consumption pattern of steel changed drastically. In correspondence with the change, the company devised a business strategy to develop its sales network to minimize information asymmetries between the company and the intermediary merchant. The development of sales network enabled the company to cultivate an emerging demand

⁶⁴ Vinay Bahl, *The Making of the Indian Working Class*

⁶⁵ Morris, "The Growth of Large-Scale Industry" pp. 589

outlet, thereby helping the company survive after the 1920s. This resulted in the sharing of its views with some local merchants and entrepreneurs who had opposed the laissez faire policy of the colonial government to retain control over domestic outlets in their hands.⁶⁶ Nomura's work shows that one of the most important business strategies of TISCO, whose steel did not have sufficient international competitiveness in the 1920s, was the reorganization of the domestic sales department in order to expand the company's domestic sales network. TISCO in course of developing its sales marketing network, established wide ranging controlling power over indigenous local merchants who were in the business of purchasing and selling imported steel even before the foundation of TISCO in 1907. This led to the establishment of collective support of the business magnates such as Tatas and some indigenous merchants and entrepreneurs as Indian business classes for resisting government policy of laissez faire in 1930s.

The importance of the steel demanded by mass consumers increased after World War I, while the steel consumed by the railway industry, a dominant consumer of steel before the war, decreased its share, indicating that a shift in the consumption pattern of steel had occurred in the Indian steel market in the 1920s. How did TISCO respond to the changing market conditions where mass consumers had increased their share in market demand?

The strengthening of TISCO's bargaining power over indigenous local merchants in pricing as well as terms of contracts in the 1930s has been considered to have occurred largely from tariff protection. Nomura shows that price competitiveness of TISCO steel shown by price differences between after-tariff-levied prices of British steel and TISCO realized prices did not reveal any apparent improvement in trend until 1930-31, and the differences remained almost Rs. 8 in case of structural section steel and Rs 9 in case of bar steel, while the competitiveness described by the price differences drastically increased after 1931-32. Nomura attributes this to the constant efforts by the company's sales department to accumulate market information at depots and stockyards. In order to cultivate an emerging demand led by mass consumers,

⁶⁶ Nomura, "Selling Steel in the 1920s: TISCO in the Period of Transition" pp.83-116

TISCO invested a huge amount of money in the task of collecting market information during the 1920s. According to him the study of changing power balance between TISCO and indigenous local merchants explains the way business leaders of independent India such as Tatas strengthened their control over other smaller domestic economic actors and built the economic and political base that enabled them to fill the vacuum created by the retreat of British expatriate businesses after independence. The commanding power exercised by large indigenous capitalists over smaller traders in and after 1930s offered an excellent opportunity to realize India's planned economic development, which required the wide ranging influence of leading industrialists like Tatas.⁶⁷ Also tight connection established between urban-based merchant capitalist financiers and inland markets resulted in these urban magnates' deep involvement in the domestic economy of India.

⁶⁷ Ibid

Table No. 1 Iron Ore raised in Bengal and Bihar and Orissa during the years 1909-1918

Year	Burdwan	Singhbhum	Manbhum	Sambalpur	Mayurbhanj	Puri	Total for Bengal Bihar and Orissa
	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1909	46,623	15,215	10,132	737	.....	.....	72,707
1910	24,387	17,646	.....	620	.....	.....	42,653
1911	5,456	36,276	.....	610	300,00	.....	342,342
1912	9,882	83,425	.....	608	471,232	.....	565,147
1913	8,926	98,196	.....	666	247,025	.....	354,813
1914	1,204	151,662.3	.....	617	249,910	48	403,441.3
1915	2,243	127,040	.....	386	240,268.8	53	369,990.8
1916	.....	150,258	.....	343	240,520	55	391,176
1917	.....	184,815	.....	377.5	195,621	.....	380,813.5
1918	.....	120,363	.....	401.6	338,903	.....	459,667.6
Average	14,051.6	98,489.6	.....	536.6	285,435	52	338,275.1

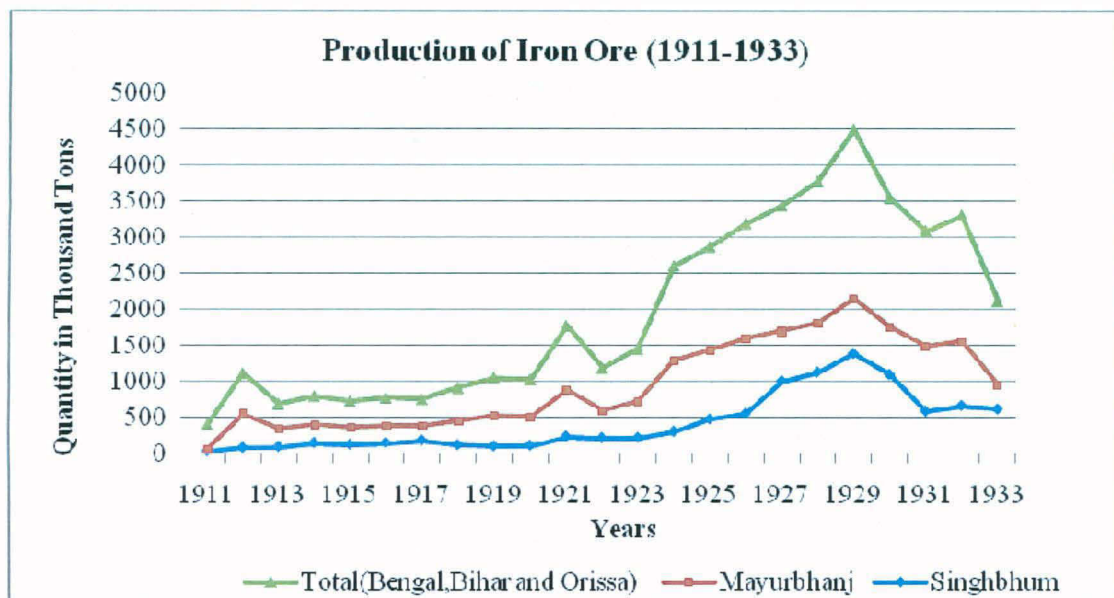
Note: Ore raised in Burdwan, Singhbhum and Manbhum is for the Barakar Iron Works. That raised in Sambalpur was smelted in native furnace. That raised in Mayurbhanj was for the Tata Iron and Steel Co Ltd.

Source: "Quinquennial Review of the Mineral Production in India, 1914-1918", *Records of Geological Survey of India* Vol. LII, 1921 pp. 109

Table No. 2 Iron Ore raised in Bihar and Orissa during the years 1919-1933

Year	Singhbhum	Sambalpur	Mayurbhanj	Keonjhar	Puri	Total Quantity
	Tons	Tons	Tons	Tons	Tons	Tons
1919	104,728	945	423,599	.....	.....	529,272
1920	113,008	1,010	403,359	.....	.....	517,377
1921	237,173	797	651,495	.....	.....	889,465
1922	215,746	798	378,134	.....	.....	594,678
1923	218,584	632	507,225	.....	.....	726,441
1924	305,238	654	996,920	.....	.....	1,302,812
1925	477,580	703	957,275	.....	.....	1,435,558
1926	552,079	569	1,041,929	.....	.....	1,594,577
1927	1,007,037	561	692,137	36,325	.....	1,736,060
1928	1,131,746	21	683,493	141,361	.....	1,956,621
1929	1,390,245	21	759,875	187,203	.....	2,337,344
1930	1,099,435	6	659,392	24,909	.....	1,783,742
1931	588,290	.....	901,246	109,841	9	1,599,386
1932	666,874	7	891,193	186,173	.....	1,744,247
1933	616,946	4	341,502	195,944	.....	1,154,396
Average	581,647	448	685,918	125,965	9	1,326,798

Source: "Quinquennial Review of the Mineral Production of India, 1929-1933",
Records of Geological Survey of India, Vol. LXX, 1935 pp.123



Graph 1: Production of iron ore from 1911-1933 showing total production of Bengal, Bihar and Orissa as whole, along with contribution of Mayurbhanj State and Singhbhum District.

Increase in production in Mayurbhanj around 1921-23 is because production starts in two new mines of TISCO-Badampahar and Suleipat. Increase in production in Singhbhum around 1926-27 is due to opening of TISCO's Noamundi mines and IISCO's Gua mines. Steep decline after 1929 is due to economic depression. If we remove the share of Burdwan and Manbhum which declined after discovery of richer ores in Singhbhum and Mayurbhanj, then the graph of total production of Bengal, Bihar, Orissa closely follows the production in Mayurbhanj and Singhbhum. Also increase in total production after 1927 is also due to added share of production from Keonjhar.

During 1941-42 after the expiry of first thirty years of mining lease of iron ore, TISCO entered into negotiations with Mayurbhanj durbar for the renewal of mining leases. During these negotiations tensions between the company and Mayurbhanj state became apparent. The state had given huge concessions to TISCO during leasing the ore mines for the first time in 1909-10. But soon the State realized its disadvantaged position, when Tatas decided not to set up a steel plant in Mayurbhanj. By the time of second renewal, the princely state mustered full effort in maximizing profit on royalty on iron ore. In the renewed lease the company was granted option for the renewal of the leases for a further period of thirty years but at the enhanced rate of annas five per ton for the renewal period. On the other hand the Company agreed to relinquish all the mining plots containing the Vanadium bearing magnetites (about 5 million tons) which were included in the original leases and pay considerably enhanced rate of royalty (more than double) for the iron ores despatched from the Company's mines as well as to pay income tax to the State on profits made in the mining operations. The income of Mayurbhanj State from the royalty on iron ore mines became more than double after negotiations with TISCO over renewal of lease of iron ore mines. The state had realized the economic potential of its mineral resources and was planning to set up a Vanadium factory at Rairangpur in Bamanghati sub-division, Vanadium being highly valued for the manufacture of special steel particularly bullet proof steel. The geological exploration done by the State's Mining and Geology Department had revealed 15-20 million tons of Vanadium-bearing magnetite in the state. It was this economic and profit motive, for which the Durbar asked TISCO to relinquish rights over vanadium bearing iron ore in the original lease. Thus by 1940s TISCO and Mayurbhanj state had become competitors in the mining enterprise.⁶⁸ But still support of princely state to TISCO had not diminished.

During the initial years of 1940s Labour Investigation Committee found a slump in raising of iron ore which it attributed to two main reason. First, the demand for iron ore from TISCO had considerably fallen due to the fact that the supply of coal

⁶⁸ *Report on the Administration of Mayurbhanj State, 1941-42*

for smelting iron had fallen and that the Government of India was importing steel from United States at a cheaper rate and it controlled the sale wholly and TISCO could not sell its production in open market. Second, the supply of labour was poor as there was migration of labour from Singhbhum to Assam for work under 'military contractors' for constructing roads and other Public Works, which was paying higher wages.⁶⁹ Also during this time TISCO had to fight against the situation created by the shortage and high price of rice which caused great difficulty in maintaining sufficient labour to the work. Under emergent conditions Mayurbhanj Durbar granted permission to the Manager of TISCO's Badampahar Iron Mines, to utilise the available labour in the mine to the fullest possible extent by exempting it from adherence to certain sections of existing Mayurbhanj State Mines Order, 1937 and allowing mining operations to continue for the full seven days a week till the condition improved.⁷⁰ Thus we find that under emergency situation princely state of Mayurbhanj came in support of TISCO bending its own existing labour laws. On the other hand IISCO had to suspend its mining operation in Manoharpur mines in Singhbhum due to a dispute with colonial Government over the question of the payment of royalty.⁷¹ Other companies never managed to garner the same kind of support that TISCO enjoyed under the aegis of the colonial Government.

Colonial Capital, Princely States and TISCO

The Raja, the raiyats have buried their treasures,
 Their treasures they have buried;
 Sahibs and Sepoys have made the road,
 Upon the road carts are driven.
 The road is made, on it cart are driven.⁷²

⁶⁹ B. P. Adarkar, *Report on Labour conditions in Iron Ore Industry*, (Simla: Labour Investigation committee, 1945) pp. 2-3

⁷⁰ *Report on the Administration of Mayurbhanj State, 1943-44* pp. 92-93

⁷¹ B. P. Adarkar, *Report on Labour Conditions in the iron ore Industry* pp. 3

⁷² Ho folksong sung at making over of the bride. Translation and transcription of song in *Linguistic survey of India: Gramophone Records of Chotanagpur Dialects* (Calcutta: The Baptist Mission Press, 1921)

Success of modern 'Iron and Steel' industry required close cooperation between Colonial State, Princely states and private companies. Failure of most of modern smelting enterprises in nineteenth century was mainly due to lack of government support in terms of mining regulations and transportation. By the beginning of twentieth century government policies had changed. By this time the colonial state was far more inclined towards private capitalists. But working of colonial capitalism was not only marked by production but also by extraction: if steel plant was to be set in British India, minerals were to be extracted from princely states. This set the manner in which colonial government, princely states and private companies became complicit in colonial capitalism. Even here TISCO enjoyed a privileged position vis-a-vis other private companies. It was greatly assisted and patronised by colonial government and Mayurbhanj princely state. We saw some aspects of colonial government's assistance to TISCO in the previous section. In this section I have dealt with politics of laying railway networks and transportation in capitalist mode of extraction. This politics was marked by constant negotiations between various actors in the political economy of iron ore production. The most visible aspect of assistance to TISCO was in terms of mining concessions and railway networks. The maharaja of Mayurbhanj granted exclusive mining rights to Tatas and the colonial state opened a broad-gauge branch to Gurumahisani from its mainline in 1911, thereby connecting iron deposits with steel work in Jamshedpur. But let us begin with delineating the nature of princely states in colonial India, which helps us in understanding the politics of assistance more clearly.

In post-mutiny period British colonialism became a powerful legitimizer of princely states. To avoid future such rebellions, colonial government sought to improve its links with the Indian rulers after British crown took over India in 1858. In case of Orissa, where most regions in the state were under several feudatory rulers, Biswamoy Pati, argues that colonialism itself was legitimized by the rulers. He situates this mutual legitimation against the background of the states' internal process of legitimation – the way *darbars* themselves secured legitimacy from their subjects. He argues that process of Hinduization of *adivasis* in the nineteenth century contributed significantly to the creation of a support base for the states. Thus

'tradition' as an ideological means of legitimization, coexisted with the contradictory projects of modernity. He shows that two contradictory processes coexisted—the search for ancientness through *rajabansabalis* and the project of modernity. The component of modernity and social good saw the 'public works' and opening of mines. These had exploitative component in the form of forced labour-*bethi*, expansion of agriculture and destruction of forests. Indian bourgeoisie and colonial capitalism coexisted with princely states like Mayurbhanj.⁷³ Colonial modernity in case of princely states of Orissa sought to draw legitimacy from this so called 'progress' in order to dilute their oppressive features. Both colonial and princely states joined hands to tap the resources at the disposal of the states and exploit the people.⁷⁴ Exploring the distinct socio-economic formations of princely states during colonial rule, Hira Singh argues that colonial penetration failed to dissolve the pre-capitalist socio-economic order. Far from being passive objects, the pre-colonial structures and subjects resisted colonial-capitalist penetration and forced its agents to compromise and to co-exist. The result was that the colonial power and the princely states survived by bolstering and legitimizing each other. Singh argues that peasant movements in princely states from 1920s onwards played a crucial role in dissolving the feudal order and its ally, the colonial state- since the collapse of one led inevitably to the collapse of the other.⁷⁵ Ahuja focuses on the transformation of the circulatory regime in the Feudatory States of Orissa. He traces the metamorphosis of 'recalcitrant rajas' into 'improving rulers' and the contradictory effects of the ensuing expansion of transport infrastructure. One particularly striking result was the transformation and reinvigoration of *bethi*- the traditional obligation of subordinated classes to unpaid and forced labour.⁷⁶ Several nodal points of the Orissa's *ancient regime* of circulation were disarticulated and

⁷³ Biswamoy Pati, 'The Order of legitimacy: Princely Orissa 1850-1947' in Waltraud Ernst and Biswamoy Pati (eds.) *India's Princely States: People, princes and colonialism* (Routledge, 2007) pp 85-98

⁷⁴ Biswamoy Pati "Interrogating Stereotypes: Exploring the Princely States in Colonial Orissa", *South Asia Research*, Vol. 25 No. 2 (2005) pp. 165-182

⁷⁵ Hira Singh, "Colonial and Postcolonial Historiography and the Princely States: Relations of Power and Rituals of Legitimation" in Waltraud Ernst and Biswamoy Pati (eds.) *India's Princely States: People, Princes and Colonialism* (Routledge, 2007) pp-15-29.

⁷⁶ Ibid

marginalized, while others acquired new circulatory functions like headquarters of the western Tributary States on the Bengal-Nagpur Railway mainline.⁷⁷

Railways played an important role in opening up this forested track for the exploitation of ores, minerals and other natural resources. Mobility of traditional iron workers, Agarias which we discussed in the previous section was restricted by new forest laws, but modern capitalist mining imposed new “circulatory regime” of railways. The editors of a recent collection of essays define ‘circulatory regime’ as totality of circulation occurring in a given society, susceptible to change over time. This ‘circulatory regime’ in turn tends to shape society, which can be seen as an ensemble of crisscrossing circulatory flows. They differentiate circulation from simple mobility in terms that it implies a double movement of going forth and coming back, which can be repeated indefinitely. In circulating things, men and notions often transform themselves. Circulation is therefore a value-loaded term which implies an incremental aspect and not the simple reproduction across space of already formed structures and notions.⁷⁸ Ravi Ahuja uses the notion of ‘circulatory regime’ as a conceptual tool of periodisation, that is, for the identification of discontinuities in the forms and contents of circulation.⁷⁹ He uses the notion of “produced social space” for the analysis of problems of circulation and transport infrastructure. He argues that roads, railways and other forms of infrastructure should be perceived, not as isolated and neutral technical “facts”, but as materializations of social relations in space. They should be seen simultaneously as results and preconditions of “circulation”, of potentially cyclic spatial practices of social groups.⁸⁰

⁷⁷ Ibid

⁷⁸ Claude Markovits, Jacques Pouchepadass and Sanjay Subramanyum (eds.) *Society and Circulation: Mobile People and Itinerant Cultures in South-Asia, 1750-1950*. See Introduction pp. 1-22. They suggest circulation as a general framework to look at Indian Society and the transformation it went during modern period.

⁷⁹ Ravi Ahuja, *Pathways of Empire: Circulation, ‘Public Works’ and Social Space in Colonial Orissa, c.1780-1914* (Hyderabad: Orient Blackswan, 2009) pp. 9 Distinguishing circulatory regimes, he suggests, enables us to acknowledge a long history of circulation in South Asia without glossing over the changing contexts and divergent articulations of this modality of socio-spatial practice.

⁸⁰ Ibid

Capitalism marked tendency towards spatial abstraction. Relations between spaces and places thus assume preponderance over their absolute qualities. Spatial abstraction implies a thorough transformation between social time and social space or, the ensemble of a new 'time-space'. This development has three main aspects: An enormous acceleration of the circulation of commodities, persons and information occurs, which is bound up with a drive towards social homogenization and maybe be experienced as what Ravi Ahuja terms "time-space compression".⁸¹ But this is not an even development. Spatial disparities are heightened as relative distance is "annihilated" between certain places at the cost of others. Fragmentation, peripheralisation and exclusion travel in the train of homogenization, centralization and integration. The beat of social life assumes greater autonomy from the cycles of nature. Human made, rigidly scheduled and short term elements are thus superimposed in differential degrees and forms upon older rhythms. Imposition of new circulatory regimes implied not merely quantitative changes- spatial expansion, intensification and acceleration of circulation, but also a new role for circulation in the organization of production and in society in general.⁸²

The development of iron mining industry was closely linked to the construction of the railways in this thickly forested tract. The Bengal-Nagpur Railway traversed the District from east to west, and was connected with the East Indian Railway by the Sini-Asansol branch. The extension of the Bengal Nagpur Railways in the early decades of the twentieth century opened a large area of Kolhan and Porahat, resulting in mining development and the consequent rapid wave of settlements in the area. BNR mainline which traversed the whole length of Gangpur state increased the revenue of the state from 1910s, turned its limestone and dolomite quarries into profitable business, which were required as "flux" for steel works. Jamshedpur was merely 130 km from these limestone quarries. Later, the Bengal-Nagpur Railway was extended from Onlajori station on the Tatanagar-Gurumaisani branch, a distance of 25 miles, into the Badampahar deposit.

⁸¹ Ibid

⁸² Ibid

After getting sufficient iron ore reserve in Gurumahisani in Mayurbhanj, Tatas became concerned about suitable location for setting up of steel works. Steel Plant could not have been built in Mayurbhanj as Bamanghatty Subdivision where Gurumahisani ore deposits were discovered was a completely hilly tract mostly covered by dense forest at that time, therefore search was carried out for a site elsewhere. Perin and Weld, geologists hired by Tatas at first chose Sini, a junction on the Bengal-Nagpur Railway, about sixty miles from Gurumahisani hills. It was considered that the iron-ore, coal and limestone could be assembled there at low transit charges. John Hewett, who was at that time the head of the newly-formed Department of Commerce and Industry, gave the Tata's project every reasonable support. On behalf of the Government of India, he undertook to build a railway from a point on the Bengal-Nagpur Railway to Gurumahisani. His original desire was to carry the line right through to the East Coast Railway, through Chaibasa-Chakradharpur, and this proposal was warmly supported by the Maharaja of Mayurbhanj, the whole of whose State would have been thus traversed.⁸³

But when the survey of the route begun, the Tatas soon pointed out that the alignment chosen would add ten unnecessary miles to their haulage. The Government agreed not to charge haulage for ten extra miles. Then came the question of gauge. The Government wanted to build a narrow-gauge line, and to this Dorab Tata initially agreed. But later he went to Calcutta and was able to persuade the authorities to construct the railway line on the broad gauge.⁸⁴ Reduced rates of freight on the line were promised, and the colonial Government further undertook to purchase from the proposed works, at import prices, 20,000 tons of steel rails annually for ten years. Meanwhile, the idea of carrying the railway line through the State of Mayurbhanj was deferred due to accidental discovery of another favourable location site. But the survey for railway line was completed upto Gurumahisani. And the Colonial Government announced that it would begin building the line as soon as Tata Sons & Co. had formed the undertaking into a company.⁸⁵

⁸³ Fraser, *Iron and Steel in India* pp. 50-51

⁸⁴ Ibid

⁸⁵ Ibid

One of the reasons for changing the site for proposed steel plant from Sini Junction to a village called Sakchi, 20 miles away, and about 2 ½ miles from the Kalimati station⁸⁶ on the Bengal-Nagpur Railway was the cost outlays in laying the foundation and damming a seasonal river stream nearby for water reservoir and problem in acquiring land. But the main factor was difficulty in acquiring large tracts of land required for the work.⁸⁷ Sackchi was accidently discovered during the course of surveys being conducted for the railway. Its foremost advantage was that it shortened the distance to Calcutta. Kalimati Station was 152 miles from Calcutta whereas Sini was 171 miles. The new site was considerably nearer to the Gurumahisani mines, though this benefit was counterbalanced by the longer haulage necessary for transporting coal from Jharia. Most importantly, the new site had abundant water supply that could be obtained from Subarnarekha and Karkhai rivers.⁸⁸

The company entered into negotiations with the Government for change in site. The Government was initially reluctant to give consent for the site change. The chief source of discontentment here was the question of the railway to Gurumahisani mines. The earlier proposal had involved hauling the ore for nearly 20 miles over the main line of the Bengal-Nagpur Railway to Sini. Dorab Tata now was now asking the Government for the construction of a direct line from Gurumahisani to Kalimati, with a short connection from Sakchi to the main line at Kalimati. The length of new line thus proposed was shorter by ten miles, being 40 miles instead of 50. To this proposal the colonial Government agreed, but with the condition that the haulage of 40 miles from Gurumahisani to Kalimati was to be charged as 50 miles. The colonial Government acquired five square miles of land in perpetuity at Sakchi, which was handed over to the company for the construction work. The company further got a lease of 18 ½ square miles from from Dhalbhum Estate for 23 years. The reason for acquiring so much extra land was justified necessary for having “power” to prevent

⁸⁶ It was this Sakchi village which developed into steel city, whose name was later changed to Jamshedpur. The name of Kalimati Station was later changed to Tatanagar Station

⁸⁷ Fraser, *Iron and Steel in India* pp. 54

⁸⁸ *Ibid* pp. 55

“undesirable characters” from settling within easy reach of the works.⁸⁹ Most of the land acquired was inhabited by Santhals.⁹⁰

The Noamundi mine was connected by a railway siding with the Raj - Kharsawan-Gua extension of the Bengal Nagpur Railways. This line and its several branches lead to the various iron ore deposits of the region. The iron ore of TISCO was sent to Jamshedpur Steel Plant and those of IISCO to the smelting works near Asansol in the Damodar Valley.

Almost all mines in Singhbhum were located in the midst of dense forest of Saranda. As such, though the opening of railways opened up the ore deposits for exploitation, large areas in the interior remained inaccessible in the absence of proper roads due to the hilly terrain and dense forests. Even as late as 1946, a government report point out the difficulty of transportation in Singhbhum due to its hilly terrain and criss-crossing of many rivers and streams:

Only big mines like Noamundi, Gua, Cheria and Duia are connected with B.N Railway lines. Transport constitutes one of the major difficulties of the mining operations in the interior of this [Singhbhum] district. There are numerous streams and rivers which further complicate the problem of transport, with the result that many of the smaller mines remain inaccessible to heavy traffic during the monsoon.⁹¹

Acquiring Land Digging Ore

In this section I will discuss the legal issues involved in leasing of land for mining prospecting especially in the context of Kolhan Government Estate. Prior to the promulgation of the Chotanagpur Tenancy Act, 1908, colonial state's intervention in the land market was of different order. The periodic intervention largely affected the market for tenures and estates. The earliest such intervention was in the form of Wilkinson's Rules of 1839 by which sale, purchase or transfer of tenures and estates

⁸⁹ Ibid

⁹⁰ Ibid

⁹¹ *Annual Report on the mining condition of the district of Singhbhum for the year 1946*, Bihar State Archive File No. VII M 23/47

required the permission of the commissioner of the division. The background to these executive rules was the Kol insurrection of 1832. It was thought that the displacement of traditional chiefs and headmen from their proprietary rights was the main cause of resentment among the tribals. In Kolhan estate of Singhbhum district, government policy was protectionist- sales, mortgages and transactions of land rights were absolutely prohibited. The Deputy Commissioner had the power to summarily eject outsider transferees.⁹²

A new set of mining rules was promulgated in 1899 to regulate the issue of licenses for prospecting or mining in British India. These new rules profoundly changed the scenario of mineral exploitation in India. Increase in mining activities in the first half of twentieth century was mainly due to revised mining rules, facilitating entry of private entrepreneurs in mining sphere. Prospecting licenses were issuable by the local authority for a period of one year on certain conditions and the license had a right, subject to the provisions of the rules on or before the expiry of his license, to the grant of a mining lease in the case of precious stones. Mining leases were granted by the local government not exceeding 30 years and provided for the payment of dead rent, as well as of royalty at specified rates. The area which a mining lease may extend to varied with respect to different minerals. But there was a provision that the local government may not without the consent of the Government of India, grant to one lessee or to those joint in interest with him lease over areas exceeding an aggregate of 10 sq. miles. In addition to the dead rent, which was, except in the case of coal and iron, generally one rupee per acre, the royalty payable was fixed at one anna per ton of coal, 8 anna per 40 gallons of oil, 7 ½ percent on the net profit in the case of gold or silver, ½ anna per ton of ironstone, 2 ½ percent on sale value in the case of other metals and 30 percent on the net profits of each year in respect of precious stones. By the rules exploring license for one year could be obtained but they gave no exclusive rights and there was no prohibition against free exploration in unoccupied and unreserved lands. Prospecting licenses were granted over restricted areas for a period of one year, renewable with the consent of the Local Government

⁹² Prabhu P. Mohapatra, "Land and Credit Market in Chotanagpur, 1880-1950", *Studies in History* 6, 2 (1990) pp. 166

for a second and third term. Such licenses carried an indefeasible claim for a subsequent mining lease for any mineral other than precious stones over the same or a restricted area. These rules however were applicable only in British India.⁹³

Under revised rules which were issued in 1913, the "Exploring license" was abolished. Prospecting licenses for a limited period might be granted to persons holding certificates of approval from the local Government. Such licenses carried a right to a mining lease or in the case of precious stones to the first offer of a mining lease that the Government of India might think fit to make. The area let to a single lessee was limited. Rights in respect of petroleum and of certain metals of importance in the manufacture of armament might be granted only to British subjects.⁹⁴

In nearly all the coal bearing land in Bengal, mineral rights were conceded permanently with the surface ownership. In the coalfields, the collieries actually acted as the "industrial variant of the zamindari estate", with the zamindari managers being invariably Europeans. Many of the larger colliery enterprises took advantage of the Permanent Settlement to acquire extensive zamindari estates, and a significant proportion of their employees became their tenants. The usual practice was to bind the miners in service tenancy arrangement, under which a small plot of land was given to them in exchange in exchange for their labour in the mines. This arrangement, especially in Raniganj and Giridih, enabled the firms to exert considerable power over their workers.⁹⁵ In 1908 the Chota Nagpur Tenancy Act prohibited such service arrangements, but it continued unabated until the depression made it obsolete in the 1930s, and the local colonial officials saw nothing wrong with that deliberate infringement of law.⁹⁶ In practically all Native states, however, the mineral rights belonged to the respective rulers and concessions were granted for mining and

⁹³ *Statement Exhibiting the Moral and Material Progress and Condition of India, 1901-02* pp. 238-239

⁹⁴ *Ibid*, 1912-13 pp. 60

⁹⁵ Collin Simmons, 'Recruiting and Organizing an Industrial Labour Force in colonial India: The Case of the Coal Mining Industry c. 1880-1939', *Indian Economic and Social History Review*, Vol. 13 No. 4 (1976) pp. 455-485.

⁹⁶ *Ibid*

prospecting under rules that involved a certain amount of supervision by the Government of India.⁹⁷

However, formulation of laws was one thing and their implementation another. The available sources from Singhbhum, particularly Kolhan, present a different picture. There seems to have been a drastic mismatch between formulation of laws from above and implementation from below. The CNTA, 1908 was a highly significant legislation which recognized and preserved the rights of local communities over their land, forest and other resources and also upheld other customary rights and practices of the tribes.⁹⁸ While CNTA was enacted specifically to protect tribal land from being expropriated by outsiders, Section 49 of the CNTA itself allows land to be transferred for mining and industrial purposes. This shows an internal contradiction within the laws. Though in the wake of CNTA and a number of contemporary Forestry Reservation Orders in Kolhan, the acquisition of land for mining in Western Singhbhum was not without problems, but preexistence of a wide ranging Land Acquisition Act of 1894 for 'public use', whose definition was broad enough to sanction land for practically any purpose, made the task of mining companies much easier. The protective laws were subverted paving the way for large scale industrial mining by the beginning of twentieth century.

Land acquisition for opening of mines had dramatic impact on the lives of Hos. Monetary compensation, when granted was rarely adequate, and the Hos, unused to money economy, would fritter away the compensation they received and thereby sink into indebtedness. This point becomes clearer with the testimony of the Kolhan Inspector, Ratneshwar Ray:

In the matter of acquiring tenants' lands for mining purposes, I bring to the notice of the District Commissioner how it tells hard upon the poor tenants. By leasing out land for mining purposes, the government derives royalty and the lessee derives immediate profit, but the poor tenant loses his only source of livelihood. In villages like Karanjia every inch of land has been recorded in the name of one tenant or the

⁹⁷ *Statement Exhibiting the Moral and Material Progress and condition of India, 1912-13* pp. 60

⁹⁸ For technical details of the CNTA, see *The Chotanagpur Tenancy Rules, 1931*, (Patna: Board of Revenue, Bihar and Orissa, 1931)

other, so that there is no way left for replacing the raiyat with fresh land lost by him. By the money compensation paid to him he cannot buy other lands because nobody sells his holding in Kolhan. The result is that the money he gets, he spends in buying his food.⁹⁹

This indicates that the land alienation could not be mitigated through land compensation because free land was not easily available in Kolhan. This ultimately led to depeasantization and migration of tenants from villages, as the diary informs, “the tenants seeing that they cannot make new lands from the waste settled with them in Gundijora, took thika settlement of rice lands in Keonjhar State. They are now busy harvesting this crop”.¹⁰⁰

Ratneshwar’s Diary provides interesting details which helps historians to understand the way mining operated on the ground. It tells us that several “news mongers” acted as, “professional supplier to mining concessionaries who....sell them some useful information”.¹⁰¹ The practices and malpractices of mine owners form important theme of the diary. Abundance of minerals in Singhbhum and neighbouring princely states of Orissa did not mean availability of uniformly good quality of minerals at all places. So the mine owners generally blended superior and inferior qualities to make the stuff marketable. Most of the mines which Ratneshwar talks about were small in scale of operation. He is silent about working of large mines in Kolhan like that of TISCO –Noamundi and that of IISCO- Gua and Manoharpur. He briefly mentions the prevalence of alcoholism and absenting from work owing to Hindu and tribal festivals.¹⁰²

Ratneshwar’s diary provides detailed information about the procedure of land acquisition, compensation, problem of land acquisition and consequent peasant protests. The method of acquiring land was that the lessee had to apply for issuing prospecting license by stating that the reason and extent of land to be acquired for

⁹⁹ Tour Diary of Ratneshwar Ray, Kolhan Inspector (Unpublished Private Collection) .His Diary entry for 9 March 1929. Cited in Sanjukta Das Gupta, *Adivasis and the Raj: Socio-economic Transition of the Hos, 1820-1932* (Delhi: Orient Blackswan, 2011) pp. 189

¹⁰⁰ Ratneshwar’s diary entry for 20.10.1927. Cited in Asok Kumar Sen, *Representing Tribe: The Ho of Singhbhum under Colonial Rule* (Delhi: Concept Publishing, 2011) pp. 70-71

¹⁰¹ Ratneshwar’s diary entry for 19/30.4.1929. Cited in Sen, *Representing Tribe* pp. 73

¹⁰² Sen, *Representing Tribe* pp. 73-75

mining. After official enquiry the license was issued. Next it was converted into a mining license when minerals were found in marketable quantum. We learn that generally land was acquired after arriving at an agreement between the owner and the government in which the Manki and Munda played a crucial role. The amount of compensation was fixed at market rates and it was delivered generally to the landowner in the village itself. But if the receiver remained absent at the time of payment, he had to collect the amount from Chaibasa treasury. Providing him with another land sometimes compensated the landowner. Disputes arose quite often which required official mediation to ease tension. But when the efforts failed the government did not flinch from clamping down section 50 of the Chota Nagpur Tenancy Act.¹⁰³

He states that the occasion for conflict arose more in cases when landowner's consent was not procured through mutual consultation or peasant disagreed to a proposal. One such instance was the tension between Bagchi Lahiri and Company and the villagers of Rajanka and Kondowa. Ratneshwar noted, "The fact is that the tenants' lands were....acquired...against the will of the tenants."¹⁰⁴ The villagers resisted this by refusing to accept compensation amount and sowed crops on the disputed lands. In another instance Rando Ho refused to part with his plot of land to Kasimbazar Clay Factory. Similarly, the villagers of Chota Mahuldia objected to the surrender additional lands to the above company.¹⁰⁵ As Asok Kumar Sen argues, such modes of everyday resistance disputes the notion that armed resistance constituted the natural and typical tribal mode of protest. The instances of peasant resistance reported by Ratneshwar were few, but these provide a glimpse of popular discontentment, which cannot be found in archival sources.¹⁰⁶

Ratneswar Ray's Diary also reports the tendency among prospectors and miners to violate the official procedure. They did not clearly demarcate the lease area and begin mining work within one year of the granting of lease as was obligatory. There were frequent encroachments into lands of Forest Department as well as other

¹⁰³ Ibid pp. 70

¹⁰⁴ Ratneshwar's diary entry 24.9.1927. Cited in Sen, *Representing Tribe* pp. 71

¹⁰⁵ Ratneshwar's diary entry 17.2.1928 and 25.4.1928. Cited in Sen, *Representing Tribe* pp. 71

¹⁰⁶ Sen, *Representing Tribe* pp. 71-72

mine owners. Law was also violated when prior sanction for extending mining work was not sought.¹⁰⁷

This diary of an official of lower bureaucracy of British Government becomes site of contestation between two mutually contradictory discourses on mining- mining as essentially leading to 'development' and industrialization and mining causing displacement. As part of bureaucratic machinery Ratneshwar sought to conciliate Kondowa villagers not to disturb activities in the Tata's leasehold. But he was equally aware of displacement of villagers due to leasing out of lands to private entrepreneurs and companies as he notes, "By leasing out a land for mining purposes Government derives immense profit but the poor tenant loses his only resource of livelihood."¹⁰⁸

As Asok Sen cautions us, "Diary is a dispersed, incoherent and piecemeal reporting [of] reality" and a historian has to invariably play the "hermeneutic act of ordering the disjointed elements to make it a coherent whole". One is impressed by the rich details on questions related to land use, mining, forest, migration, popular resistance and working of local administration. These are not to be found in general administrative reports on mines and land, forest. As such tour diary of Ratneshwar Ray forms an important repository of local/regional history.¹⁰⁹

Legal questions became very important in the first decade of independence in Orissa. This increase in number of prospecting and licensing of metallic mining was due to opening of new economic avenues of ferro-alloys. It is important to note that Bihar and Orissa Iron field was interspersed with many other minerals like copper, manganese, chromite etc. In post- independence period, in the context of economic planning, many plants were opened for producing alloys of iron, like ferro-manganese, ferro-chromite, ferro-vanadium, which had special economic benefits. In the iron field, iron ore occurred along with other minerals as well. This had potential for manufacture of alloys. And this was realized during the Five Years Plan. Under such condition competition among private entrepreneurs increased to get prospecting

¹⁰⁷ Ratneshwar's diary entry for 20.10.1927, 1.4.1928 and also 9.3.1929. Cited in Sen, *Representing Tribe* pp. 74

¹⁰⁸ Ratneshwar's diary entry 3.3.1929. Cited in Sen, *Representing Tribe* pp. 72

¹⁰⁹ Sen, *Representing Tribe* pp. 68-69

and mining licenses. This created further legal complications -at stake were the rights over minerals. And here competing actors were not only public and private sector, but also the state government and the centre.¹¹⁰ In the emerging discourse on the relationship between mining and national development, consultations with and participation of local communities whose lands were being prospected was completely missing.¹¹¹

National Development and the Planning of Iron Ore

In what ways was mining of minerals and ores looked at in the discourse of national development? Radhika Krishnan identifies three distinct schools of thought which shaped the mining discourse in post colonial situation- the mining pragmatists, the mining pessimists and the mining developmentalists. The mining developmentalists were avowedly optimistic and enthusiastic about the mining project, while the pessimists were openly critical to the extent of being dismissive of the entire project. On the other hand, pragmatists while critical of certain impacts of mining activity but saw the possibility of ameliorating these impacts.¹¹²

Unpacking the term 'Iron and Steel', makes it possible to look at the relationship between iron ore and steel production. It was through a historical process that steel became the symbol of nation building. Development of Steel factories with foreign collaboration was the main thrust of the Nehruvian economy. In this grand discourse on 'Iron and Steel', ore factor was completely absent and everything was overshadowed by 'Steel'. Planned economy meant planning of efficient extraction of ores and minerals for facilitating increased production of steel and pig iron. An effort to look at the way ores were extracted will give proper perspective to understand planned economy.

¹¹⁰ See Sarjoo Prasad, *Report of the Orissa Inquiry Commission 1971-72* (Government of Orissa: Home Department, 1972)

¹¹¹ See Felix Padel and Samarendra Das, *Out of this Earth: East India Adivasis and the Aluminium Cartel* (Delhi: Orient Blackswan, 2010)

¹¹² Radhika Krishnan, *Digging the Earth: Exploring Mining Debates in Independent India* (Unpublished Mphil Dissertation, Jawaharlal Nehru University, 2009) pp. 8-42

The discourse on the mining largely sees questions of the social implication of mining or environmental concerns in isolation from the social, political and economic conditions within which the mining project operates. However, the mining project- the way it has originated, its guiding principles and its priorities- neither existed nor operated in a vacuum.¹¹³ Rather it was shaped by the forces of colonialism, the exigencies of World Wars and the presence of vast railway network. These factors sustained mining in colonial India. In independent India, mining got the enthusiastic patronage of its ruling elite with its belief in 'modern', 'scientific' projects, necessary for 'national development'. These objectives got a new direction with the promulgation of Five Years Plans, which encompassed the priorities of post-colonial state:

the expansion of the iron and steel industry has obviously the highest priority, since more than any other industrial project, the levels of production in these materials determine the tempo of progress of the economy.... Diverse types of fabricating facilities have to be created to promote the production of a wide range of items.... the creation of basic facilities such as the establishment of heavy foundries, forgings and structural shops is absolutely necessary.¹¹⁴

It does not come as a surprise then that one of the major project of Nehruvian economy was to set up million ton capacity steel plants simultaneously in Bhilai, Durgapur and Rourkela with foreign collaboration. In the nationalist narrative story begins and ends with the steel factory. But we have to keep in mind that this led to renewed search for 'captive mines' for these steel plants. Planning process was not limited to steel only but was extended to iron ore as well.¹¹⁵ National Mineral Development Corporation (NMDC) was set up for detailed mapping, exploration, prospecting of minerals. Besides, 'Captive mines' for steel plants, iron ore mines like Chiriburu and Meghahataburu were set up especially for exporting of iron ore to Japan.

¹¹³ Ibid

¹¹⁴ Extracts from Chapter 19 "Programme for Industrial Development" of Second Five Year Plan, Planning Commission, Government of India. Cited in Radhika Krishnan, *Digging the Earth: Exploring the Mining Debates in Independent India* pp. 56

¹¹⁵ Gopal K. Kadekori, *Economic Planning for Iron Ore in India* (Delhi: Institute of Economic Growth and Hindustan Publishing Corporation, 1982)

In the First Five Year Plan Jamshedpur and Burnpur were expanded. In the Second Plan, 1956-61, a new nationalized concern, Hindustan Steel, was established to operate three new plants built with foreign economic and technical cooperation- Rourkela (German cooperation), Bhilai (Soviet) and Durgapur (British).

P.N Bose, on estimating the probable reserve of iron ore after his geological survey of minerals of Mayurbhanj in 1904, states: "It is very difficult to make even an approximate estimate of the quantity of available iron ore. But it would be no exaggeration to say, that a practically *inexhaustible* supply for several furnaces on a modern scale may be safely depended upon."¹¹⁶ This notion of abundant and virtually inexhaustible iron ore changed by the end of the fourth five year plan and economic planners started advocating for the need to plan the extraction of iron ore. This is how P.C Joshi describes the need for economic planning of Iron ore, "Iron ore being a natural resource, is highly linked with developmental process...of India. The methods of extraction and use of iron ore need to be placed on a scientific and rational basis, in view especially of the *exhaustible* nature of this resource."¹¹⁷ Here we can see the changing discourse on iron ore from *inexhaustible* to *exhaustible* nature of ore/minerals, and hence increased efforts to preserve and plan it for domestic use.

Nature of Urbanization: Factory vs Mines

People have often said "the city" when they meant capitalism or bureaucracy or centralized power, while "the country"...has at times meant everything from independence to deprivation, and from the powers of an active imagination to a form of release from consciousness. At every point we need to put these ideas to the historical realities, at times to be confronted, at times denied.¹¹⁸

Post-colonial state's effort to develop Steel Cities as marker of industrialization and national strength further increased the spatial difference between

¹¹⁶ P.N Bose, "Notes on the Geology and Mineral Resources of Mayurbhanj", *Records of the Geological Survey of India* Vol. XXXI, 1904 p-167-173

¹¹⁷ P.C Joshi, 'Foreword' in Gopal Kadekori, *Economic Planning for Iron Ore in India* pp.xiii

¹¹⁸ Raymond Williams, *The Country and the City* (New York: Oxford University Press, 1973)

Steel Cities and Mining Towns. The process was initiated in the beginning of twentieth century with the emergence of Jamshedpur as industrial city. TISCO has often been described as paternalistic in their efforts to administer Jamshedpur city. Controlled and administered by the private company founded in 1909, it is probably the oldest extant company town and one of the largest in terms of population.

Blair Kling describes TISCO as a 'steel company governing a town' and the 'company paternalism' of TISCO as a feature of 'Indian cultural characteristics', marked by a 'willingness to accept dependency and employer intrusion into one's privacy, as well as the deep seated yearning for a protective patron'¹¹⁹. He argues that there is general lack of paternalism in Indian Industry, but marks out Tatas as an exception. Kling differentiates between paternalism in India and in the west on the basis of prevailing socioeconomic structure and cultural aspects of society. He ascribes cultural differences as most important aspect which differentiates Indian and western paternalism. TISCO's relation to Jamshedpur resonate with "traditional feudalism". It is replication of rural patron-client relation between landlord and tenant in city. On the basis of his field study and oral interviews, Kling argues that in Jamshedpur employees and non employees are embedded in hierarchical culture of patron client and many regarded themselves as having ruler-subject relationship with the Tatas. The managing director of the steel mill, carrying on the functions of traditional Indian ruler, acts as a social leader, a patron of public activities, and a moral guide for the community.¹²⁰ The reason for persistence of paternalism in India, according to Kling is enormous gap between the urban, western educated elites and the uneducated rural villagers and urban poor who provide most of the unskilled industrial labour. Because the educational and economic gap between owner and worker is so wide, paternal guidance is not resented. In India, acknowledging one's subservience to the protector is more important than asserting one's individual rights and personal independence. Hence in case of the Indian situation, there is a deeply

¹¹⁹ Blair B. Kling, "Paternalism in Indian Labour: The Tata Iron and Steel Company of Jamshedpur" *International Labour and Working-Class History* No. 53 (Spring 1998) pp. 69-87

¹²⁰ Ibid. Kling cites example of an event in 1992, when a high official in the Town Department of the steel mill was assassinated by an "encroacher", the managing director of Tisco led a huge funeral procession of workers and townspeople to protest police and government failure to protect the city. P 71

entrenched expectation of paternal behavior and obligation on the part of the owner matched by reciprocal dependence and subservience on the part of worker. According to him much of the labour unrest in Jamshedpur was the result of unrealized paternalistic expectations.¹²¹ J.R.D and other top directors of Tata enterprise have constantly emphasized that the basis of their welfare policies in steel mill and their paternalism in Jamshedpur was their belief in the national importance of the steel mill and in the social responsibility of those with power and wealth.¹²²

Blair Kling points towards three features of company's paternalistic policies within the steel mill- First, a formal, contractual and regulated paternalism, which he identifies as "Welfare Capitalism", second, the role of the company's welfare department in assisting, protecting and guiding its workers, particularly lower echelon workers coming from villages and third, activities related to the workers' living condition, overlapping with the larger paternalistic role of the company in the city of Jamshedpur.¹²³

Kling's understanding of TISCO as inherently paternalistic and "progressive firm", is beset with problem. Was paternalism of TISCO limited only to Jamshedpur or extended to iron mines and limestone quarries as well? Workers of Noamundi mines in their memorandum to Bihar Labour Enquiry committee questioned the paternalism of TISCO by drawing attention to different economic standards in Jamshaedpur and the mines. Also TISCO mines in Mayurbhanj were manually operated even after independence before being finally abandoned in 1968. During 1961-71, apart from the normal increase of population, closure of the TISCO mines at Gorumahisani, Badampahar, Sulaipat in 1968 led to increased migration to the agricultural sector. Nearly 8000 miners and another 2000 who had earned their

¹²¹ Ibid pp. 71

¹²² This view can be found in their public speeches, house publication and interviews. For collection of such speeches see S.A Sabavala and Russi M. Lala (eds.) *Keynote: J.R.D Tata* (Bombay: Tata Press Ltd., 1986).

¹²³ Kling, 'Paternalism in Indian Labour' pp. 73

livelihood from ancillary occupations returned to Mayurbhanj district, raising its population by 36.16 per cent - the highest for any district in Orissa.¹²⁴

Mining towns remained in prolonged process of transition, they ended up being something hybrid- neither rural nor urban. Mines are basically Steel Factory's backyard, the place of extraction which are to be abandoned when reserves are exhausted. Dietmer Rothermund uses the concept of 'Enclave Economy' for Dhanbad coal mines to argue that these mines became pockets of industrialization in the midst of agrarian economy.¹²⁵ According to Rothermund, Economic enclaves are separated by a dualistic threshold from their environment usually originating under colonialism or under conditions of quasi-colonial control. Economic dualism, as per his description, is characterized by the formation of a firm threshold which separates the relatively more advanced urban industrial sector from the rural economy, and whose visible evidence is the establishment of enclaves which greatly differed in their level of activity from their hinterland. They are geared to a demand from abroad e.g mines which are geared for export only or plantations which produce cash crops for the world market. In addition there are Secondary or Derivative enclaves which cater to the needs of the primary ones. He argues that Indian coal-field was a typical example of 'Derivative enclave'. Indian coal was rarely exported but catered to the demand for home in railways, jute, tea. The fact that this secondary enclave depended on the demand created in the primary ones implied that indigenous entrepreneurs could not get a foothold in this field.¹²⁶ Close association of iron mines with hills and forests, because of geological nature of iron ore, meant iron ore mines remained enclosed and even more dispersed in the forests of 'South Chotanagpur'.

Some distinctive features of mining industry have to be kept in mind. Mines are not concentrated in towns, nor are their workers town dwellers. Spread over a large area, their workforce is dispersed. They are wasting assets, and the drive for

¹²⁴ Sitakant Mahapatra, *Modernization and Ritual: Identity and Change in Santal Society*, (Calcutta: Oxford University Press, 1986) pp. 77

¹²⁵ Dietmer Rothermund, "The Coalfield-An Enclave in a Backward Region" in D.Rothermund and D.C Wadhwa (ed.) *Zamindars, Mines and Peasants: Studies in the History of an Indian Coalfield and its Rural Hinterland* (Delhi: Manohar, 1978) pp.1-19

¹²⁶ Ibid

increased production ultimately requires the opening up of new mines. With widespread units, transportation is complicated, and the location of sites is crucial to profit rates. Therefore mines are best worked to exhaustion, for lengthy stoppages increases various economic and geological risk factors.¹²⁷

In his study of settlement geography of Chotanagpur, Ayodhya Prasad describes mining as essentially an activity of countryside which directly impress upon the rural landscape. Mining centres generally tend to be distributed widely, allowing each of them to have sufficient area for operation. For this reason, he argues, mining industry alone, if not attended by processing, manufacturing or trading activities, nowhere gives rise to a town by itself. For him, "Mining centres constitute that end of the countryside which communicates with urban areas".¹²⁸ From the point of view of settlement geography, Prasad classifies mining settlements into two categories: large scale concentrated mining and small sporadic mines. Large scale concentrated mining are often accompanied by processing and finishing units, which leads to growth of mining towns, engulfing large number of villages. This process of mining in Chotanagpur gave rise to few urban centres like Jharia and its surroundings, Mosabani, Noamundi. Small sized mines and quarries, however were widely scattered and do not produce enough to induce the growth of towns. Such mining centres were conveniently "contained in the rural landscape". The surface features of these mining centres were impoverished and did not differ substantially from other features of the rural landscape. At these mining sites the top-works e.g offices, shades and stores were not very different structurally from the rural establishments. The supply of labour at these mines was mostly from local and neighbouring areas. For these workers, who mostly stayed in their hometowns, mines were just another place of work in their "village compass".¹²⁹ In addition to the mines which were subject to control under the Mines Act, thousand of "unlicensed quarries" particularly in inaccessible hills were worked by the villages when there was no agricultural work especially from March to June. During this period they usually went to forests to

¹²⁷ Simeon, *Politics of Labour under Late Colonialism* pp. 16

¹²⁸ Ayodhya Prasad, *Chotanagpur: Geography of Rural Settlement* (Ranchi: Ranchi University and G.E.L Press, 1973) pp.74-75

¹²⁹ Ibid

collect forest product or to work in permanent or semi-permanent mines and quarries. “Villagers’ quarries” were numerous in Chotanagpur and Santhal Pargana including Singhbhum. Mines were more like “scars in the rural landscape”.¹³⁰

Rabi Patnaik, famous Oriya writer made a sharp observation of the landscape of Joda mining area of Keonjhar in his short story written in a backdrop of mechanization and retrenchment of labourers leading to agitation and police repression in the area in 1970s. The comment emphasizes the hybrid nature of mines, somewhere in between the rural and the urban, defying any attempt at characterizing the nature of its settlement pattern,:

Joda. The heart of more than two hundred mines, big and small, in the Jamda-Koira valley, [is] a strange place-neither a town nor a village. It looks like a town-planners’ nightmare. The swanky mining company’s office and quarters jar, along with Neolithic hutments of the shanty town inhabited by the labourers. They are surrounded by barren hills, long since stripped of their foliage, gaping like ugly sores on a giant green animal. It’s a settlement of plunderers, men and machines methodically ripping the earth’s bowels apart in their unquenchable greed. Beyond the neatly laid out rows of handsome staff quarters, atop a hillock, lies the company guest house ‘Joda View’. With its five-star luxury, it hosts top company executives and senior Government officials who happen to spend a couple of nights over here. Otherwise it’s mostly deserted.¹³¹

In a recent study Srirupa Roy looks at spatial practices associated with the Nehruvian state’s push towards “nation building” through rapid industrialization and the ways in which a “new India” was realized through building of new urban spaces. By focusing on the formation of one such urban spaces-steel town or industrial township build to house the workers of the nationalized steel plants she looks at the concrete localized

¹³⁰ Ibid

¹³¹ Joda Mines are captive mines of TISCO. Rabi Patnaik’s Oriya Short Story ‘*Savitry*’, translated into English by Ramanuj Shastry in Kishori Charan Das (ed.) ‘*Beyond the Roots: An Anthology of Oriya Short Stories*’, (Delhi: National Book Trust, 1998) pp 190-196. Rabi Patnaik (1935-91), was a member of Communist Party of India. His published works consist of 18 collection of short stories. A sharp observer of human nature at various levels, he received the Orissa Sahitya Akademy Award in 1984 for *Hiranya garbha* (short stories) and the Sahitya Akademy Award posthumously in 1993 for another short story collection *Vichitra-Barna*.

practices that enabled the nation state to take shape. Steel towns were held as the exemplary national spaces of the new India-spaces that would enable the birth of new “nationally integrated producer citizen” and bring forth the future of national spaces in which the state could foreground activities undertaken on behalf of the nation and thereby render visible its representative character. She traces the journey of the steel town from its original establishment as the exemplary national dreamworld in late 1950s to its reconceptualization a decade later as the exemplary national catastrophe in the wake of the religious riots that erupted in steel town of Rourkela.¹³²

The manufacture of steel itself was invested with considerable national symbolic importance. Steel was much more than mere industrial substance as declared in a government publication, “the production of steel is the foundation for the national superstructure for the prosperity of modern men”. The making of steel became part of glorious project of serving the nation. Postcolonial steel towns were sites in which transition from the dependent colonial economy to the sovereign and national/planned economy and from ‘unfree subject’ to the ‘productive citizen’ proudly serving her nation became visible.¹³³

On the other hand till as late as 1960 a report of Government of Bihar brought attention towards the unplanned, transient nature of mining towns:

Noamundi is a mining station which has nothing to show for all the wealth which it presumably produce. It is approached by an extremely bad road and the place has a look of a desert camp with a bazar thrown in. It has not been planned in any way for habitation or even as a long term settlement. It has the appearance of an overnight camp which is undescribed, even after years, whether to leave the place or not. This is significant because it reflects a casual attitude towards the effects of industrial exploitation. Life seems to be cheap and without a thought. There is no growth, just expansion or contraction as the work demands. It would be difficult to say whether

¹³² Srirupa Roy *Beyond Belief: India and the Politics of Postcolonial Nationalism* (Delhi: Permanent Black, 2007) pp. 133-169

¹³³ Ibid

Noamundi is unique or that *mining stations are set up only to be abandoned, therefore need no care.*¹³⁴

In retrospect we can conclude that working of colonial capitalism demanded active cooperation between colonial government, princely states and private capitalists like Tatas. The most visible aspect of this collaboration was reflected in the laying down of railway networks which became site of constant negotiations between the colonial government and TISCO, and marked the emergence of a 'new circulatory regime'. Increase in mining activity in twentieth century was due to favourable mining laws. But colonial government in 'tribal' regions like Kolhan was caught between a policy of 'protectionism' of 'tribal' groups and the utilitarian idea of mining as beneficial for wider society. Obviously in reality mining implied land acquisition and displacement which belied the colonial government's paternalism. However attempts at land acquisition for facilitating mining operations were not undertaken in absence of any resistance on part of those displaced even if such resistance did not result in open agitations. We saw how the tour diary of an official in lower bureaucracy of colonial administration open up open up possibilities in understanding the functioning of mining laws on the ground level and allowed us to listen to 'small voices of history'.

In the discourse of national development in post colonial India, steel became the symbol of national empowerment. This celebration of steel perhaps invisibilised the political economy of iron ore production.. Thus planned economy not only meant increased production of steel but also efficient extraction of minerals. While steel cities became sites of urban planning, mines remained the signs of primitivity.

¹³⁴ Narmadeshwar Prasad and Arun Sahay, *Impact of Industrialisation on Bihar Tribals: A Report* (Ranchi: Bihar Tribal Research Institute, Government of Bihar, 1961) pp. 51-52. My emphasis.

Chapter 3 Ties of Community and Ethnicity

This chapter is divided into three sections. In the first part of this chapter, I have discussed the agrarian structure of South Chotanagpur, the patterns of migration and modes of recruitment in the region focusing on iron ore mines. In the second section I have discussed agrarian and industrial struggles and the development of tribal solidarity and collective action. In the third section I have discussed self assertion, more generally community consciousness among 'tribals' of 'South Chotanagpur', focusing on various socio-religious movements and movements around language and script in Singhbhum and Mayurbhanj.

I have used the Diary of Gerald Dickson, a missionary belonging to Society for Propagation of Gospel and associated with St. Augustines' Church, Manoharpur in West Singhbhum for understanding socio-economic life in the region. This diary which is basically his daily record of events from 1910 to 1940 opens up a new world of Local History. He tries to note down each and every possible details of the region-ethnicity, village structure, description of natural resources-forest, rivers, flora fauna, settlement process and was also a keen observer of important political events during the period- Tana Bhagat Movement, Hari Baba Movement. His main concern for recording all these was to help in future evangelical process. This diary is also written in the form of travel writing. Mines do figure in his account, but only as superficial accounts, and there is no in-depth observations of these economic phenomenon. Unlike South Africa, missionaries in this part of Chotanagpur had no specific agenda of evangelical work among mines labourers.¹ But we can see the gradual development of missionary influence in the iron mining township of Chiria, near Manoharpur from the account of Gerald Dickson: "The threatened closing down of the work of BISCO in Manoharpur causes grief and anxiety. One result has been that we have had

¹ Role of Christian missionaries among miners in India has not been researched properly. This question requires further research to get a proper idea about situation in India. Janaki Nair's work is the only one which deals with role of missionaries. See Janaki Nair, *Miners and Millhands*. Nair argues that invocation of satanic power was completely absent in the Indian context. The prince of darkness, invented by colonial Christianity to denigrate peasant or tribal religiosities did not structure the discourse of reforming Hindu sects.

interdenominational services of intercession, both in Manoharpur Church and up in Chiriya itself. At the latter no less than 80 persons attended".² Chiria had a small European presence, because BISCO was completely managed by Europeans at that time. Since it was situated in the midst of dense forests of Saranda pir and the actual mining operation was on the top of Budu hills, a small European colony developed.³ His entry of 18 May 1925 gives brief description of Chiria Mines, Manoharpur and social life of Europeans in this small, remote mining centre:

Percy Martin and I spent a pleasant few days up on Chiriya Hill. The new bungalows are now built and were at our disposal. From our height of 3,500 feet we look down across miles of forest, over the whole valley of the Koel river. *About a mile away are the coolie lines, where the iron ore is being dug and everywhere the red earth shows through.* There is said to be a cap of 35 feet thick of solid iron ore over all these hills in an area of about 6 square miles. I am told that about 1,000 tons of ore is sent daily to the blast furnaces at Kulti, 200 miles away, all is owned by the Bengal Iron and Steel Company. *While the two bungalows already built are ideal for Europeans, it is a question whether servants will agree to work here.*⁴

In such missionary accounts, 'coolie lines' does figure, but it is merely mentioned. It appears only as a detail in the landscape. From such accounts we learn little about the mines, but they do tell us about the landscape of the mining region, give us a picture of the terrain on which mining activity occurred, the ground over which the miners walked.

² Diary of Anglican Missionary Gerald Dickson, Private Collection, St. Augustines' Church, Manoharpur. His entry for 1 September 1930 p. 175

³ Ibid. 26 November 1924 p. 125. Not much is known about social relations between Europeans and natives and workers in these mines, because Dickson does not say much on this aspect. Dickson's entry 12 October 1926, "Mr. and Mrs. Kelso invited me to stay with them in one of the new bungalows on the Chiriya hills. I went with seven boys who were out for adventure on their own. Up there we are above the white mist which hides the river valleys below, until the sun dispels them. We are higher than Ranchi and there is a lovely feeling in the air. The one objection is that for much of the year the grass is so long that one can walk nowhere *except towards where the ore is being mined.*" My emphasis.

⁴ Ibid pp. 129. My emphasis.

I

Agrarian Relations and Patterns of Mobility

In Labour History lot of emphasis has been put on long distance migration of tribal labour from Chotanagpur and Orissa to Assam tea plantation. In these histories internal fluidity/mobility within Chotanagpur and feudatory states of Orissa have been largely ignored. Even while talking about Chotanagpur as catchment area or major recruiting ground for 'tribal' labour, as Asok Sen points out, there is a tendency of spatializing Chotanagpur as a unified, homogenous tribal zone and having a singular past.⁵ In this section I will discuss patterns of internal mobility in 'South Chotanagpur' as well as long distance migration to Assam to understand labour migration in its entirety.

Prabhu Mohapatra tries to locate emigration from Chotanagpur in the context of continuous arable expansion and its impact on ecological relations of the region. According to him the institutional factors like rent and indebtedness which impeded arable expansion in North Chotanagpur-Palamua and Hazaribagh, cannot by themselves explain the level of emigration from Chotanagpur. They aided or impeded emigration only in a context of increasingly risky agrarian conditions. It is in the context of arable expansion and consequent ecological vulnerability that the institutional relations operated and the struggle of rights over land and the increasing proletarianization of the mass of tribal peasantry took place. Institutional factors by themselves were not the primary reason for emigration.⁶

We have to keep geological features of Chotanagpur plateau in mind to understand the nature of agricultural process here. The universal division of valley bottom and sides of ridges is an important feature of the topography of Chotanagpur plateau. Agricultural farming was done according to this distinct topographical division. In local parlance the division was known as *don* and *tanr* land respectively.

⁵ Asok Kumar Sen, *Representing Tribe: The Ho of Singhbhum under Colonial Rule* (Delhi: Concept Publishing, 2011)

⁶ Prabhu Mohapatra, "Coolies and Colliers: A Study of the Agrarian Context of Labour Migration from Chotanagpur, 1880-1920", *Studies in History*, 1,2 (1985) pp. 257-303

Rice was mostly grown in don land. The steep gradient of slope gave rise to problem of overdrainage and soil erosion which precluded the possibility of growing long duration, water sensitive crops like rice, while variety of millets, pulses and oilseed were grown in tanr land. Agricultural expansion during nineteenth and twentieth century altered this division of topographical features by the process of terracing. By terracing the sides of ridges both water retention and soil profile could be improved. Terracing of upland or tanr constituted most important form of intensification of cultivation.⁷

Prabhu Mohapatra delineates the general trends that characterised the arable expansion in Chotanagpur from the last decades of the 19th century up till 1950. Spatially he makes distinction between North Chotanagpur comprising districts of Palamau and Hazaribagh and South Chotanagpur comprising Manbhum, Ranchi and Singhbhum districts. Temporally, he identifies the process of Survey and Settlement operations as marking a watershed in the agrarian history of Chotanagpur for two reasons. First with the survey and settlement operations, for the first time reliable agricultural statistics were collected for the region. Second, with the recording of customary and occupancy rights of tenants under the provisions of Chotanagpur Tenancy Act of 1908, the position of the tenant and especially the customary tribal tenure holders became much stronger. Landlord's ability to arbitrarily enhance rent or eject tenants was also greatly curbed. This had a significant influence on the course of agrarian expansion. As such he uses the period of settlement operations i.e 1902-25 as benchmark to divide the entire period into two segments- period before settlement and that after settlement.⁸

Now taking these two spatial and temporal distinctions into consideration, he identifies two distinct trends in the process of arable expansion- 'normal' and 'delayed' expansion in this period. According to him, South Chotanagpur was the region of 'Normal expansion', which was characterised by much greater rate of growth at the beginning of the period which then slowed down as the limit of arable frontier was

⁷ Prabhu Mohapatra, "Some Aspects of Arable Expansion in Chotanagpur, 1880-1950", *Economic and Political Weekly* April 20, 1991 pp. 1043-1054

⁸ Ibid

reached. This was the characteristic pattern of the districts of Ranchi, Singhbhum and Manbhum. In contrast, the northern districts of Hazaribagh and Palamau displayed the characteristics of 'delayed expansion'. Here institutional constraints on arable expansion like rent, landlord's *bakast* land, landlessness led to stagnation in the pre-settlement period, followed by a late burst of expansion after the settlement operations.⁹ Mohapatra argues that demographic pattern had the strongest effect on arable expansion but its character was different in two types of expansionary processes. In the southern districts or the region of 'normal expansion process', it was largely the growth variable or change in population, which fuelled arable expansion. In case of northern districts or region of 'delayed expansion', where the process of arable expansion was considerably modified by institutional factors, demographic influence was mainly transmitted in the shape of a density variable.¹⁰

As regards the system of arable expansion, the major form of expansion in the extensive margin was either by founding a new village, by reclaiming jungle or by reclaiming wasteland and jungle of an old village. The organisation of reclamation of jungle was traditionally governed by custom. The oldest custom of founding villages was the *khutkatti* system found amongst the Mundas of Ranchi and Singhbhum. A group of pioneer reclaimers, usually members of the same clan undertook to reclaim jungle and, set up the village on payment of a nominal tribute to the superior chieftain or overlord. They became the virtual owners of the village, having equal rights over the land and jungle. Additionally, the right to be buried in the village graveyard was reserved for them. These rights were transmitted to their patrilineal descendants. Similar custom of reclamation with variation was prevalent among most other tribes. The commonest form of reclamation however was through the *pradhani* system, under which large tracts of jungles were cleared in Chotanagpur. The *pradhan* was the leader of a band of settlers who undertook to reclaim jungle by paying a stipulated lump sum to the landlord. The rent of the village, unlike in *khuntkatti* system, was adjusted periodically, according to the size of cultivation. Again unlike in the *khuntkatti* system, the *pradhan* was often remunerated either by grant of perpetually

⁹ Ibid

¹⁰ Ibid

rent-free land called *man* or *mania* or given a certain percentage of the village rent as commission. In all these forms of group clearance, the organisation of reclamation was independent of the superior chieftain or landlord's interference. The custom governing individual reclamation was commonly known as *korkar*. Under this system the resident tenant of a village was allowed to reclaim jungle or wasteland without payment of rent for certain number of years (usually three years) after which he paid only half the village rate. Both the customs of group clearance and individual reclamation were however under severe attack from the institution of landlordism at the turn of the century, since these customs interfered with the landlord's efforts to increase their income by private exploitation of forests as also their ability to increase the rate of rent on the reclaimed land. There was a continuous conflict over these customs between landlords and the tenants throughout the late nineteenth century. As for expansion in the intensive margin, the *korkar* system allowed the tenants to terrace the *tanr* land in their own holdings without paying any additional rent. It was a right to which the tenants clung to desperately because with the extensive margin being exhausted, this was their only hope in the face of a rapidly rising population. The expansion in the extensive margin usually meant extensions of both *don* and *tanr* land. In case of intensive margin, there were three ways in which expansion took place, first by reduction in the period of following of *tanr* land, secondly by increased double cropping. The most important method however was in terracing of *tanr* land into *don* land.¹¹

Mohapatra suggests that by the beginning of the twentieth century, the reclamatory impulse had greatly slowed down, due no doubt to the rising commercialisation of forests and consequent interest of the colonial state in preserving the jungle against natural expansion of arable. Another important factor was privatization of uncultivated waste land and the stranglehold of landlord property on it. The natural expansion of arable had been led from the front by pioneering tribesmen who lost to late coming landlords and contractors in the struggle for

¹¹ Ibid

resources of the region. The expansion in the extensive margin usually meant extension of both *don* and *tanr* land.

If the lateral expansion of the arable was already reaching an end by the beginning of the twentieth century, there was still the possibility of expansion in the intensive margin. In case of intensive margin, there were three ways in which expansion took place, first by reduction in the period of fallowing of *tanr* land, secondly by increased double cropping. The most important method however was terracing of *tanr* land into *don* land.

Through the nineteenth century till the 1950s, there was a steady advance of wet rice cultivation in the region. What facilitated this growth was the practice of terracing of uplands into rice land. As such the primary form of arable expansion was through extension of *don* land at the expanse of *tanr* land. This expansion of wet-rice cultivation displaced the crops grown on *tanr* land like millets, pulses and other foodgrains as well as oilseeds and minor cash crops like cotton and sugarcane. In many respects, this process of arable expansion in Chotanagpur presented a dynamic contrast to rest of Bengal and Bihar. While in the rest of Bengal and Bihar the pace of reclamation had slowed down considerably in the second half of nineteenth century and from the turn of the twentieth century onwards, there seems to have been hardly any expansion of acreage, on the other hand in the case of Chotanagpur not only the reclamation process continue well into the 1930s, there was even a perceptible increase in the yield per acre given the rising share of rice in the gross sown area. Main impetus for intensification of cultivation in Chotanagpur came from growth in population. Rate of population growth in Chotanagpur was higher than the rate of population growth in Bihar or British India as a whole. Between 1881 and 1931, the growth of population in Chotanagpur was 57.1 percent. The natural response to a high rate of population growth was an increase in the intensity of cultivation, either through reduction of fallowing and primarily through conversion of upland into rice land.

However, the process of agricultural expansion was not without its paradoxes. It increased the vulnerability of the agrarian regime of the region to fluctuations of

harvest. Increasingly as drought resistant crops were replaced by wet rice cultivated in the high terraces, the agrarian regime became prone to caprice of monsoons resulting in increase in number of droughts. Thus, we find that between 1880 and 1920, with a very high rate of arable expansion, Chotanagpur was subjected to four major famines and a series of serious harvest failures. As a consequence, Mohapatra argues that arable expansion in Chotanagpur had significant ecological impact on the region.¹² It is rather paradoxical that the heavy outmigration during these decades from Chotanagpur was not from the areas where arable cultivation had stagnated but from the districts, where rapid intensification of arable farming had occurred. Mohapatra gives an ecological explanation for this. He shows that in South Chotanagpur in the districts of Ranchi, Singhbhum and Manbhum, emigration was highly correlated with expanding arable mainly in intensive margin. This expansion put a large number of household at the mercy of an erratic monsoon, putting their food supply position under severe strain.¹³

Now let us see the specific situations in Singhbhum. In Singhbhum, there is enough evidence of extension of cultivation between 1867 and 1918. Between 1867 and 1897, in Kolhan Government Estate, which constituted more than half the district, the increase in the area under cultivation was approximately 80 percent, most of it in the intensive margin.¹⁴ Between 1897 and 1918, the increase was only 29 percent, but again in the intensive margin.¹⁵ Mohapatra shows two trends in the arable expansion in Kolhan. First, there was substantial increase in area of riceland between 1867-1920, and second the rate of increase of riceland between 1867-1897 was higher than between 1897 and 1920.¹⁶ In case of Dhalbhum Estate of Singhbhum, Mohapatra shows that between 1870s till 1934 there was uninterrupted expansion in the area of rice land.¹⁷

¹² Ibid

¹³ Mohapatra, "Coolies and Colliers" p. 297

¹⁴ A.D Tuckey, *Final Report on the Resettlement of Kolhan Government Estate 1913-18* (Patna, 1920) pp. 2

¹⁵ Ibid pp. 4

¹⁶ Mohapatra, "Some Aspects of Arable Expansion" p. 1047

¹⁷ Ibid

Sanjukta Dasgupta attempts to relate the history of forests in Singhbhum with the agrarian history of the region under colonial rule and argues that the interdependence between agriculture and forest and their complementary roles in the livelihood needs of the people gradually became sharply demarcated during British rule. In this sense, the notion of British colonial rule marking a crucial watershed in the ecological history of India can certainly be applied to Singhbhum.¹⁸ In Singhbhum, as in other parts of Chota Nagpur, the most significant change associated with the colonial period was the expansion of settled cultivation, in the late nineteenth century. This constituted one of the methods in which the early colonial administration sought to consolidate its control over the tribal people of the region. Extension of cultivation served the dual purpose of 'civilising' both the countryside and the 'savage' through sedentarisation and control of their volatility. Yet, agrarian change in Singhbhum did not lead to any tangible benefits nor did it indicate stability of livelihood or agrarian development so far as the bulk of the *adivasi* population was concerned. In precolonial times, agriculture and dependence on forests had complemented one another. The increase of cultivation together with restricting access to forests which occurred under colonial rule had an adverse effect on a large section of the Hos in Kolhan. As their access to the forests became restricted, it made them all the more dependent on settled agriculture. Uplands, where slash-and-burn methods used for growing hardy crops were converted into settled rice lands. The increasing dependence on rice made the Hos more vulnerable to famine and scarcity. The colonial government laid the responsibility of such improvement on the *adivasis* and was content to denigrate them as being 'improvident and lazy' and not amenable to change. Agriculture, however, continued to be dependent on rainfall. There were few irrigation projects to counteract the uncertainty of rain. Thus the agrarian economy remained fragile and liable to famine and scarcity. The problem was accentuated by the action of the outsider traders in creating an artificial shortage by exporting most of the produce outside to Calcutta and other urban centres. In such circumstances, migration to Assam in search for a new livelihood was an option taken

¹⁸ Sanjukta Dasgupta, "Accessing Nature: Agrarian Change, Forest Laws and their Impact on an Adivasi Economy in Colonial India", *Conservation and Society* 7, 4 (2009)

up by some. Nevertheless, migration remained the last option for most of the Hos who preferred to remain bound to their land rather than seek their fortunes abroad.¹⁹

Not only Singhbhum but all neighbouring princely states of Mayurbhanj, Keonjhar, Bonai, Gangpur, Sereikela and Kharsawn were settled during first three decades of twentieth century. These settlement operations had serious impact on the society as it led to agrarian unrest during 1920s. Not many studies have been done on agrarian structure of these princely states.²⁰ Princely states of Orissa were settled along the Permanent Settlement model, and settlement operations were conducted on the lines of British India and in close assistance from colonial government. Though separate settlement operations were carried out in these princely states, it was only in Ramdhyan Report that effort was made to understand agrarian situation of princely states of Orissa, Chotanagpur and Chattisgarh as a whole.²¹ Even this report is marked by conspicuous absence of Mayurbhanj, the largest princely state of Orissa, which Biswamoy Pati points out as an effort to “veil the internal order of exploitation”.²²

Colonial policy of reservation and protection of the woodland initiated during nineteenth century adversely affected forest-cultivation dependent tribal socio-economic set up and forced marginalized families to stage inter-village and inter-pir migrations for a living.²³ Asok Kumar Sen has stressed on the particularity of Singhbhum in terms of labour migration on the basis of his study of Village Papers relating to land settlements of Kolhan. He has criticized the tendency of spatializing Chotanagpur as a unified tribal zone, having a singular past in the overall studies of labour migration from Chotanagpur and stresses the importance of experiences of migration, which were often region specific. His work shows that indebtedness and land alienation, which were main reason for emigration in rest of Chotanagpur and

¹⁹ Ibid

²⁰ For a brief overview of agrarian structure of Orissan Princely States, see Biswamoy Pati, ‘Interrogating Stereotypes: Exploring the Princely states in colonial Orissa’ *South Asia Research* Vol. 25 No. 2 (Nov. 2005) pp.165-182

²¹ R. K Ramdhyan, *Report on the Land Tenures and the Revenue System of the Orissa and Chattisgarh States* Vol. III

²² Pati, ‘Interrogating Stereotypes’ pp. 169

²³ Asok Kumar Sen, *Representing Tribe: The Ho of Singhbhum under Colonial Rule* (Delhi: Concept Publishing, 2011) pp. 118

Santhal Pargana, were not relevant for Singhbhum.²⁴ He suggests that increase in the number of emigration from Singhbhum by the beginning of twentieth Century was due to the practice of recruiting labourers from neighbouring feudatory states of Mayurbhanj, Keonjhar, Bonai, Gangpur, Seraikela and Kharsawan as well who were routed through Chaibasa, district headquarter of Singhbhum. Out of the total of 3033 and 4454 recruits in 1907-8 and 1908-9, 1117 and 905 respectively belonged to the feudatory states of Orissa. This gives misleading figures for Singhbhum. Internal demand of labour created by opening of Tata steel Plant at Sakchi and iron mines in Kolhan did not led to reduction of emigration. We don't have detailed ethnic and social background of Singhbhum emigrants

Thus, two major patterns of tribal migration can be seen in South Chotanagpur. Firstly, long distance migration of tribal population towards Assam Tea Plantations. Secondly, internal migration to Iron mines and Jamshedpur Steel Plant from neighboring districts and princely states within the Province of Bihar and Orissa. Though on the one hand migration towards Assam Tea Plantations was permanent in nature, migration to mines was mostly seasonal in character as the miners kept close association with fields in their villages. Overall population scenario of the region was in constant flux due to opening up of new labour regimes.

From late nineteenth century onwards Singhbhum had been major recruiting ground for Assam Tea Plantations. Till 1901 Ranchi remained the most important source of plantation labour, closely followed by Manbhum and Hazaribagh. Afterwards they declined absolutely as well as in terms of the proportion of district population enumerated in Assam. Singhbhum on the other hand, quickly rose in terms of absolute number enumerated, as well in terms of the proportion of district population enumerated in Assam. From Singhbhum 35-40% of the total migration was towards Assam.²⁵ What effect this large scale, long distance migration of tribal population had on labour supply in local iron mines of Singhbhum-Mayurbhanj is far from clear.

²⁴ Ibid

²⁵ Ibid pp. 251-252

According to 1931 Census of India 7650 persons were engaged in the extraction of iron ore in the province of Bihar and Orissa. It informs that the development of these mines in the previous decade had been rapid. Most importantly it informs that the number of female workers employed in these mines was as large as the number of males.²⁶ Similarly Royal Commission of Labour estimated the employment in iron mines to be around 8000 and observed that “the majority of workers are recruited in the district [Singhbhum] and many attend their work daily from their villages”.²⁷ The Labour Investigation committee estimated the total employment in the iron mines of the Singhbhum and the adjoining princely states to be around 15,000 in the year 1943. However, this figure was not a steady one because the Committee failed to estimate the figure of contractors’ labour and found that a large number of iron mining labour force was recruited from the tribal villages directly surrounding the mines.²⁸ Though Hos are the dominant ethnic community of the region, Mundās, and Santhals also constitute significant tribal population of the region. Even though the major tribal groups of Chotanagpur had long ago taken to settled agriculture, food gathering continued to play an important role in the tribal economy. However, in view of a history of state restrictions on the use of forest products, besides a decline in forest acreage, the adivasis by the late nineteenth century had started supplementing their meager agricultural incomes by working as migrant wage labourers in agricultural fields, mines, factories/mills, plantations and railway construction sites.

Anthropologist D.N Majumdar, who did extensive ethnographic survey of the Hos during 1920s and 1930s, writes that, “The mining centres get a constant supply of local labour, as on all sides of them are Ho villages”.²⁹ J.L Keenan, the Irish-American General Manager of TISCO in thirties saw at Noamundi, “endless streams of Kohl, Santhals and Ho women, the inhabitants of the district, walking in a steady

²⁶ *Census of India, 1931 Vol. VII- Bihar and Orissa, Part 1- Report* pp. 196

²⁷ *Report of the royal Commission of Labour in India 1931* pp. 112

²⁸ B.P. Adarkar, *Report on the Labour Conditions in the Iron Ore Industry* (Simla: Labour Investigation Committee, 1945) pp. 4-5

²⁹ D.N Majumdar, *The Affairs of a Tribe: A Study in Tribal Dynamics* (Lucknow: Ethnographic and Folk Culture Society, 1950) pp. 293

line from the mining faces to the narrow gauge tract with baskets of ore on their heads".³⁰

Stuart Corbridge in his study on the iron mines argues that in terms of employment, local tribal men and women were disproportionately directed towards temporary, underprivileged and unskilled jobs. It reflected, according to him, "a definite company interest in maintaining the village labourers as a segregated, cheap and unorganized". Thus while tribals formed major part of mining labour force, their position in skilled and administrative echelons were correspondingly low. The skilled labourers in the mines were mostly from other parts of the country. According to the 1921 Census, which is the only official statistics to report on the social background of both skilled and unskilled workers at the four large iron mines in Singhbhum, only 246 unskilled workers came from outside the province of Bihar and Orissa. And of the remaining 4,007 the great majority were drawn from the local tribals. By contrast as many as 156 of the 544 skilled male workers came from areas other than Bihar and Orissa. In particular there was a clerical stratum of Bengalis and groups of masons from the United Province and the Central Provinces.³¹ Unfortunately not even these meagre statistics were collected in the 1931, 1941 or 1951 Censuses. Unlike mica, copper or coal mining, no detailed official report on the composition and labour situation in iron mines were recorded in the colonial India except Adarkar Report of 1945. Bengal Iron and Steel Company's Ajita and Pansura mines in Manoharpur employed total of 133 males and 651 females working in 1931. Nearly whole of the labour force came from Singhbhum district or the neighbouring feudatory states, though there were approximately 150 workers who came from Bilaspur or Raipur in the Central Province.³²

The heterogeneity of labour in the mines was pointed out by the mining officer of Singhbhum in terms of the presence of Punjabis and people from Central and United Provinces in his evidence to Bihar Labour Enquiry Committee. However, the

³⁰ J.L Keenan, *A Steel Man in India* (1945). Cited in Stuart Corbridge, 'Industrial Development in Tribal India' pp. 46

³¹ P.C Tallents, *Census of India, 1921, Vol.7, Bihar and Orissa*, Table 22. Cited in Corbridge (1982) pp. 44-46

³² *Royal Commission of Labour in India: Written Evidence Vol.IV Part 1 Bihar and Orissa*, 1930 pp.5

details of social and ethnic background of labourers in the hierarchy of workplace are difficult to know because the official sources are almost silent on this aspect. Nevertheless, the sharp contrast between skilled and unskilled labour in terms of social composition cannot be denied. Appointments of the skilled workers were made either by the manager of the mine or the General Superintendent of Ore Mines and Quarries and Prospecting. Workers of Noamundi iron mine complained about favoritism in such appointments, where the relations and friends of an influential man or a favourite of the management got jobs ignoring the claims of seniors in the lower positions.³³ A report of 1947 however suggests that both local and imported labourers were employed. The majority of the outsiders came from the surrounding Native States and the districts of Raipur and Bilaspur of the Central Province.³⁴

Majumdar talks about mines and plantations in terms of their relative influence on the lives of Hos. According to him mines had not much influence on the cultural lives of Hos as they did not lose touch with their tribal society and tradition. They return back to villages for *Mage* and *Baha* festivals. The natural environment of Hos remained the background of their culture. In case of plantations they were more exposed to new settings and cultural patterns because possibility of their coming back frequently to distant homes is less. Detribalization was rapid in the case of migration to tea plantations.³⁵

Labour Reports points out sharp distinction between the nature of Company labour and Contractors' labour in Iron mining industry - Company labour being stable and permanent, whereas Contractors' labour migratory in its habit. At Noamundi 50% of contract labour was drawn from neighbouring districts and states, the Gangpur State, the Mayurbhanj state, the Keonjhar State, Chattisgarh and the Bilaspur and

³³ *BLEC Report Vol. III Part C* pp. 232

³⁴ Bihar State Archive, Labour Department, File No. VII M 23/47. This fact is substantiated by my interviews with some retired officials of IISCO's Manoharpur mines (now taken over by Steel Authority of India Ltd.). One officer claimed that till mid-1970s, the mining labour had significant Bilaspuri component. After which this component was slowly wiped out. And now most of labourers are from local tribal communities. Also interesting fact which I got from the interview is that women formed significant component of mining labour till 1970s, after which managerial policy eliminated this element. Their jobs were diverted to their male relatives. This fact was also corroborated by one second generation labourer as well from his memory of working in the beginning of 1970s.

³⁵ Majumdar, *A Tribe in Transition* pp. 188-189

Ranchi districts. Labour in Gorumahisani largely came from Mayurbhanj state itself and were mostly Kols and Santhals.³⁶ At Gua, workers were drawn from the States of Keonjhar, Bonai, Mayurbhanj and Gangpur and the District of Sambalpur.

There was close association of the iron miners with the agriculture. The labourers recruited by contractors were essentially farmers who look upon mining as a means of additional income. There was great variation in labour supply throughout the year. The labour supply in the mines closely followed the agricultural seasons. During the monsoon period, July and August, the miners return to the fields for agricultural work. According to the manager of C.P Syndicate, almost 75 per cent of the worker at Gorumahisani returned to their villages for agricultural operations, during this period. From mid-November to mid-December they again leave the mines and go home for harvesting. There was also migration between the mines according to the availability of work.³⁷

Majumdar observes the temporary nature of migration to mines. According to him there were two main considerations for working in mines. First was the immediate need of money for paying *Malgoozari* and ceremonial needs and second, the lure of a 'free and unfettered life' in the mines. He distinguishes the labour in Jamshedpur and mining centres of Gua, Noamundi and Manoharpur in terms of its permanent and temporary nature respectively. Though routine work in steel factory of Jamshedpur was not popular among the Hos, still by 1935 a permanent Ho population developed there. Noamundi got constant supply of local labour, as on all sides of it were Ho villages. Ho labourers came to work in Noamundi from their villages. As such they brought rice from home instead of depending entirely on the shops in mine. Shopkeepers in the mines of Singhbhum brought rice from the neighboring feudatory states of Orissa. In Keonjhar rice was cheap.³⁸ But as the State did not allow the rice to be exported the shopkeepers cannot freely import from there and a system of barter was prevalent between Singhbhum and these princely states. Merchants exported salt into these states particularly Gangpur and Keonjhar and received rice in exchange.

³⁶ D.V Rege, *Labour Investigation Committee Report 1946* pp.76

³⁷ *Ibid* pp.72

³⁸ On 28th July 1934 rice was selling at Keonjhar border at 22 seers a rupee

This gives us an idea about inter-state, trading networks in rice and other essential commodities. State borders over the years had been well defined, but in day to day life these borders and boundaries were constantly defied.

As late as 1960, a government report observed:

In the mining area [Noamundi] ...nothing seems to be permanent-neither the mines nor the workers. The workers seem to be perpetually casual, they come to earn some money and then return home. There is no time limit to their stay, but they are not going to make it their life-work, nor do they seem to adopt it even as a more comfortable way of life. Necessity seems to be their only incentive, which might have, as a by-product, a *lack of ambition and a happy-go-lucky attitude*. There is no bond with the place of work or the work itself.³⁹

Rajnarayan Chandavarkar has argued that migration to cities and retaining connections with their villages were for them a matter of “conscious choice”, as it was seen as a means to repay their debts, hold on to their lands and improve their position and status in village society. Moreover, the uncertainties of urban living were offset by the psychological reassurance provided by their continuing connections with village.⁴⁰

Modes of Recruitment: Contractor and Jobbers

The precise modes of recruiting labour in iron ore mines varied over both time and space and between different grades of employee but most of the labourers were recruited through contractor system.⁴¹ Singhbhum mining concerns, taken as a whole had little difficulty in enticing unskilled tribal labour to their quarries but specific mines did encounter labour deficiencies and resorted to distinctive methods of recruitment. It is interesting to note that though Oraons did not constitute significant ethnic group in Kolhan, they were especially brought in from neighbouring districts to

³⁹ Prasad and Sahay, *Impact of Industrialisation on Bihar Tribes: A Report*. My emphasis.

⁴⁰ Rajnarayan Chandavarkar, *The Origin of Industrial Capitalism* pp. 124-167

⁴¹ Stuart Corbridge (1982) pp.49

work in Bengal Iron and Steel Company's Duia iron ore mines in Saranda pir during first decade of twentieth century.⁴²

Bengal Iron and Steel Company reported to Royal Commission of Labour that since its mines were old established there was a continuous flow of labour coming of its accord whenever agriculture work and other mines are slack. Work is carried on half departmentally and half on contract. Departmentally, no recruiting was done beyond sending mates to the surrounding bazaars on bazaar day to let the labour know that they are wanted. Contractors, however, send out recruiters to more distant districts to bring in labour.⁴³ Though private companies did not find much trouble in recruiting sufficient local labour for their works it was their participation in festivals and agricultural operations which made it difficult to keep a constant number at work and as in the case of IISCO's Gua mines, "labour force varied as much from 1,800 to 500 within a week's time".⁴⁴

Describing the recruiting pattern in iron mines, Labour Investigation committee, 1945 informs that companies recruited their own labour direct locally. Workers were informed about the availability of work in the mines and this news soon got spread in the surrounding villages. The workers who were in need of job "muster strong at the Companies" offices' and were enlisted according to the daily requirement. Sometimes mates were sent to the villages to recruit the required labour. Companies were not in the favour of establishing Employment Exchanges as these were thought to be suitable only for skilled and semi-skilled labour, who had acquired the habit of regular work.

Local unskilled labourers, many of whom owned land, had no desire for regular and continuous work and preferred to obtain employment in mines only during the need of money and in absence of agricultural work. Labour for contract work in the quarries were recruited through Jobbers from the surrounding districts. The main contractors practically had very few labourers of their own. The

⁴² A. D. Tuckey, *Final Report on the Resettlement of the Kolhan Government Estate in the District of Singhbhum 1913-1918*, (Patna: 1920) pp. 8-10

⁴³ *Royal Commission on Labour* Vol. IV Part 1, 1930 pp.10

⁴⁴ *Records of Geological Survey of India*, Vol. LVII, 1925 pp. 150

Jobber recruited, controlled and paid the miners. These sub-contractors were paid commission by the main contractor.⁴⁵ Nageshwar Prasad, Mining Officer of Singhbhum in his oral evidence to Bihar Labour Enquiry Committee (BLEC) agrees that in Noamundi very small proportion of labourers were recruited directly by the Tatas, 90 per cent were done by the Contractors. The loading work was done by the company and raising was done by contractors.⁴⁶

Commenting on the Contractor system in Noamundi mines of TISCO, J.L. Keenan, wrote in 1935 on the basis of his field trip to the mine: _____

We have saved a lot of money by letting out contracts on the tender system. In fact, the cost of mining ore at one of our mines has dropped from annas fourteen to anna seven.... I have found out on enquiry that the average wages of labour mines had dropped to three quarters of an anna per day. I cannot say that the wages that our contractors are paying is any credit to Tata Iron and Steel Company Limited and it is high time that we took some drastic action to ensure to the workman a wage sufficient to keep them with their bodies and soul together.⁴⁷

D. N. Majumdar pointed out that indirect method of recruitment under contractor system made companies indifferent towards social conditions of labourers:

The indirect method of employment in mines, for example, where the labourers are recruited and engaged by the contractors, help the companies to transfer their obligation to the former, so that even genuine grievances do not get redress and contractors always shield themselves by blaming the Companies concerned and the latter escape by being impersonal in the matters of labour management.⁴⁸

BLEC condemned the system of recruitment through contractors, who, 'ordinarily lack the sense of moral obligation towards labour which the employers or their managers are expected to have and therefore do not hesitate to exploit the helpless position of labour in their charge.'⁴⁹ In a Memorandum submitted to BLEC, the workers and miners of Noamundi state that miners were mostly from Kolhan area,

⁴⁵ B.P Adarkar Report(1945) pp.7 and Report of BLEC Vol.III Part C pp.235

⁴⁶ Report of BLEC Vol. IV Part A (Oral Evidences by the officials), 1941 pp. 290-292.

⁴⁷ J.L Keenan, "Note on Labour in Jamshedpur" *Modern Review*, December, 1935 pp.704-708

⁴⁸ Majumdar

⁴⁹ Report of BLEC, PP. 36

where the mine was situated and wages given to them was very low. An outside labourer could not survive with such low rates and that company had taken advantage of the low standard of living of the Kolhan people. The minimum wages of the unskilled labourer in the mines was annas 5 only. They also demanded abolition of Contract system, a demand they had also placed before the Tata Workers Union. The workers argued that direct employment of miners by the company would lead to increase in their earning, as well as reduction in the cost of raising ore.⁵⁰

F.G Percival, the General Superintendent, Ore Mines and Quarries and Prospecting of TISCO stated that the contract system was favored by the Companies because the raising is fixed and they know beforehand the cost-accounting of the work, which eliminates all risk for them. The system was also adaptable to seasonal variations of labour supply. He also admitted that the contract system meant less amenities for labour and possibilities of underpayment. The manager of C.P Syndicate, a Contracting agency, was of the view that they could hardly do without recruiting Sardars. Recruiting Sardars were locally respected and were responsible for worker's conduct and safe return of tools and implements by workers. On their responsibility, advances of money were often made to workers.⁵¹ Stuart Corbridge argues that the tribal village economy subsidized the costs involved in the production and reproduction of a mining labour force, which would otherwise have fallen on the mining companies.⁵²

Owners and management constructed stereotypes out of the social patterns of employment. Prabhu Mohapatra has suggested examining the adaptability of the workforce to differing work processes.⁵³ Stereotypes could differ depending on the position of the recruiters, and the context within which the stereotype was being employed. The tribal labourers, according to managers were 'quick of perception and quite competent to follow instructions and their skill develop quicker than other

⁵⁰ Report of BLEC Vol. III Part C pp. 232-38.

⁵¹ Adarkar, *Report on Labour Conditions in Iron Ore Industry* pp. 7-8

⁵² Corbridge (1982) pp. 61-62

⁵³ Mohapatra, 'Coolies and Colliers' pp. 261-266

communities but what they acquire they lose in no time and most of the labourers end where they started, as coolies.’⁵⁴

This is how management of TISCO’s Noamundi mines perceived tribal labourers in a 1960 report of Government of Bihar, “...in spite of the facilities given by the company, the labourers do not make use of them and that the money spent by the company seems to be a waste...the labourers are spendthrift and spend their wages on cosmetics, dresses and ornaments”⁵⁵ The authorities at Noamundi were distressed by “darkness, extravagance and general loose living of the workers” as they did not seem to take their “good fortune as a settled thing, they give the impression that they must enjoy their prosperity as long as it lasts, not for example in food, health, education but cheap luxuries.”⁵⁶

The outstanding thing that the report observed about the Noamundi tribal labourers was that they had, “by and large accepted the compulsions of mining area and life and they are getting away from the tribal ethos and moorings. Their past has been obliterated. They have before them nothing but the immediate present stern and cruel.”⁵⁷

II

In the second part of this chapter I have tried to place the industrial development of the region within wider social and political movements of the period. I have shown that labour movement during this period was not always separated from agrarian struggles, but during particular conjunctures got conjoined under leadership of militant trade union leader of Jamshedpur-Maneck Homi. Industrial and agrarian agitations during 1920s were synchronous. My attempt is to understand social movements as an organic whole. To argue for discreteness of industrial and agrarian domains will

⁵⁴ D.N Majumdar, *The Affairs of a Tribe* pp. 295-296. This managerial view was collected by D.N Majumdar on the basis of his ethnographic field work during 1940s in iron ore mines of Singhbhum.

⁵⁵ Prasad and Sahay, *Impact of Industrialisation on Bihar Tribes: A Report* Bihar Tribal Research Institute, Government of Bihar pp. 18-19

⁵⁶ Ibid pp. 52

⁵⁷ Ibid

perhaps mean overlooking the interconnections between various social movements. In the industrial sphere of the region dynamism of labour movement was restricted only to Jamshedpur, we know very little about the situation in iron ore mines. In the previous chapter we saw how the political economy of steel production worked with close collaboration of colonial government, princely states and TISCO. History of labour movement in Jamshedpur has shown how workers of steel plant had to struggle constantly over the period for dignified social conditions. I will show how TISCO management collaborated with the Ruler of Sereikela State to restrict the influence of Homi and to prevent agitations of workers and tenants in their respective domains. One can only speculate the situation in iron mines in Mayurbhanj State under conditions of such a collusion between the princely state and private capitalists. Recruitment of 'tribal' labour was not only for industrial sector but also for war frontiers. Attempt of colonial state to recruit Santhals of Mayurbhanj to work in France during World War I gave rise to a rebellion in 1917. Though the immediate cause of this rebellion was against recruitment, it became the context for expressing grievances against forest laws and restrictions imposed by Excise Department. We will see how during this rebellion, which also occurred in Bamanghaty subdivision where TISCO's iron mines were located, colonial state made an attempt to barricade these mines and prevented santhals from conducting meeting in the vicinity of mines and dispersed them. Under such situation we get to know the 'internal order of exploitation' in princely states which otherwise remained veiled. Also we will see that during 1920s the region was punctuated by a series of agrarian agitations as it coincided with revenue settlement operations.

Thus industrial sector was not the only source of dynamism. The identities of labourers were also continuously shaped by the wider cultural milieu they inhabited, their links to affective networks, and their community ties. It is important to recognize that labourers were not only workers but also members of communities and so the social movements of the time had significance for them. We need to see the social world they inhabited, the community assertions they were a part of, and the cultural networks they helped forge. This will help us to understand the meaning of the term worker in a better way.

Agrarian and Industrial Agitations

In the study of industrialization there is emphasis on linear movement from agrarian to industrial. Agrarian and industrial are understood as two separate domains. Agrarian precedes the industrial and gives way to industrialization. As such movements originating in these supposedly separate domains are studied separately. Labour historians study trade union movements and strikes while historians of social movements and popular protest focus on agrarian uprising and 'tribal' rebellion. Recently Katrina Navickas has argued for meaningful dialogue between labour history and history of collective action and popular protest.⁵⁸ In the first half of twentieth century, in the case of South Chotanagpur, agrarian and industrial movements were synchronous and not diachronous. The history of labour movement in Jamshedpur steel plant has largely been understood separately from broader agrarian and social movements of the region. This has not given proper perspective to understand social movements as an organic whole. Trade union leader of Jamshedpur-Maneck Homi's sphere of influence was not limited to industrial but he also made efforts to unite tenants of feudatory states as well. First three decades of twentieth century were period of settlement operations in the region. This gave rise to discontentment among tenants against various oppressive taxes. Agrarian struggles spread in Sereikela and Mayurbhanj feudatory states, Dhalbhum estate of Singhbhum where Jamshedpur steel plant was located as well as Anandpur zamindary of Porahat estate of Singhbhum. Though agrarian and industrial struggles were happening separately, under interesting historical circumstances they got conjoined during last years of 1920s. In the course of events, complex interplay of borders and boundaries in the region became apparent as affairs of princely states of Sereikela and Mayurbhanj got entangled with that of British India. Colonial officers got alarmed at

⁵⁸ Katrina Navickas, 'What Happened to Class? New Histories of Labour and Collective Action in Britain', *Social History* Vol. 36 No. 2 (2011) pp. 192-204

the “grave and growing unrest among aboriginals in both States on the Singhbhum border.”⁵⁹

During 1925 to 1928, revisional revenue settlement operations took place in the Sereikela state.⁶⁰ The results were decidedly unfavourable to the raiyats of the state. Raja was trying to increase revenue from agriculture. As a consequence of the settlement, rents increased 60 percent, a rent higher than that obtaining in neighbouring districts and states. The political agent at Sambalpur began to receive numerous petitions from raiyats when the new rates began to be imposed in 1927. The Political Agent of Feudatory States C.L Philip commented that: “I find in Sereikela.....rates of rent higher than those existing elsewhere the return to the raiyats in the form of public amenities, particularly communications, education, medical relief, is far behind what exists in other states.”⁶¹

In August 1929, agitation swept over Seraikela after sporadic outbursts had occurred from 1924 onwards. The officials ascertained the real cause of Sereikela trouble to be the “new rules regarding jungle produce and the reclamation of new lands”. The tenants had no right to make Nayabadi lands without permission.⁶² On the other hand agitation in Mayurbhanj started when state officials started stopping tenants from bringing lac over the border of Singhbhum in Kolhan to sell there where they got better prices. Mayurbhanj State officials declared this as “illegal”.⁶³ There was also a grievance over the hide monopoly in which the monopolist paid unfair prices since there were a number of grades of hides. In view of state restrictions on forest use, a petition was sent to Mayurbhanj chief regarding use of timber for making ploughs.⁶⁴ Situation in Singhbhum was also no different. Santhals of Dhalbhum estate of Singhbhum were complaining against oppression of the manager of the new owner

⁵⁹ Unrest among the Perjas of Sereikela and Mayurbhanj States, Bihar State Archives, Political Special Department File No. 250/1929

⁶⁰ Shaikh Abdul Hakim, *Final Report on the Survey and Settlement Operation in the Sereikela State, 1925-1928* (Patna: Reprint, 1953)

⁶¹ Cited in E. M. Lavalley, “Pre-Industrial and Industrial Elite Accommodation: Seraikela and Jamshedpur” in Richard Fox (ed.) *Realm and Region in Traditional India* (Delhi: Vikas Publishing, 1977) pp. 181

⁶² BSA Pol. Spl. Deptt. File No. 125/1929

⁶³ Ibid

⁶⁴ Ibid

of the estate. Now authorities started fearing the spread of unrest in rest of Singhbhum as well, as there was serious discontentment among tenants in Anandpur zamindari/sub-estate against the Thakur. Besides extracting illegal *salamis* from his tenants the Thakur also exacted compulsory labour until 1927, every one who defaulted being fined Rs. 5. Again the tenants were forced to sell the fruit bearing trees and their hides and skins to the *thiccadar* of the Thakur, whether he paid them the market price or not. This was also enforced by a fine.⁶⁵ But the most important cause of discontent was introduction of *Dikus* as headmen of new tolas. In the leadership of Andreas Munda, an educated Christian inhabitant, the peasantry of the zamindary organized against the landlord. The agitation of the tenants under Andreas Munda resulted in the Thakur being prosecuted in eight cases under section 63, Chota Nagpur Tenancy Act, in 1929-30 and being fined Rs. 1,600 in all.⁶⁶ Thus we find that the region was punctuated by series of agrarian struggles during second half of 1920s and these agitations coincided with settlement operations in the region.

Now let us move our attention towards industrial sphere of Jamshedpur situated in Dhalbhum estate of Singhbhum, which was fast growing into a steel city, but not without problems of industrialization and labour agitation for better social and labour conditions. During 1920s this gave rise to trade union movement and militant labour leader Maneck Homi. My intention here is not to give a historical overview of labour movement in Jamshedpur, which has been ably done by various scholars.⁶⁷ Rather what I intend here is to give a brief account of 1928 strike in Jamshedpur which saw the rise of Maneck Homi as militant labour leader, to understand better the context which forced TISCO management and Sereikela chief to collaborate with each other to curb the growing influence of Homi over workers and tenants in their respective domains. What is really remarkable about Homi was that he did not limit himself to the labour situation in industrial city but also made constant

⁶⁵ F.E.A Taylor, *Final Report on the Revision Settlement of Porahat Estate District Singhbhum 1928-32* (Patna: 1938) pp. 27-29

⁶⁶ Ibid

⁶⁷ For details of Labour movement in Jamshedpur see Dilip Simeon, *Politics of Labour under late Colonialism* (Delhi: Manohar, 1995) Vinay Bahl, *The Making of Indian working Class: A Case of the Tata Iron and Steel Company, 1880-1946* (Delhi: Sage, 1995)

efforts to organize tenants against oppressive tax imposed on tenants of neighbouring princely states as well as Dhalbhum estate itself where Jamshedpur was located.

In December 1927 a series of strikes began in various departments of TISCO over deteriorating working conditions, departmental grievances and demand for bonus and a general wage increase. New strikes continued to break out over several months and the company learned that the dissidents, representing almost all departments, had recruited Maneck Homi⁶⁸, a local pleader to advise them in their strike action. Homi advised the workers to organize departmental strikes which would inhibit the company's operations but which would not prematurely require mass absences from work with its attendant economic hardships for the workers. The sectional strikes finally coalesced into a general strike which lasted for three months and 13 days and was to cost the company estimated crores of rupees. The workers showed remarkable solidarity with the important exception of the Bengali workers. Company was resolved not to deal with Homi or his organization. At the critical stage of the strike, imminent collapse forced Homi to seek external assistance of C.F Andrew's nominal replacement, Subhas Chandra Bose. Bose with no labour experience came to Jamshedpur and was successful in strengthening the strike by having the Bengali workers join the strike. When the strike was near total some of the TISCO directors came from Bombay and entered into negotiations with Bose but were immovable in their unwillingness to deal with Homi. Reluctantly, Homi was forced to concede to Bose in the matter of negotiations as workers were becoming demoralized and economically weakened by the lengthy strike. A settlement was reached on 12 September 1928 by Bose. Homi at first attempted to repudiate the settlement because

⁶⁸Homi had once been in the employ of the company but had left to improve his education in the United States. After a period of practical experience in American steel plants, he returned to India and zealously pursued TISCO's directors, based in Bombay, and local management, at Jamshedpur, with his plans and ideas. TISCO's management at Jamshedpur was hostile either to Homi's approach or to the substance of his ideas and considered his request for renewed employment pretentious. Homi was resentful and wrote a lengthy brief to the Tariff Commission in 1923 opposing TISCO's submission requesting Tariff protection. Although the Tariff Commission refused to consider Homi's submission on the ground that the information had been gained by the unauthorized aid of officers in the company itself, the critical submission earned him permanent enmity of company officials. Homi's resentment was increased by the discharge of his father from the company's employment in 1924. The personal enmity between Homi and the TISCO officers had significant impact on labour relations in Jamshedpur from 1928 to 1945.

because it had not been voted on by strike committee or the workers but was forced to retract due to pressure from his committee. Immediately after the strike, the leadership coalition fell apart. Bose opted for the pro-nationalist Labour Association and Homi and his followers formed a new union, the Labour Federation. In terms of militancy, membership and diversity of support among all strata and factions of workers, the Labour Federation was by far the more viable of workers' organization. The Federation continued an unrelenting verbal war against the company and physical attacks on its opposition, the Labour Association. Within a short period, Bose was forced to remit in extending the Labour Association's influence and returned to Calcutta, leaving the Association in the care of Naidu, its General Secretary.

After the strike Homi's position became strong. Company realized that industrial peace cannot be bought cheaply. Homi had a strong organization and its demand for recognition could not go unheeded. Several tactics were adopted by the company because they thought that they could undermine homi's leadership. But these ultimately failed. Recognition of the union could not be avoided and sometime after its registration, it was recognized. Company adopted indirect methods to eliminate the Federation. Company hired *goondas* confronted with Federation militants. Violence was met with equal violence. This brought company and Federation into sharp conflict with police and government authorities. Company encouraged neighbouring cultivators to trespass on Homi's land, which ultimately embroiled Homi into civil cases arising out of land disputes. Homi's legal adversaries were indirectly financed by the company. All these company efforts did not significantly undermine Homi's position or the hold of Federation over labour. In fact Federation's influence was increasing and strikes were occurring in associate companies of Jamshedpur as well. Several criminal cases were charged against Homi as several TISCO officials alleged that they were physically assaulted by Homi and his associates. In one case homi was sentenced to six month rigorous imprisonment

and in another he was sentenced to a further six month imprisonment. The cases were framed and fabricated.⁶⁹

In each of the domains of Princely State of Saraikela and the TISCO, events took place around 1928-29 which breached their economic peace and provided the basis for their cooperation. But prior to this year relation between the company and the state was very limited. Saraikela was primarily agrarian feudatory state, while Jamshedpur was fast growing into an industrial area city. In September 1929, a year after the conclusion of the TISCO strike, Homi was contacted by a number of prajas/peasants of the 'tribal' villages of the Sereikela state. Peasants hoped that he might stop the settlement. Homi was aware of unrest among peasants of Sereikela and Mayurbhanj and had brought it to the notice of colonial authorities, but officials did not take Homi seriously and thought that "there was no matter which could not be settled by reference to the Chief." Homi was invited to address a mass meeting in the Sereikela state but at first he declined to do so as he was not sure how far he would be protected by law outside British India.⁷⁰ But at a meeting of around 250 Sereikela tenants under leadership of Homi held in Beldih near Jamshedpur on 8 October 1929, Homi asked for a general *vakilatnama* to enable him "to call for meetings within the State area" and said that unreasonable taxes should be discontinued or else tenants would resort to civil disobedience. Homi agreed to assist the peasants and to represent their various agrarian grievances to the Maharaja. He also threatened similar action in Mayurbhanj. Beldih meeting forced colonial authorities and Sereikela Chief to take Homi's action seriously as prevailing political situations smelled of "unpleasant possibilities".⁷¹ Homi's advise to peasant of feudatory states not to pay unjust taxes opened up a political drama in which boundaries between princely states and British India came to forefront. If Homi crossed the border to enter state of Sereikela he was subject to State law and if he would be imprisoned there it would led to political repercussion in Jamshedpur. Officials warned Homi not merely of the "danger of exciting aboriginals but also the danger to himself of adding to his already numerous

⁶⁹Ibid. This is based on Lavalley's interview with several retired officers of the company who were active in anti-union activities of the period.

⁷⁰ Letter from J. R Dain to H. K. Briscoe, dated 9th Oct. 1929, BSA Pol. Spl. Deptt. File No. 125/1929

⁷¹ Ibid

enemies.”⁷² Meanwhile Homi hold a meeting of Sereikela and Mayurbhanj ‘tribal’ tenants at a place in Kolhan in Singhbhum and told “what their rights of private defence are”.⁷³ Officials were getting anxious as Homi’s support of agitation in Sereikela and Mayurbhanj was affecting Singhbhum as even Dhalbhum Santhals were approaching him against the new manager of the estate.⁷⁴ Officials viewed him to be “quite prepared to foster agitation in any state in which he get a footing.” They thought that since his position in Jamshedpur was insecure he hoped to “consolidate it by posing as a leader of the aboriginals.”⁷⁵

After a series of informal communications with the Raja and the Political Agent, the raja requested Homi to draw up a formal petition and an authority to represent his peasant clients. A date was fixed to make representations before the ruling chief and the state officers contacted the signatories to the representation. Thousands of raiyats attended the durbars held by raja on 24 November and 2 December 1929. The decision of Raja was not forthcoming for several months and Homi was continually vexed by his clients for word on the resolution on the issue. When the decision was made no substantial relief was given to the petitioners.⁷⁶ Around December 1929 it seems that Homi also got involved with affairs in Mayurbhanj regarding tenant grievances against lac and hide monopolies and since Mayurbhanj chief was not present in the state at that time opinion of colonial authorities were divided. Finally it was decided that if he enters the border of Mayurbhanj and refuses to leave then instead of arresting him there it was thought better to remove him quietly over the border. Colonial government was initially reluctant to arrest Homi in princely states as it recognized that grievances were ‘not wholly imaginary’ and would given rise to more ‘disturbances’. But the authorities

⁷² Letter from J. E Scott to H. K. Briscoe dated 3 Nov. 1929, BSA Pol. Spl. Deptt. File No. 125/1929

⁷³ From J R Dain to H. K Briscoe DO No. 190-C dated 15 November 1929, BSA Pol. Spl. Deptt. File No. 125/1929

⁷⁴ File No. 125/1929 pp. 20

⁷⁵ Ibid

⁷⁶ Lavalley pp. 182

were waiting for Homi to commit an offence inside the state so that they get pretext for imprisoning him in princely state.⁷⁷

It was under these turbulent political circumstances that TISCO management and the ruling chief of Sereikela combined against Homi as he had threatened their positions. E.M. Lavalley provides a brilliant analysis of this cooperation and reciprocal actions between 'industrial' and 'preindustrial' elites.⁷⁸ He argues that the Raja's response in dealing with Homi was instructed if not initiated by the company. The resort to the legal system and its manipulation was even more attractive to the Seraikela elite than to the company insofar as the ruling chief was the highest judicial officer of the state. He argues that where survival is an issue, pre-industrial and industrial elite were quite capable of not only co-existence but active cooperation and interdependence. Interrelations were strong among the elites-'preindustrial' and 'industrial' and weakest among the social movements, which arose in their domains-labour and agrarian struggles in Jamshedpur and Sereikela respectively. For this reason, the movements never merged and their interconnectedness was neither based on 'collective consciousness' nor 'alliance' but through a weak form-intermediary called on to perform tasks specific to the movements in each domains. The two disparate forces never coalesced and were easily contained by their politically and economically dominant elites.

Around May-June 1930 Homi found himself amongst several legal battles: two criminal assault cases, a civil suit for defalcation of funds, a criminal case arising out of charges of embezzlement and several other cases dealing with land disputes. Details of these legal disputes are not very clear. In the midst of all these, a complaint was made before the Seraikela magistrate that Homi had taken money on a false undertaking. Homi alleged that the entire case was a fabrication begun with the

⁷⁷ Extract from E. H Berthoud's fortnightly for first half of December 1929, BSA Pol. Spl. Deptt. 1929 File no. 125/1929

⁷⁸ Eduard M. Lavalley "Pre-Industrial and Industrial Elite Accomodation: Seraikela and Jamshedpur" in Richard G. Fox (ed.) *Realm and Region in Traditional India* (Delhi: Vikas Publishing, 1977) pp-165-193

collaboration of TISCO to ensure his removal from Jamshedpur labour situation and from being an agitational influence among the Sereikela Raja's peasantry.⁷⁹

The trial was difficult for Homi as his lawyers were not allowed to represent him because they were not licensed in the state. Homi defended himself. He tried desperately to avoid being extradited into the jurisdiction of a native state. He argued that a British Indian subject should not be turned over to a native Indian state because his rights could not be adequately guaranteed. Out of five cases only one was prosecuted and on 27 April 1931, after a trial of four months, Homi was convicted and sentenced to one year rigorous imprisonment and a fine of fifty rupees. After the trial, Homi was returned to Chaibasa where embezzlement case was being heard. Homi lost all his cases and began to serve sentences in Hazaribagh Jail. Over his head loomed the Sereikela sentence which he would serve in that state after completing the sentences owed to British India. In 1934 he was removed to Sereikela to serve his sentence there. During this period both the TISCO management and the Raja were apprehensive about Homi's release due to the popular esteem with which he continued to be held by labourers.⁸⁰

In October 1934, the Home Minister and Advocate General of Sereikela told John Keenan, TISCO'S General Manager that the Raja was thinking of releasing Homi if he signed a bond undertaking to abstain from political and economic activity in Sereikela state and further promised to keep away from the state. The General Manager managed to avert this proposal and wrote the company's Agent in Calcutta:

⁷⁹ Levalle substantiates this with his interview with one retired officer: "I went to Sereikela to make a contract with the Raja to take his unskilled labour and he would serve the company's interest. Homi was at the height of his power and wanted Sereikela to come under his control. He had a meeting in Sereikela and that was the incident which gave a chance to get Homi for us..... I discussed the case with the Raja and C.N Mohanty, who was subsequently my father in law, who was the administrator and judge of Sereikela State. His brother A.N Mohanty, was the personal secretary to the Maharaja. A settlement was made to prefer Sereikela labour and Sereikela would do the best for the company's interest". Levalle pp-183

⁸⁰ Meanwhile the company had extended its support to a union, titled Metal Workers' Union (MWU) organized by W.V.R Naidu and V.V Kalappa and V.V.Giri as its nominal head. This was actually the company's creation and failed to win over either nationalist Labour Association or hostile Labour Federation. MWU was unable to displace the loyalty of the majority of workers to Homi's personal leadership.

I was able to persuade them to keep Homi in Jail until March 8th, 1935 on giving them an undertaking that we would insure that in case he, or any other like Homi, tried to make the peasant withhold their rent that we would ask the Government to intercede and help out their state.⁸¹

To further bar any premature release, Keenan visited the Governor of Bihar and received an undertaking that the Governor would not do anything to secure Homi's release.⁸² Why was there such concern by the company to keep Homi in Jail knowing that the labour leader would eventually have to be released? The crucial consideration in Keenan's thinking was to ensure that Homi would remain in Jail until after the annual bonus payments in March 1935. Release of Homi prior to bonus payment would have provided the unionist with an immediate economic issue around which to reorganize and revitalize the Labour Federation and to capture the imagination of the workers. Hence it was important to prevent his return until payment had been made.

The Liaison officer was sent to ensure the commitment from Sereikela that Homi would not be released until after the bonus payment. In the meeting, the raja advanced a scheme which would give Sereikela state subjects preference for unskilled labour whose loyalty the state would guarantee. In addition the raja's treasury would improve from the registration and contracting fees which would be charged from workers. The company would in turn discharge any employee interfering in the state. According to the Liaison officer:

...The raja said that the state has got ample power in administration but no money and the Steel Company has got ample money and *if the both powers join together* they can easily beat down anyone who might attempt to interfere with either the State or the Company.⁸³

The Calcutta representative of the managing agents-Tata and Sons Pvt Ltd authorized the company to agree verbally to the arrangement and it was given effect to in a limited form.

⁸¹ Letter from General Manager to Agent, TISCO dated 21 Oct 1934. Cited in Lavalley

⁸² Letter from General Manager to Agent, TISCO dated 25 October 1934. Cited in Lavalley

⁸³ Based on Lavalley's interview. Lavalley p-187. My emphasis.

At the close of 1934, with Homi's release imminent, another opportunity arose for the Raja to serve the company's interests. To protest hunger strike in the jail, went on a hunger strike for several days. When the General Manager of the company came to know about Homi's action, he found it as an opportunity for additional punishment to Homi. After several meetings, the Liaison officer of TISCO, succeeded in persuading the Superintendent of Jails to file complaint against Homi for violating jail discipline. On 15 Feb 1935, Homi was convicted and sentenced to a further nine months rigorous imprisonment. Homi served his full term and was released from Sereikela at the end of 1935. Homi returned after almost five years of court proceedings and imprisonment. He had lost his license to practice law, the registration of the Labour Federation had been cancelled, its accounts had been frozen and tied up in legal knots, and many of leaders were either removed or co-opted by the company.

Although the economic struggle by the peasantry and the industrial working class did not converge in a single movement, the two movements did choose a common leader in Maneck Homi. This raises some question about the inter-relationships between the two domains-agrarian and industrial, in terms of the degree of awareness the social groups in each had about each other and the communication which may or may not have existed between them. Stressing the discreteness of the two domains would perhaps overlook forms and mechanisms of their interaction. It is almost certain that the industrial working class was not aware of the happening within neighbouring princely states, but the opposite may not have been true. Levalle argues that there is a possibility that beneath the "formality of elite contact was a tissue of social and cultural contact at the oral level, among the ordinary populace of two domains".

Ethnic Solidarity and Collective Action: Santhal Rebellions in Mayurbhanj

Indivar Kamtekar has argued that states inaugurate wars and then try to make them the business of the people over whom they govern. Modern wars therefore test states,

not just on “the battle front, but also on the home front”. War requires unusual demands on society and to extract greater resources than usual from it.⁸⁴

In 1917, during the First World War when the Government of India was pressed to find 50,000 men for Labour Corps for France, then local officials allowed headmen and rural intermediaries to deploy the powers vested in them for corvee. Corvee had the direct force of the state behind it, and its application to labor recruitment for service overseas was unprecedented.⁸⁵ The local government was asked by the Army Department to recruit labour corps for service on road and railway construction in France. Recruitment processes were in progress among Santhals of Santhal Pargana and the Mundas and Oraons of Chota Nagpur. More than 4,000 labourers had been recruited by the end of May 1917. Already 6,000 Santhal labourers from Santhal Pargana had been recruited for Labour Corps in Mesopotamia. Now the administration turned their eye on possibility of recruitment of aboriginal labour from the Feudatory States of Orissa.

J.E Scott, who had been Superintendent of Mayurbhanj State, was asked to raise a Corps of Santhals from Mayurbhanj and adjoining states in Orissa and to undertake organized recruitment in the area. But the efforts which were successful in Chotanagpur and Santhal Pargana, turned out to be failure in Mayurbhanj, as authorities faced open rebellion against recruitment. Even in Chotanagpur, recruitment process was not a smooth and homogenous one. Success in Ranchi was not matched by that in Kolhan in Singhbhum: “The good pay does not attract the Hos the least as he is afraid of a country which he has not been visited and no amount of argument does any good”⁸⁶. This was attributed to the influence of missionaries in Ranchi. Recruitment in Ranchi was done in close collaboration with missionaries. A large number of tribals were recruited in Ranchi only after the assurance that a Father would go with them as they did not like “the idea of remaining.....in a distant foreign

⁸⁴ Indivar Kamtekar, “A Different War Dance: State and Class in India 1939-1945”, *Past and Present* No. 176, 2002 pp. 189

⁸⁵ Radhika Singha, “Finding Labour from India for the War in Iraq: The Jail Porter and Labour Corps, 1916-1920” *Comparative studies in society and History* 49, 2 (2007)

⁸⁶ Letter of W. McPherson to M.G Hallett dated 15 May 1917, BSA, Political Special Department, File No 1525/1917

country and possibly dying without religious help”.⁸⁷ Thirtieth Chotanagpur Labour Corps for France was almost exclusively Roman Catholic in nature and ethnically composed predominantly from Mundas and Oraons. Out of 2000 recruits, 798 were Mundas and 967 were Oraons and 235 were from other ethnic groups. And of the total recruits, 960 were Roman Catholics, 377 Anglicans, 151 Lutherens and 512 were non-christians.⁸⁸

In May 1917 a rising occurred among the Santal inhabitants of the Mayurbhanj State. The immediate cause was an attempt to enlist men for a labour corps to serve on road and railway construction in France. On 16 May organized opposition to the work of recruitment was reported. Rumours were circulating amongst Santhals that they would be compelled to go to France against their will and against their Maharaja and that they would have to make forced contributions to war loan. Also there were rumours that they would be placed in front of the fighting line or dumped into the sea. J.E Scott, late Superintendent of the Mayurbhanj State, termed this to, “deliberate perversion of the conditions of service and the malicious misrepresentation of the intensions of Government by persons who were interested in preventing the lower class of labourer from leaving the state”. Official thinking was that ‘aboriginals’ being “simple and credulous people are easily excited by false rumours and wild stories”. The mob of Santhals assaulted some of the minor officials who were helping in the work of recruitment, looted bazaars and broke up the railway line at Betnoti station. The first series of disturbances occurred in Sadar and Kaptipada subdivisions culminating in the large scale damage to the Rupsa-Bangriposi railway line, sleepers were removed and telegraph lines cut and the destruction of the market at Betnoti on 18 and 19 May. Subsequently the Saraskona hat was looted on 2 June. Order was temporarily restored by the dispatch of the armed police reserves from Orissa and 100 infantry from Calcutta. At that time it seemed to the Government and local officials that the trouble was over and nothing remained except remedial and disciplinary action. The cause of the disturbance was presumed

⁸⁷ Letter of Father Rev. Van Hoeck to McPherson dated 19 May 1917, BSA Political Special department, File No. 1525/1917

⁸⁸ Letter from J. McPherson, supervisor, Assam Labour Board on Special Duty, to the Chief Secretary, Government of Bihar and Orissa, BSA Political special Department File No. 1525/1917

to be “malicious misrepresentation of objects of recruitment of labour corps for France”. However, the Santhals continued to show signs of unrest and in spite of assurances regarding the recruiting operations, the Santals continued to hold mass meetings in order to discuss various grievances against the administration. One of these gatherings was held on 4 June in the vicinity of TISCO’s Iron Ore mines. Apprehending an attack on the mines, the local officials took special precautions to disperse the gathering.

In June a fresh rising occurred in the Bamanghati Subdivision, the bazaar of Rairangpur was looted and burnt and a state constable was murdered by the mob. Military Police was again called and the disturbance was suppressed by the end of the month. On this occasion the agitation had no connection with labour recruitment, but was partly a reflection of the earlier disturbances and partly a manifestation of the discontent at the working of the State forest and Excise regulations. On the 15 June a large mob of Santhals gathered at Rairangpur, a collision with the State police occurred, one constable and two Santhals were killed and on the flight of the thana police the mob proceeded to loot and burn down the Rairangpur bazaar including the thana building. Santhals dispersed as soon as armed police arrived. A few small bazaars were also looted before the police arrived. The main bands of Santhals were broken by the police and were kept on move. 100 rifles from Calcutta were stationed in the vicinity of TISCO’s Iron Ore mines. Many Santals were convicted and sentenced to various terms of imprisonment for complicity in these disturbances.⁸⁹ The unrest in second phase was kept alive by agitation concerning rent and forest questions. The rebellion forced the Government to abandon efforts to recruit labour in Mayurbhanj and it was found desirable to continue recruitment from British territories only and to leave all the Feudatory States “alone for the time being”. After the restoration of peace, an enquiry was made regarding functioning of State administration that gave rise to discontent among the aboriginal population, leading ultimately to the “disturbance”.

⁸⁹ BSA, Political Special Department File No. 105/1917. Also see the *Report on the Administration of Bihar and Orissa for the year 1917-18* pp. 5

In the trial cases of the rebellion altogether 1118 persons were put on trial of whom 977 persons were convicted, 114 acquitted or discharged and 27 died during trial. Out of 1118 persons put on trial, 712 were for major and 406 were for minor offences. Persons charged with major offence were under the order of the Government tried by Mr. L.T.R Lucas special Judge and Babu Haridas Bose State Judge. Persons charged with minor offences were tried some of the state judge and the rest by other Magistrate of the state. Out of 712 persons put on trial for major offences, 613 were convicted, 74 acquitted or discharged and 25 died during trial. Out of 406 persons tried for minor offences, 364 were convicted, 40 acquitted or discharged and 2 died during trial.⁹⁰

Table No. 3 Mayurbhanj Santhal Rebellion, 1917 Trial case

Number of Persons	Sentenced to
4	Death
33	Transportation for life
1	Rigorous imprisonment for life
13	14 years' transportation
19	10 years' transportation
30	7 years' transportation
8	10 years' rigorous imprisonment
68	7 years' rigorous imprisonment
3	6 years' rigorous imprisonment
193	5 years' rigorous imprisonment
66	Below 5 years and upto 3 years rigorous imprisonment
368	Below 3 years and above 1 years rigorous imprisonment
163	Rigorous imprisonment for one year or less
7	Fined only
1	Whipping only
Total 977	

Source: *Annual Report on the Administration of Mayurbhanj for the year 1917-18*

⁹⁰ *Report on the Administration of Mayurbhanj 1917-1918*

The trials began in the beginning of August 1917 and lasted till about the end of the year, while the Commissioner of Orissa disposed of the appeal by the end of March 1918. The Commissioner submitted his final report in the shape of his comment enclosing a detailed factual and analytical report by C.L Philip, the Political Agent of the feudatory States. Philip's report dealt at length with the fiscal and economic conditions of the state and also included a survey of the administration in the state since it came under British management. Difficulty in ascertaining on the part of administration the motives and reasons behind the rebellion, was best represented in the following comments of Philip:

It is hardly possible to ascertain the strength of the various motives for this continuance of the disturbance, and to say how much to mere desire for loot, how much to false representation by the leader, how much to get rid of all outsiders, hindus included, and how much to fear of what action the more active participants would take against those who did not join it.⁹¹

Scott explained that the Santal of Mayurbhanj were much more backward than their counterpart in the Santal Parganas and Chotanagpur, who had for many generations been in close contact with European officials and missionaries. They were therefore more suspicious of novelty and influenced by credulous rumours.⁹²

The petition presented by Baiju Manjh, to the Commissioner of Orissa best represented the grievances of Santhals, which were mostly against various agricultural and forest taxes. Santhals were resisting administration's attempt of 'fencing the forest'. New forest laws prevented the people from collecting forest products and selling them, cutting of trees in reserved forests. Realization of royalty on various articles of domestic and agricultural use in place of the old plough tax was also a major source of discontentment. Beside these Santhals had to do unpaid labour for forest officials. The grievances against the Excise department were regarding prosecuting for distillation of liquor and brewing of *handia* or rice beer for sale in village market, which it declared as "illegal".

⁹¹ Cited in Mahapatra, *Modernization and Ritual* pp. 18

⁹² BSA Pol. Spl. Deptt. File No. 105/1917

C.L Philip somehow downplays the exploitative nature of administrative power in form of forest and excise regulations and stresses the irrational, pre-political, child like nature of Santhal, when he comments:

The grievances which the aboriginal raiyats really feel are those connected with the excise and forest rules, not because these are unjust or unduly oppressive but simply because they have an *ineradicable idea that they have a right to drink what they like and to cut down trees and generally deal with the jungle as they like and they cannot understand why this right should be interfered with.*⁹³

On the popular tradition of the 'mob' and nature of eighteenth century social crime, E.P Thompson explains the two different forms of riotous action observable in that period. On the one hand there were actions which arose spontaneously. These occurred when the popular sense of what was fair was provoked. On the other hand, there were crowd actions which were instigated and manipulated by those who stood above or apart from the 'people'. In particular he looks at food riots, which, he argues, were efforts by the people to maintain and later 'reimpose the older moral economy as against the economy of the free market'.⁹⁴

At the time of merger of Mayurbhanj state with the state of Orissa on the eve of Indian independence, Santhals under the leadership of Sonaram Soren, declared themselves in favour of merger with Bihar. They stated that Mayurbhanj was formerly part of Singhbhum, and since Singhbhum was going to Bihar, Mayurbhanj also should merge with Bihar. They further added that if the Government of Orissa could bring Singhbhum into Orissa, the adivasis of Mayurbhanj would have no objection to Mayurbhanj merging with Orissa, but until this was done they should continue their agitation against merger of Mayurbhanj with Orissa.⁹⁵

⁹³ Cited in Mahapatra, *Modernization and Ritual* pp. 19. My emphasis.

⁹⁴ E.P Thompson, "The Moral Economy of the English Crowd in the Eighteenth Century", *Past and Present* 50, 1971. He also discusses the 'London mob', whose actions in this period might be characterized as a 'mixture of mob and revolutionary crowd' and whose politics he viewed as transitional.

⁹⁵ This section is completely based on the study of Sitakant Mahapatra, famous Oriya litterateur, poet and folklorist. He was also Deputy Commissioner of Mayurbhanj. Mahapatra, *Modernization and Ritual* pp. 56-58

There was widespread agitation by the adivasis throughout Mayurbhanj and the law and order situation was seriously disturbed. Their agitation followed a series of decisions like: disobedience of the laws of Orissa government, non-payment of rent (most importantly forest royalty) to Orissa Government but payment could be made to the Central Government or to the Maharaja of Mayurbhanj, if the latter demanded it, forcible cultivation of waste land, non-cooperation with non-adivasis, large-scale violation of all forest laws, smuggling out controlled commodities to Bihar and organization of strikes in TISCO's iron ore mines.⁹⁶

The movement culminated in a series of disturbances. Telephone and telegraph lines were cut at several places, bridges were damaged, the Baripada-Rairangpur road was blocked, trees from reserved forests were cut indiscriminately, and there were some murders. The administration was paralyzed and the Government had to resort to firing. The rioters were taken into custody and ringleaders were detained under the Orissa Maintenance of Public Order Act, and punitive tax and collective fines of Rs 1 lakh were imposed on adivasis of Bamanghati sub division. This agitation was an important one of its kind in Mayurbhanj, since Santhal Rebellion of 1917.⁹⁷ Two years later adivasi leaders tried to obtain the refund of the collective fines imposed on the adivasis. The Government decided not to refund the collective fine, however it released all adivasi prisoners in June 1950 and all important cases were withdrawn against them.⁹⁸

III

In the third section of this chapter I have tried to situate the issues of ethnicity and community consciousness in South Chotanagpur within larger political and cultural developments. It is only at certain points in the history of a society that ethnicity is asserted explicitly, although in practice it has been 'lived' and 'used' all the time. What are the conditions under which ethnicity emerges as a major element for

⁹⁶ Ibid

⁹⁷ Ibid

⁹⁸ Ibid

collective action, self-assertion and political mobilization? By looking into Socio-religious movements among Hos of Singhbhum and development of solidarity among Santhals and Hos around the question of language and script, I have shown how over the period of time the boundaries of ethnicity and community were constantly redefined by tribal groups of this region

Socio-Religious Movements and Self-Assertion of Identity

O Birsa, you had come up in year 1895.

O Haribaba, you had come up 29 years after Birsa.

O Birsa, the twenty-cubit long turban was drenched with blood,

O Haribaba, you disturbed the spirits.⁹⁹

Historians studying tribal protests in Chotanagpur have mostly seen tribal conflict as the result of the infiltration of 'non tribals' or Dikus into 'tribal' domain and tribal movements as the resistance of 'tribals' against 'non-tribals' or as 'insiders' vs 'outsiders' or 'aboriginals' vs 'people of higher civilization'. The assumption implicit in these studies is that while tribals could borrow religious and cultural symbols of non-tribals, the economic interests of both these groups were inherently antagonistic. Tribal communities, seen as almost homogeneous, were perceived to be united in an opposition to alien and unacceptable elements that had entered their land. In the first half of twentieth century there were various attempts of social reformation and religious revitalization among the Hos. They attempted to reinvent themselves and gain self-respect vis-vis the non-Hos who were mainly Hindus. These revitalization movements were efforts to form a new cultural community. As such internal conflict and hierarchy within community became apparent. There was a growing split in the village society between the new sect of converts to the revitalization philosophy and those who were unwilling to shun the tradition, thus weakening the old village organization. Sangeeta Dasgupta's study of the Tana Bhagat movement among Oraons of Chotanagpur, recognizes the importance of tracing Oraon and Tana opposition to

⁹⁹ Folklore associated with Haribaba Movement. Translation from Ho language by Kumar Suresh Singh. See Singh, "The Haribaba Movement in Chotanagpur, 1931-32", *The Journal of Bihar Research Society* Vol. 49 Part 1-4(1963) pp. 296

the zamindars, banias and the British state, but suggests that conflict must be located also within the internal hierarchy of the community.¹⁰⁰ Dasgupta argues that as the Tanas were confronted with extra-territorial and cross-cultural forces that relocated the structure, practices and hierarchies of the Oraon world, they responded with a sense of nostalgia for their customs. But as she shows even as the Tanas articulated their protest by drawing upon Oraon cultural traditions, these were not homogenized, they were selectively appropriated in the course of the movement. Further, as the Tanas drew upon and contested the symbols and values of the dominant groups, Oraons practices acquired a new meaning. At the same time, ideas that were modified in consonance with Oraon cultural moorings. The borders between the 'Self' and the 'Other' thus became distinct, and yet blurred in the course of the Tana movement as the Tanas negotiated between different worlds and sought to define their identity.¹⁰¹ In this section I have studied the socio religious movements among the Hos- Satya Dharma and Haribaba Movement as well as efforts of educated Hos to introduce reforms in society.

In 1907, a religious revitalization movement started among a section of the Hos. Believed to have been started by one Singrai Ho of Bhuta village in Barkela pir, the *Satya Dharam* or *Punya Dharam* movement was looked upon as a new religion by the contemporary settlement officer Dahn Panna who recorded this during resettlement operation in Kolhan Government Estate.¹⁰² The movement aimed at the purification of the Ho religion through reform of some customary practices and the adoption of some Hindu mores. They put on sacred thread like the Hindu Brahmins. Its adherents worshipped only one God, who was omnipotent and invisible and was addressed as *Sat Malik* or true Lord and who was to be worshipped through *dhyān* and *jap* i.e meditation and devotion. They had no image or representation of their God and they denounced the idolatry of the Hindus. Influence of Hindu metaphysical thought and a break from Ho tradition is apparent. The followers gave up traditional dancing,

¹⁰⁰ Sangeeta Dasgupta "Reordering a world: The Tana Bhagat Movement, 1914-1919", *Studies in History*, 15,1 (1999) pp. 1-41

¹⁰¹ Ibid

¹⁰² Dahn Mahi Panna, "Note on the Hos", in A.D Tuckey, *Final Report on the Resettlement of the Kolhan Government Estate in the District of Singhbhum, 1913-1918* (Patna: 1920) pp. 118-128. We don't have much information about this movement except this short note.

drinking of *diang* or rice beer and other customs which were commonly looked upon by high-caste Hindus.¹⁰³ What is important to note is their strict observance of rituals, ceremonies and fixed rules for the daily conduct of their lives. They followed vegetarianism and did not take food prepared by the people of other religions. They took bath daily and whenever they went outside the house they did not reenter again without taking bath. They did not use any medicine during illness but believed that prayer to God will save them from illness. The adherents of this new religion were said to be found in the villages of the Chaibasa town, the district headquarter of Singhbhum and were distinguished by their "better dress and umbrella". Panna calculated the membership of this new religion to be around 800.¹⁰⁴ He observed that four gurus-Bamiya Ho, Hari Ho, Duta Ho and Birjo Ho, who after the death of its founder, were propagating their new ideas among their "tribesmen".

A movement took place in 1931-32 over almost whole of Singhbhum and even spread to some parts of Ranchi District and Gangpur Feudatory State. It was named Haribaba Movement as it was started by Duka Ho who had taken the name Haribaba. He was originally from Siriapos village, Seraikela State. In its initial phase the movement had aspects of religious revitalization with emphasis on re-establishing traditional purity but in its later phase it took a political turn when Haribaba started having visions of the overthrow of Colonial Government. He was finally arrested in Kharsawan State. Racial isolation was emphasized as he asked his disciples to break relationship with *tantis* or weaver caste and other inferior people. He told people to give up all filthy habits and advised them to give up the practice of witchcraft, which he argued only served to enhance the authority of the *Pahan* or village priests. Purification agenda included purging the Ho society of the evil of spirit worship and eradication of the evil of drunkenness.¹⁰⁵ Contemporary reports suggest the influence of Gandhi's visit to Chaibasa and his temperance movement on the Hos.

¹⁰³ Ibid

¹⁰⁴ Ibid

¹⁰⁵ F.E.A Taylor, *Final Report on the Settlement of Porahat Estate District Singhbhum 1928-32* (Patna: Superintendent Government Printing, 1938) pp. 31

Haribaba started preaching the tribals against the worship of spirits-*bongas* and *bhuts* as these were responsible for calamities such as disease or famine. Anglican missionary, Gerald Dickson explains the elaborate rituals and ceremonies associated with this movement. The expulsion of evil spirits and a hectic search for them in all places was launched amidst a cacophany of deafening sounds of feverish drumming and ceaseless beating of gongs, the exuberant disciples jumping and dancing all along. All articles associated with spirits were thrown out. Non-believer would invite the curse of Haribaba and would be, "smitten by plague, famine, turn into bird or grow tails like monkeys."¹⁰⁶ His disciples brought some sort of sanctified water, *Hari pani* from their Guru which was believed to have magical properties which brought trance when the water was sprinkled on a person during which the person influenced was able to detect evil spirits and point out the creatures in which they were living at that time.¹⁰⁷ Thursday was declared a day of rest and prayer, ploughing and sowing was prohibited on that day. The main thrust of the movement was to get rid of unclean practices. All filthy animals like pig, goat, fowl were to be destroyed. Meat and fish was prohibited and vegetarianism was promoted.¹⁰⁸ This however caused considerable economic hardship to the common people. The Revisional Settlement Report of Porahat mentioned that:

Some persons have exploited the movement for their own benefit and the country has been emptied of fowls and black goats. It was explained that the fowls and black goats were primarily for offerings to the spirits of the village and as such offerings were no longer necessary it was no use keeping them. The idea caught the imagination of the people to such an extent that the local *hats* were for some weeks simply flooded with fowls and black goats which were sold at ridiculously low prices. People are already finding it difficult to pay for salt and other minor necessities, many of which they used to get by the sale of fowls and goats.¹⁰⁹

Growing influence of Haribaba among the tribals was a source of alarm for missionaries as it was a threat to their evangelical process. Religious overtones of Haribaba movement came in conflict with interests of missionaries. Dickson observed

¹⁰⁶ Diary of Gerald Dickson. His diary entry for August 1931 pp. 183

¹⁰⁷ Taylor, *Final Report on the Revisional Settlement of Porahat Estate*, pp. 31

¹⁰⁸ Singh, "Haribaba Movement" (1963) pp. 290

¹⁰⁹ Taylor, *Final Report on the Revisional Settlement of Porahat Estate*, pp. 31

two probable 'dangers' for Christian community in Manoharpur which had come under the increasing influence of Haribabites. First that some of the "weak brethren" whose allegiance to Christianity was suspicious would undoubtedly be "carried away". Second the "pagans" who join the movement would get "Hinduized", and therefore making it harder to "convert to Christianity". Under such circumstances, he predicted that the Christians will be like "weeds easily plucked up"¹¹⁰ Dickson observed that the movement had become so strong among the people of Manoharpur that even 'ferry-men' who drove boat on Koel river, refused to work on Thursday, the day prohibited by Haribaba for work. He also pointed out that some "misguided" Lutherans also joined Haribaba.¹¹¹ Missionary attitude towards Gandhi's temperance movement:

Gandhi may be a saint but he is an *irresponsible one and an impatient one*. A nation like India cannot be made temperate by force. By now in all the big centres the liquor shops are picketed and anyone coming out carrying liquor is apt to be molested. One could only smile at the measures adopted by his envoys. They announce anyone eating flesh or fish will have no children. Anyone drinking alcohol or beer will be dead in two years. Anyone eating flesh will be eaten by worms in two months. The result is that number of people have sold off their goats and chicken, or else they have had a wild orgy of flesh blood before they had to become vegetarians.¹¹²

Simultaneously another movement among Santhals was led by Silu Santhal alias Tarachand was spreading in the Dhalbhum Estate of Singhbhum. It was convergence of both Haribaba movement and movement led by Silu Santhal in Singhbhum, which was the main source of alarm for colonial authorities. Tarachand claimed himself to be a healer gifted with miraculous powers and called upon people to give up drinking.¹¹³ His influence spread to Santhals of Mayurbhanj State. According to him, the world was created by God and not the raja and there could therefore no question of paying land revenue.¹¹⁴ This indicates political dimension of this movement and

¹¹⁰ Dickson, Diary entry for August 1931, pp. 183

¹¹¹ Ibid

¹¹² Dickson. His diary entry for May 1921 pp. 104-105. Emphasis mine.

¹¹³ A. Majid to A.D Tuckey, Comm., CND, 27 March 1931, Cited in K.S Singh, "The Haribaba Movement in Chota Nagpur, 1931-32", *Journal of Bihar Research Society* (1963) pp. 285

¹¹⁴ Extract from the confidential diary of Superintendent of Police, Manbhum, 8 March 1931, Cited in Ibid.

became the basis for his proclamation of a sort of economic-political independence. By circulating mango leaves through villages in Dhalbhum, Mayurbhanj and Kolhan, Tarachand summoned his followers to Rajabasa in Dhalbhum Estate, the centre of this new cult, warning that the villages would be visited by an epidemic if the message was not passed on. On 15 May 1931, a large number of Santhals started to congregate at Rajabasa and they proceeded to pull down telegraph wires, a symbol of colonial power and authority.¹¹⁵ Tarachand threatened the local authorities that he would win swaraj because he had with him a 'large number of soldiers without uniform', to whom 'the British guns would cause no injury'.¹¹⁶ On 18 July 1931, he entered Kharsawan State and assembled around 3,000 tribals including Ho, Santhals and Bhumij and then incited them to cut down timber and other trees from the reserved forests.¹¹⁷

On 19 July 1931, Haribaba visited the Congress Headquarter in Chakradharpur and according to one police report, it was after this that he began to preach the non-payment of rents and the wearing of Khaddar.¹¹⁸ Around this time Haribaba established links with Tarachand and his disciple Jai Singh Santhal or Jaichand. Haribaba visited Tarachand to 'exchange ideas'.¹¹⁹ Haribaba told his followers that British Raj had come to an end and Gandhi Raj had come. Advent of the reign of Gandhi was celebrated with dances and feasts and shouting '*Haribol, Haribaba ki jai, Gandhi ki jai*'.¹²⁰ The "state of things" as it existed before the British Raj would be "restored", and if Hindus again oppressed the Hos, the latter would "drive them out with bows and arrows".¹²¹

¹¹⁵ Ibid.

¹¹⁶ Extract from Confidential diary of superintendent of Police, Singhbhum for the period 27 May 1931, Cited in Ibid

¹¹⁷ Raja Sriram Chandra Singh Deo, Ruling Chief of Kharsawan Feudatory State to the Deputy Commissioner of Singhbhum, 26 July 1931 Government of Bihar and Orissa, Pol.-(Special) Dept. File No. 57/1931, BSA. Cited in Sanjukta Dasgupta (2011) pp. 296

¹¹⁸ R.P Ward to Tuckey, Confidential D.O No. 132/C, 30th July 1931. Cited in Sanjukta Dasgupta (2011) pp. 300

¹¹⁹ Ibid

¹²⁰ G. Vanhoutta, "Haribaba", *Chotanagpur Mission Letter*, No. 11, November 1931. Cited in Sanjukta Dasgupta(2011) pp. 300

¹²¹ Extract from A.D Tuckey's fortnightly D.O NO. 287 T.C dated 27th July, 1931. Cited in Dasgupta(2011) pp.296

Colonial authorities were alarmed by disturbances due to these movements. In his report to the Chota Nagpur commissioner, the Deputy Commissioner of Singhbhum wrote that a feature particularly worrying for the government was the undermining of the authority of the *mankis* and *mundas*, through whom the British government conducted the administration in Kolhan. He reported that wherever the movement spread it was preached that, 'there is no need to be afraid of government, as when, 'it came to the use of arm, only water would come out of the Sarkar's guns'.¹²² Since the Haribabaites increasingly began to display a 'seditious attitude', the three most influential leaders were arrested. The Kharsawan police first arrested Tarachand on 25 July 1931, two days later, they arrested Haribaba and Jaichand on the charge of disturbing the peace and assaulting the police respectively.

With the arrest of the leaders the political phase of the movement came to an end. However, Haribaba's followers refused to accept the news of his imprisonment and several miraculous tales and rumours were circulated regarding his whereabouts.¹²³ After Haribaba's arrest, his wife Nani Kui or *Hari Ma* set up an ashram at Nandpur near Manoharpur, and there she started preaching Haribaba's religion. But local officials described her efforts as a rather, "thinly disguised form of witchcraft and devil-catching", the main object of which was to provide her with a livelihood.¹²⁴ She distributed *Haripani* or sacred water on payment of a few paise. Missionary Dickson noted that she was accompanied by two "quacks", who made medicines from roots and herbs. These were guaranteed to heal all ailments at Rs ¼ each each. Local authorities decided to stop this as they were not certain what it would eventually lead to. Police raided Hari Ma's ashram in Manoharpur in January 1932 and 'three houses including their "temple" were burned and razed to the ground'.¹²⁵

¹²² R.P Ward to Tuckey, Confidential D.O. No.132/C, 30th July 1931. Cited in Dasgupta(2011) pp. 300-301

¹²³ Gerald Dickson, "The Haribaba Movement, What it is", *Chotanagpur Diocesan Paper* No. 40. Cited in Singh (1963) pp. 288

¹²⁴ Taylor, *Final Report on the Revisional Settlement Porahat Estate...* pp.31

¹²⁵ Gerald Dickson. Diary entry for January 1932, pp. 188-89

Attempt at social regeneration were also spearheaded by educated Hos during this period. The agenda of reform reveal the concern of educated Hos regarding image of their community among Caste Hindus. Many of their traditions which were considered immoral came into attack e.g drinking rice-beer, dancing and sexual licentiousness. A resolution protesting against the practice of the traditional dances were adopted by reformist Hos at a meeting in Lupungutu on 25 March 1924, which was presided over by Dulu Manki, the member of the Bihar and Orissa Legislative Council and attested by seventy influential members of the Ho community. It was argued that these customs have demoralizing influence on the youth who usually went from village to village to take part in the dances and was thus seer waste of time. The most significant objection that the reformist raised was that the music and dance were looked down upon by their 'cultured neighbour' as being 'very low and degrading'.¹²⁶ Influence of nationalist movement among educated Ho and growing class aspiration can be seen in this song written by an educated Ho teacher, Kanuram Deogam who taught in Chaibasa Zila School:

All are shaking off sleep and rubbing eyes; The people all are rising,
 But you are dead asleep like logs and stones. Regrettable it is.....
 Light of knowledge is dawning. But you are still snoring noisily.....
 How long will you lie below? Those below have gone ahead,
 They trample upon us, so let us rise. Few, few of you have light and learning
 But are you doing nothing for the welfare of your countrymen;
 Though you are educated, you are only gorging your small belly. Regrettable it is.....
 You Ho people I tell you-Gird up your loins to do good to your people and country.
 If you want to survive, You yourself walk on the path of doing good to people and
 country
 Time has changed, O Brethren!
 No more engage in merriment by *drums, dance and song*.....
 .No more toss your heads in *dancing Akhara*.
 You are *drinking leaf cup after leaf cup*
 Drink no more out of big pots.....
 You are *addicted to drinking*;
 If you want to stand on the earth

¹²⁶ D. N Majumdar, "The Cry of Social Reform among the Aborigines", *Modern Review* March 1925 pp. 285-290

Cut down and *drive away evil customs*
 If you *want respect from civilized men*
 Listen to what Deogam Kanu Ram says.
 Evil customs still linger in you,
 Only your outward looks are changed;
 In cutting and dressing of hair
 You have outdone the *English and Dikus*.
 In wearing dress and using scented oils
 The *Bengalees even are outdone*
 But you have no learning.
 You are scentless like the *Plash flower*.¹²⁷

In this song the author urges his fellow tribesmen to give up the 'evil customs' of singing, dancing and addiction to drinking and to adapt to the new social changes to get 'respect from civilized men'. Instead of just changing the outer appearance by imitating the cultural values of outsiders like Bengalees, he gives importance to education and knowledge to foster inner strength to serve the community. This song gives us idea about inner tensions within the society caught up between tradition and modernity.

Mathew Areeparampil argues that these reforms and religious movements amounted to an attempt at sanskritization and emphasized the influence of the model of the Hindu caste system on the Hos.¹²⁸ But the question arises can these socio-religious movements be understood only as imitation or replication of elite cultural values? In the concept of Sanskritization, the trope of mimesis figures as articulation of social mobility, wherein subordinated groups given time, shall become behaviorally more and more like those above them in social hierarchy.¹²⁹ This does not give us perspective to understand subaltern intellectual creativity. The influence of

¹²⁷ This song titled "Up Up Under British Shade" was written and composed by a Ho school teacher Kanuram Deogam, who taught in Chaibasa Zilla School. Emphasis are mine. The literal translation from Ho language was done by D. N. Majumdar with the help of Kanuram Deogam. The poem was published in D.N. Majumdar, "A Few Types of Ho songs composed by a Ho Teacher of Chaibasa Zilla School" *Journal of Asiatic society of Bengal* Vol XXIII, 1927 pp-27-36

¹²⁸ Mathew Areeparampil, "Socio-Cultural and Religious Movements among the Ho Tribals of Singhbhum District of Bihar" in Mrinal Miri (ed.) *Continuity and Change in Tribal Society* (Shimla: Indian Institute of Advanced Studies, 1993) pp.396-436

¹²⁹ Dilip Menon, *The Blindness of Insight: Essays on Caste in Modern India* (Chennai: Navayana, 2006) pp. xi-xii

Hindu cultural traits in the movement cannot be denied, but as B. B Chaudhury argues, this was utilized to strengthen the Ho identity by cleansing it of what was perceived to be evil within it.¹³⁰ Socio religious movements like that initiated by Haribaba or Silu Santhal were not politically neutral but were the product of time as these were influenced by Gandhian movement. We do not have direct evidence of influence of these socio religious movements over miners and industrial workers of the region but the rise of socio-religious movements among the Hos can be viewed as the result of cultural contact of traditional norm of Hos and compulsions of new industrial set up which came into existence from the first decade of twentieth century. Opening up of large number of mines and factories in Singhbhum and consequent incorporation of Hos into the new industrial order, Pranab Kumar Dasgupta argues, necessitated adaptive changes in the traditional cultural life. Singing, dancing, drinking of rice beer and festivals like *Mage* which were part of traditional Ho culture were not in conformity with new industrial culture. He thus puts the origin of the movement in context of cultural contact with industrial society.¹³¹

Language, Script and Community Consciousness

Distinctions between myth and history or orality and written are debatable issues. On the other hand advantage of the concept of social memory as Stuart Blackburn argues is that it reaches beyond both oral and written sources to other means of recording and remembering history, specifically performed culture.¹³² In an important study, Asok Kumar Sen draws on folklore and recorded orality to understand Ho pre-colonial past as it has been inscribed in their social memory. Interpreting the content of the Ho creation myth underlines the specific strategy of inscribing what the community considered significant to be ritually reproduced as an articulation of its ethnic identity. By looking into their transformation into a settled village life, their differential link

¹³⁰ B.B Chaudhuri, "Revaluation of Tradition in the Ideology of the Radical Adivasi Resistance in Colonial Eastern India, 1855-1932" Part I and Part II, *Indian Historical Review*, Vol. 36(2) 2009 pp.273-305 and Vol.37(1) 2009 pp.39-62

¹³¹ Dasgupta, "The Adi Samaj Movement among the Ho"

¹³² Stuart Blackburn "Colonial Contact in the 'hidden land': Oral history among the Apatanis of Arunachal Pradesh" *IESHR* 40, 3 (2003)

with the past, their mechanism of peopling of villages and effecting demographic balances, he argues that social memory underlines Ho sensibility as a village-centric and land-based community, the fact which holds the key to much of their movements in the pre and post-colonial periods.¹³³

In this section I have discussed the concept of revealed script, community consciousness and politics of recognition among Santhals and Hos. It is important to note that these efforts of devising scripts for languages started in the first half of twentieth century but its political repercussions were felt much later. Though language as an important component that gives a sense of belonging to the community and which survives till very late in oral form, it is the script which marks the transition from orality to written culture. The process had started much earlier with the efforts of missionaries and colonial administration to collect, record and classify customs and folklore of tribal groups and convert it into written form in Roman script. What was significant in this period was that the efforts were initiated within the tribal communities to develop separate scripts for their own languages. In case of Santhali it culminated in incorporation of Santhali language and Ol Chik script in Eight Schedule of Indian constitution, while Ho and most of tribal languages in India are still struggling for recognition. Language and script have been important factors in the politics of recognition in post colonial India.

The concept of revealed script is peculiar to many tribes. Such scripts generally have inventors who, however, disclaim any specialized personal skill or technique. Instead, they emphasize that the formulation of the script is due to some kind of divine inspiration. It is argued that the script existed in some glorious past, but disappeared with the decline of tribe. The reappearance of the script is associated with the resurgence of the vitality of the tribe. As such rise and disappearance of script is linked to the rise and fall of the tribe. Thus scripts as much as oral culture, folklore, songs, performed culture forms part of tribe's world view and social memory.

¹³³ Asok Kumar Sen, 'Collective Memory and Reconstruction of Ho Identity', *Indian Folklore Research Journal* Vol. 5 No. 8 (2008) pp. 87-103

Let us first begin our discussion with Raghunath Murmu's attempt to forge a new sense of identity and self-assertion among the Santhals by devising *Ol Chik* Script for Santhali language and reinterpreted Santhali religion. Santhali language claims three revealed scripts. One is attributed to Ramadas Tudu of Ghatsila, the second one to Ramachandra Murmu of Silda and the third that was finally accepted by the community, to Raghunath Murmu of Mayurbhanj. Raghunath Murmu's proposed script was ultimately accepted as superior by other two. Santhal leadership was divided on the question of *Ol Chik* Script, but ultimately Santhal society and its leaders accepted this script. Murmu did not claim divine inspiration, but insisted that he had no original contribution in its formulation. He maintained, "all that I did was only to use certain mechanism to give phonetic equivalence to the sound of the language and learnt it from [my] culture, social tradition".¹³⁴ The decline and disappearance of glorious past was attributed to evil influence of neighbouring non-tribal societies: Santhals forgot sense of commitment to the community and exclusiveness. Sitakant Mahapatra suggests that it is important to look at Murmu's invention of *Ol chiki* not as an isolated phenomenon but as an integral part of his ideas on social ethics, the glorious past of Santals and the need to revive and regenerate it.

Raghunath Murmu not only wrote creative literature, textbooks for educating teachers and students in *Ol* script, but gave a new sense of identity and solidarity to the tribe by reinterpreting its religion in a novel way. In his writings, Raghunath Murmu, outlined his conception of glorious heritage of Santali culture, his opinion on certain predominant socio-cultural questions like drinking *handia*, intra-sept marriage, individual morality and social ethics, the propitiation of gods and even physical culture. These works are semi-fictional. Three of them *Bidu-Chandan*, *Kherwal Bir* and *Darege Dhan* are plays. *Hital*, a collection of songs is about thanking creator, is his important creative work.¹³⁵ Both *Bidu Chandan* and *Kherwal* draw on mythical

¹³⁴ Mahapatra, *Modernization and Ritual: Identity and Change in Santal Society* (Calcutta: Oxford University Press, 1986) pp. 67

¹³⁵ *Hital* has been translated into English by Sitakant Mahapatra. See Appendix of '*Modernization and Ritual*' p-127-145. He has also translated many Santhal folklores as well as prose and poetry of Raghunath Murmu.

past. Protagonists Bidu in *Bidu Chandan* and Kherwal in *Kherwal Bir*, project certain values as features of true Santhal. Murmu combined myth, history and contemporary social concern effectively in these two plays. The play *Dharege Dhan* emphasizes the role of socialization process like community songs and dances, annual hunts and festivals. It upholds the need for a healthy society and advocates restriction on the use of *handia* to ceremonial ritual functions. It reminds the Santhals that they will never be held in esteem by non-tribals unless their 'undesirable habits' which make them objects of ridicule.

Through his works Murmu tried to bring out the richness of Santhali language and tradition and to highlight its autonomous culture and identity. Murmu launched a new movement among Santhals called *Sarna Dharam Semlet* (Sacred Grove Religious Organization). Murmu emphasized the supremacy of the Santhali culture and the role of tribal songs, dances, arts and crafts, customs and beliefs. A number of drama clubs were organized which played an important part in this cultural innovation. Murmu conceived *Sarna* as the religion of Santhals and outside the Hindu fold. It was due to his efforts and the support of Jharkhand Party that a large number of Santhals and many adivasis, returned to their religion as *Sarna* during 1951 Census. In order to differentiate themselves from Hindus, Santhals were urged to take to cow sacrifice, eating of beef, drinking of rice beer, observation of traditional customs, festivals and rituals. A new religious ideology with emphasis on hard work and morality was sought to be built up. The sacred grove came to be treated as the equivalent of the Hindu temple. The model for the projection of cultural self-image thus remained in its relation to Hindu cultural mode.

Sitakanta Mahapatra describes Murmu and his contribution in the development of Santhali language and script in these words: "Murmu is neither a charismatic leader ...nor is he a rebellious prophet. But possibly this unassuming school leader has done more than anything else to forge a sense of identity and create an awareness of belonging to the strong individual character of the Santal tribe."¹³⁶

¹³⁶ Mahapatra, *Modernization and Ritual* pp. 75

Let us now quickly move our discussion to the question of language and script amongst Hos of Singhbhum. Among the Hos, Lakho Bodra attempted to devise a new script for Ho language called *Warang Chiti*. He was born in Paseya village near Chakradharpur in district Singhbhum in 1922. After passing matriculation exam from Chaibasa Zila School, he joined railway office at Danguaposi near Noamundi iron ore mining centre. While in service he invented a script for Ho language named *Warang Chiti*. Here again like Raghunath Murmu, Lakho Bodra also insisted that in past Hos had their own script but due to invasion and migration the script was lost.¹³⁷ Bodra insisted that Hos had their own script which he ascribed to the creation of *Turi*, the mythological Ho magician, and cited the rock inscriptions found in different parts of Singhbhum in support of his view. He stressed that Hos had rich cultural tradition which denigrated in course of time. Bodra contested the 1957 election to parliament from Singhbhum on a Congress ticket but defeated by a Jharkhand candidate. He again fought the elections in 1962 as an independent candidate but lost. This marked an end to his political career.

The foundation of Adi Samaj was laid in 1954 when a committee consisting of seven members was formed during a meeting in Jhinkpani factory colony. Most of the members were followers of Jharkhand Party which had emerged as a major political force by that time. They were mainly interested in the new script invented by Bodra as till then Hos had no script of their own. All members were Hos and the President and the Secretary were workers of the Chaibasa Cement Works in Jhinkpani. Bodra started teaching script to them. In 1956, a school was started near to teach Ho students in the new script. Here Bodra started imparting his religious views. By 1970s, Adi Samaj had ten centres or *Sasang matul* all over Singhbhum and around Jhinkpani factory there were 150 families distributed in about 20 villages, who belonged to *Dupup Huda* or Adi Samaj.¹³⁸

¹³⁷ Dasgupta, Pranab Kumar, *Impact of Industrialization on a Tribe in South Bihar* (Calcutta: Anthropological survey of India, 1978) p-100-106 and Dasgupta, "The Adi Samaj Movement among the Ho" in K. S Singh (ed.) *The Tribal Movements in India* Vol.2 (Delhi: Manohar, 1983) pp. 93-107

¹³⁸ Ibid

Members of the Adi Samaj were governed by rules and regulations of the Samaj called *Kol-rule*.¹³⁹ Bodra wrote many books which explicate his religious views besides laying down rules to be followed by members. *Sahar Hora* describes creation of universe and festivals, while *Bonga Hora* describes various rituals. *Deuris* or priests were trained to perform rituals of the Samaj. Religious discourse of Bodra was highly influenced by Hindu beliefs and practices. Traditional Ho culture was reinterpreted according to Hindu beliefs and practices¹⁴⁰. The Samaj condemned *Rajikhusi* marriage and payment of bride price or *Gonong*. The Samaj encouraged *Andi* marriage with parents' consent and their own *Deori* performs the ritual including *Hom* or oblation on the sacred fire, as is done in case of Hindu marriage. The men put on sacred thread and married women apply vermilion on the parting of the hair and wear bangles emulating Hindu women. Some important political leaders became followers of Lakho Bodra. Adi Samaj movement though had limited impact on Ho society at large, operated from fairly organized platform. Due to its organized and formal nature, its presence and influence in certain pockets like Jorapokhar was readily felt. The movement was conceived by majority of Ho society with ambivalence due to its attack on traditional institutions. However, Bodra's attempt to unite Ho society under the common platform of language and script gained momentum in 1970s. *Warang Chiti* script invented by Bodra for Ho language was readily accepted by Ho society.

Thus we see that attempts to devise independent script for languages meant for forging community solidarity were not completely secular phenomenon but were deeply embedded within cultural and religious sphere. Both Raghunath Murmu and Lakho Bodra tried to impart their own understanding of religion and redefined the meaning of community. Both were critical of certain tenets of traditional community life and wanted 'undesirable habits' to be removed from community life. Both used the medium of script to write literature and thus made significant contribution in enriching their respective languages. This played an important role in unifying the community and enculcating sense of self pride. The language and the use to which it

¹³⁹ See Appendix to Dasgupta, *The Adi Samaj Movement among the Ho* pp. 101-105

¹⁴⁰ *Ibid*

is put is central to people's definition of themselves in relation to their natural and social environment. In absence of script and written form, many aspects of socio-cultural life are lost. Language has been most visible aspect of 'colonizing the mind', when one is forced to learn a language other than one's own mother tongue. It is in this context that efforts of Murmu and Bodra can be better appreciated. But these new interpretations were not accepted by community members uncritically. Murmu advocated that drinking *handia* be restricted to certain occasions but many other Santhal leaders criticized this as they argued *handia* as part of cultural life of Santhals, hence there should not be any restrictions. Even acceptance of *Ol Chik* script was a constant process of dialogue as Santhals being spread equally over Bihar, Orissa and Bengal were using Devnagri, Oriya and Bangla script in their respective regions. On the other hand Lakho Bodra's attempt to propagate new religious order was not very successful and Ho society rejected it very soon. But Bodra's new script was readily accepted by Ho society. This brings to our attention internal conflicts within the community. Boundaries of ethnicity and community were not static but were constantly redefined over the time on various issues.



Fig.6. Mined ore is being stacked by Ho workers. The miners carry the ore in buckets and dump it in wooden boxes used as a measure for payment of wages. The stock piles are located on the level areas between tracks and mining faces.

Source: Pradyumna P. Karan, "Iron Mining Industry in Singhbhum-Mayurbhanj Region of India", *Economic Geography*, 33, 4 (1957)



Fig.7 Ore-crusher, Badampahar Iron ore mines, Mayurbhanj

Source: Mayurbhanj State Census, 1931 Vol. I Report

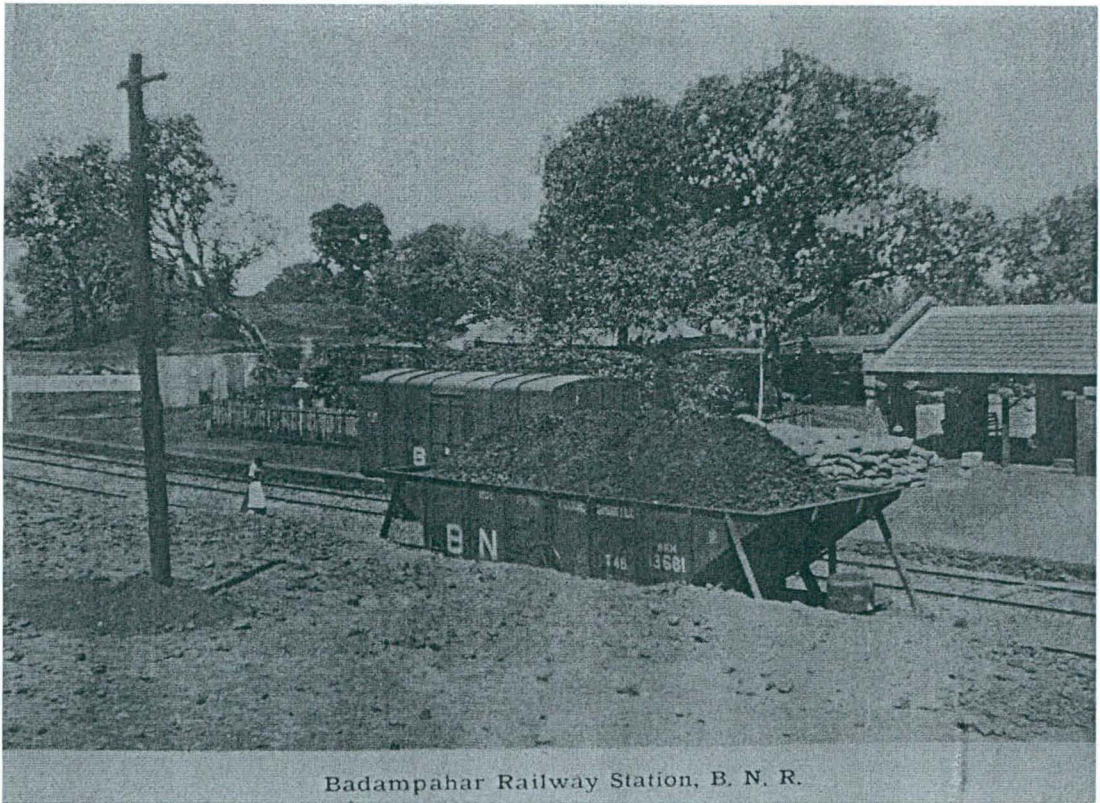


Fig. 8 Badampahar Railway Station, Mayurbhanj

Source: Mayurbhanj State Census, 1931 Vol. I Report

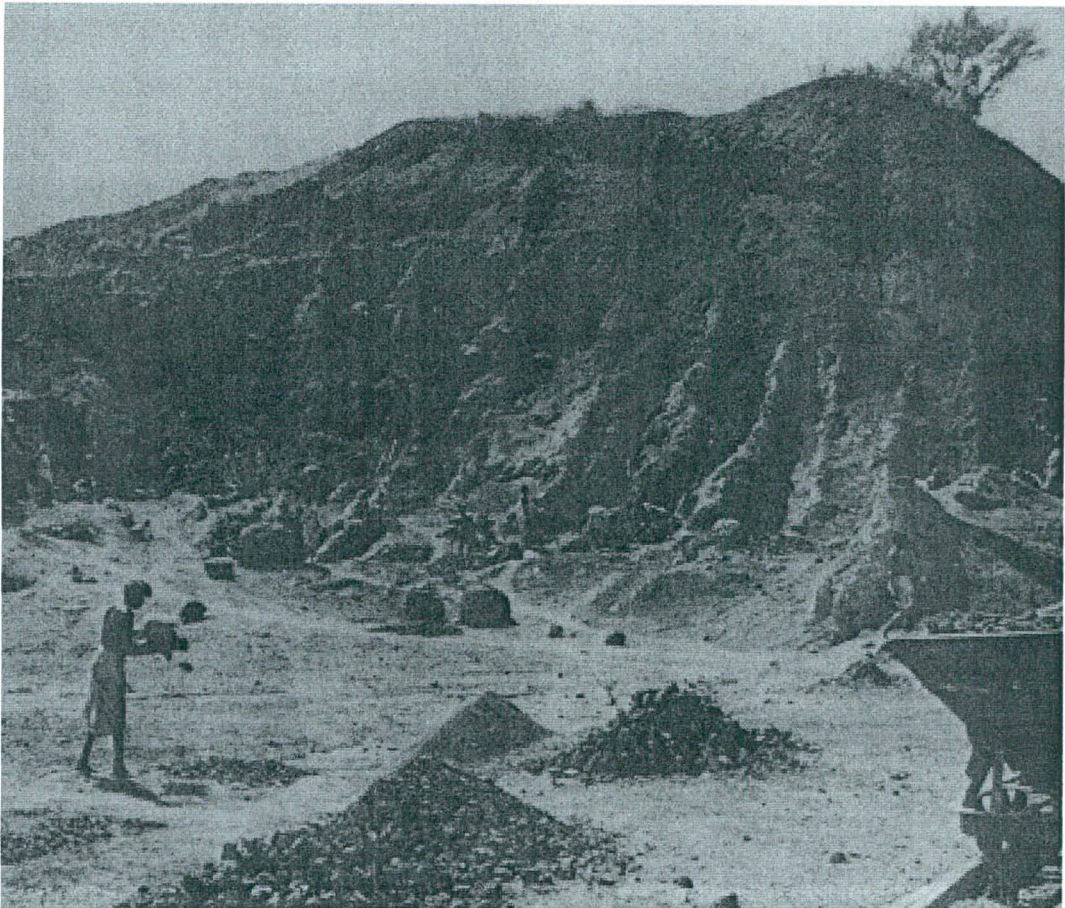


Fig.9. Mining faces of Noamundi Mines. Mined ore is stacked and then loaded by hand in trolley (right) which carries the ore to South Eastern Railway siding.

Source: Pradyumna P. Karan, "Iron Mining Industry in Singhbhum-Mayurbhanj Region of India", *Economic Geography*, 33, 4 (1957)

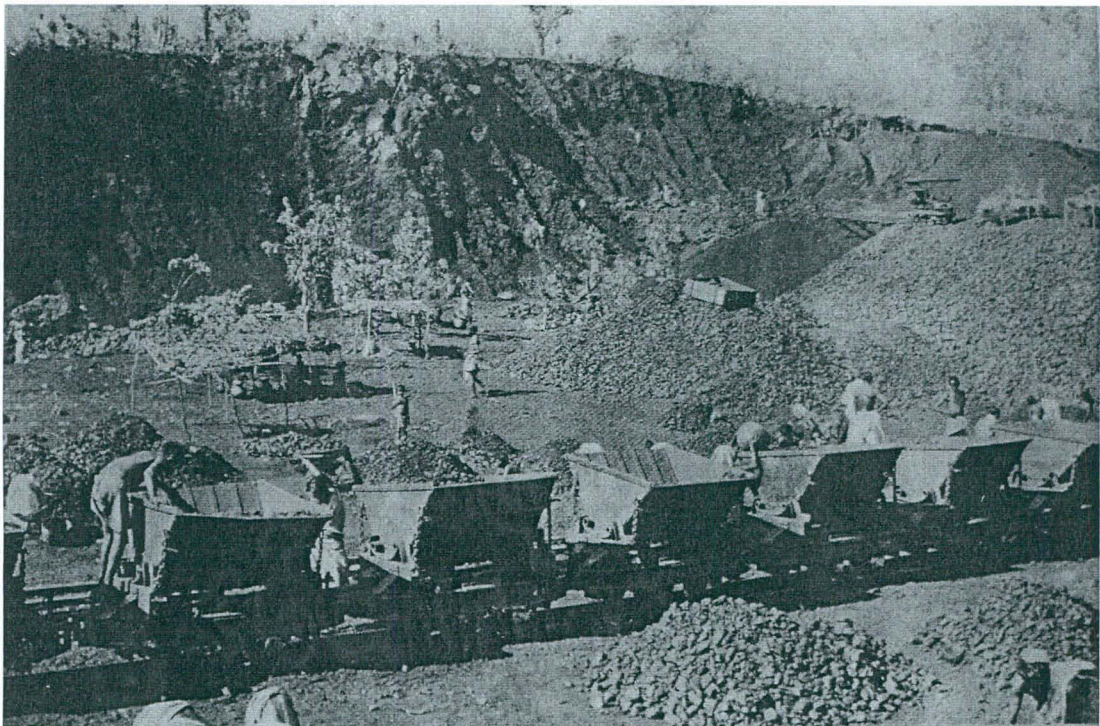


Fig.10: Mining Face, TISCO's Badampahar Iron Ore Mines, Mayurbhanj

Source: Mayurbhanj State Census 1931 Vol. I Report

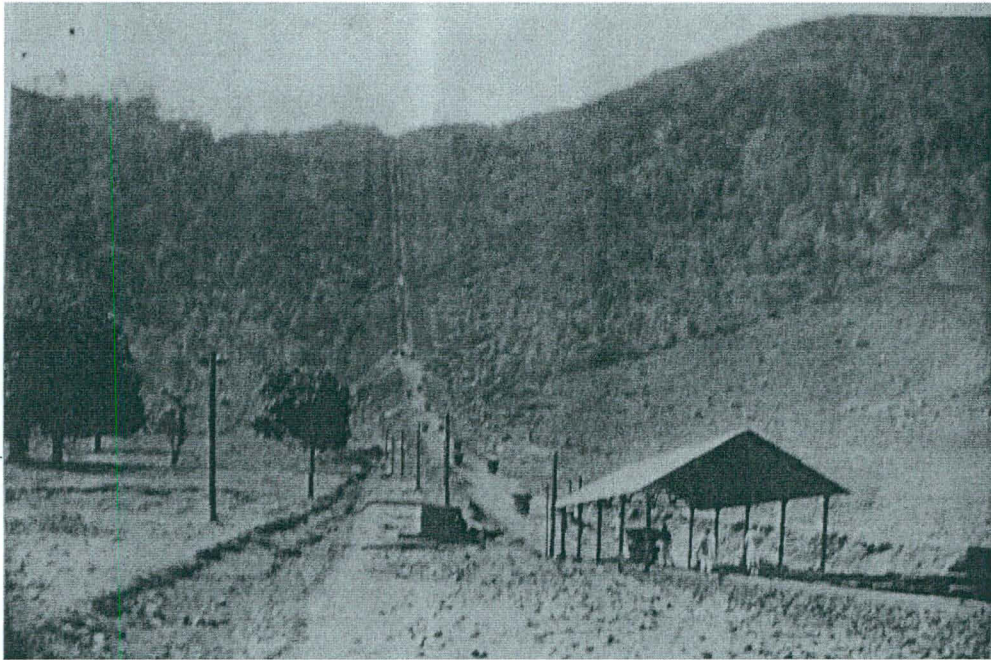


Fig.11 Incline with Endless Ropeway, Badampahar Mines, Mayurbhanj

Source: Mayurbhanj Census, 1931 Vol. I Report

Chapter 4 Work and Life in Ore Mines

Workers themselves did not write their own histories, they were written about. This however hardly demonstrates an absence of intellectual capabilities in case of the former. Dipesh Chakrabarty argues that it was in the nature of capitalist authority that it operated by forming 'a body of knowledge' about its subjects and in this it was different from pre-capitalist domination which worked more by deploying sovereignty and could do without a knowledge of the dominated. Everyday functioning of capitalist workplace produced documents, hence knowledge about working class conditions. According to him the ruling class documents often used for historical reconstructions of working-class conditions can be read for what they say and for their 'silences'. He writes, "Gaps in our knowledge are as revealing of working-class conditions as any direct reference to them". It was the same history that produced both the knowledge-enshrined in archival documents and the gaps that the same documents also contain.¹

How to understand inanimate things like stones/ore? This presents a problem for a historian, because history has proceeded with making a distinction between Natural History and Human History and it is in the present situation of environmental crisis and climate change that historian is forced to rethink this distinction.² Though work process of coal mines have been well charted out, there has been a greater difficulty in understanding work process of iron mines. What was the nature of work in iron mines? We have to understand the interplay of geography, geology, and ecology of the region in order to understand this. These mines occurred mostly in hills, covered with dense forests. Here surface and altitude were crucial factors. Mine working was done on the top of hill, in open cast method, but the ore had to be brought down through aerial ropeway. Whereas in underground mines, spatial

¹ Dipesh Chakrabarty, "Conditions for Knowledge of Working-Class Conditions: Employers, Government and the Jute workers of Calcutta, 1890-1940" in Guha, Ranajit (ed.) *Subaltern Studies II: Writings on South Asian History and Society* (Delhi: Oxford University Press, 1983) pp. 265

² See Dipesh Chakrabarty, 'The Climate of History: Four Theses', *Critical enquiry* 35 (Winter 2009) pp.197-222

demarcation was between surface and depression below surface, in case of 'open cast' mines demarcation was between ground level and altitude/elevation above ground.

Three basic problems in understanding work and labour in iron ore mines can be pointed out. First, unlike coal which was main source of power, iron ore was not understood to have any independent existence, its importance lay in its ultimate transformation into steel. Generic term 'Iron and Steel' encapsulates both features of inclusion and exclusion. It includes 'pig iron' and steel but excludes ore. This can be thought as probable reason why separate efforts were not carried out in collecting information regarding work and social conditions in ore mines. Second, iron mines spread in both administrative divisions of British India and Feudatory states were not conceptualized as industry as a whole. Meagre data collected for British India often excluded princely states/feudatory states. Statistical data collected were limited to political economy-tonnage produced and dispatched, social life was ignored. Even these statistics are marked by generalization and confusions. State, whether colonial or princely was primarily interested in getting royalty from ore produced. Rich description of work process and labour condition in coal mines can be found in annual reports of chief inspector of mines, such detailed description is lacking in case of iron mines, hence difficulty in understanding work pattern. Secondly, oral evidence of iron miners were not collected by Bihar Labour Enquiry Committee or Labour Investigation Committee. It is therefore difficult to know workers' opinion and experiences. Working condition entered into official agenda only in cases of agitations and strikes, but this industry was marked by absence of trade unions and agitations. Excitement in official discourse about richness and quantity of ore was not matched by corresponding enthusiasm in recording working conditions. Till very late there was reluctance in official reports in recording labour conditions. Census report of 1921 exclaimed: "The ore is in such quantities and so accessible that mining, consisting as it does in removing hill sides in a systematic manner presents no specific feature of interest."³ Perhaps it was difficulty of mining operation which deserved more attention. Similar descriptions can be found in TISCO's managerial opinion,

³ P. C Tallents, *Census of India, 1921 Vol. VII-Bihar and Orissa Part I-Report*, pp. 276

“Float ore require no mining and simply had to be picked up by unskilled labour”.⁴ In these official discourse there is dismissal and devaluation of work, which did not consider ‘picking up’, ‘gathering’, ‘removing hill side’, ‘breaking stone’, ‘quarrying’ as work. When for the first time Central Wage Board for Iron ore Mining Industry was constituted by Government of India in 1963, the board found lack of data on several crucial issues. The Board found that:

In this industry no effort has been made in the past for any proper wage fixation or standardization of wages on an industry wise basis. The Minimum Wages Act is also not made applicable to this industry. There were therefore wide disparities both in wages and working conditions from mine to mine... Paucity of data, both with regard to the working conditions and industrial financial position, also needed adoption of methods which were time consuming and this was the main reason for delay in the completion of the Board’s work.⁵

In this chapter I will try to draw a picture of work and social conditions in iron ore mines by focusing on wage structure, ‘morphology of accidents’, drinking culture, working of mining regulations and problem of protest and organization in these mines. I will base on labour reports especially Bihar Labour Enquiry Committee, 1940, Report on the Survey of Labour Conditions in Iron Mines, 1945 as well as works of D. N Majumdar and Pradyumna Karan.

The Work and the Workplace

Sociologists have shown that work is a socially constructed phenomenon without fixed or universal meaning across space and time and its meanings are delimited by the cultural forms in which it is practiced. Some cultures do not distinguish between work and non-work, others distinguish between work and leisure. Work might be any transformative activity, but what counts as work depends upon the social context within which that transformative activity occurs. Meaning of work is not immanent to the activities; meanings are socially constructed and maintained. Work is social not an

⁴ Lovat Fraser, *Iron and Steel in India: A Chapter From the Life of Jamshedji N. Tata*, (Bombay: Times Press, 1919) pp. 44

⁵ *Report of the Central Wage Board for Iron Ore Mining Industry*, 1967 pp. 3

individual activity. In a sense no one is ever alone at work because of the social structure that underpins and prevails over work activities.⁶ Chitra Joshi has emphasized the significance of work in the constitution of identities, a sense of self. Work meant a forging of relationship, bonds between wage earners, a sense of pride and dignity.⁷

In India iron ore was extracted by 'Open Cast' mining methods. This mainly determined the nature of work and labour force in the mines. Iron ore formation was first determined and the physical behavior of the ore body was ascertained by geological survey and prospecting of area, by digging trial pits and drilling at selected places. Trees were cleared and 'over-burden' was removed manually and hard rocks were removed by drilling and blasting. Before starting the actual process of mining operation, levelling and preparation of sections and benches were planned. Iron ore usually found at the top and flanks of hill ranges mainly in form of 'float' or bed deposits, required in some cases intensive drilling and blasting. Drilling was done by hand as well as by pneumatic and other drills. The blasted ore was broken manually screened and sized to specifications after which it was sorted out, stacked and then loaded into the lorries for transport to rail head or directly into wagons manually. The ore transported to the rail heads had to be unloaded and stacked by leveling at railway plots before wagons were available for dispatch to the centres of consumption or production. Sampling, sorting, sizing and screening were carried out again before the ore was loaded into wagons. Mining, drilling and blasting of iron ore were carried out manually, in the absence of mechanization. Mechanization in the iron mines began from 1960s onwards.⁸

Mayurbhanj's mines in and about Gurumahisani furnished iron ore at "less than one-half the cost of production of any other major ore-producing district in the world", since 'Open-Cast' mining, required little capital and predominantly

⁶ Keith Grint, *The Sociology of Work* (Polity Press, 1991) pp.7-47

⁷ Chitra Joshi, *Lost Worlds: Indian Labour and its Forgotten Histories* (Delhi: Permanent Black, 2003) pp. 11

⁸ *Report of the Central Wage Board for Iron Ore Mining Industry*, 1967 pp. 10

“unskilled” labour.⁹ We get an idea about situation in TISCO iron mines in Mayurbhanj during the initial years from the diary of missionary Gerald Dickson of Society of Propagation of Gospel. The entry in his diary for 10 February 1911, gives a vivid description of his trip to Gorumahisani mines in Mayurbhanj and conditions there. This account is important because this was the time when Mayurbhanj mines had just begun working. He mentions the number of labourers to be 3000. This is the only non government account which gives information about labourers, however cursory it may be:

The Bishop and I were given the opportunity of seeing one of the great iron ore deposits. This was Gurumasini, about 20 miles south of Sakshi. Four of us were given seats on the front of a pilot engine and on a one hour journey found ourselves scattering cows and goats from the track. Judd and engineer from U.S.A gave us lunch and showed us round. It is estimated that there are more than 20 million tons of ore covering the hill-top. *The mining or transport is not mechanized. All is done by a labour corps of 3000 coolies, I notice how a great boulder of iron-ore was transported to the rail-head by 12 men who scientifically slung the boulder by ropes to six poles. For the present, leaf huts serve for habitation, but what will happen in the rains?*¹⁰

This description of work in Gorumahisani mines is in sharp contrast to Fraser’s metaphors of just ‘gathering’ and ‘picking up’ ore.

Chief Inspector of Mines Reports in most of the case was not concerned with labour and work in iron mines except reporting production and consumption of iron ore and fatal accidents. Nature of work condition in these mines got inscribed. In most of the cases iron ore mines did not figure in main text of the reports but in the list of fatal accidents in the end. In one such report on a fatal accident in TISCO’s Noamundi mine in 1945, nature of work in the mine got recorded. The officer who enquired into this accident gave the following details regarding methods of working in the mine:

⁹ Morris D. Morris, “The Growth of Large- scale Industry to 1947”, in Dharma Kumar (ed.) *The Cambridge Economic History of India* Vol. 2 pp. 589

¹⁰ Diary of Missionary Gerald Dickson of Society of Propagation of Gospel (1910-39), St. Augustine’s church, Manoharpur pp.13-14. My emphasis.

The hills are being worked on a 'benching' system. The quarry faces or the working faces are kept sloped back to prevent danger from falls of materials. Tracks have been laid down alongside the working faces of the quarries and the ore obtained from the quarries is loaded into tubs standing some 50 to 60 feet back from the working faces. Drilling in the ore is done by hand and the holes are blasted by using gelignite or gunpowder explosives. Two compressors have recently been installed and experiments are being made to resort to compressed air drilling.¹¹

Pradyumna P. Karan give details of work process in the iron mines of Noamundi on the basis of his field work during 1953-54. He observed that miners worked in pairs, usually husband and wife. Each pair had a section of hill face about ten feet wide to cut, which they kept separate from their neighbour's sections by leaving a small wall of unworked ore, so that each miner's ore, as it rolls down the face, falls into his own pile. The mines were sloped at a safe angle for working upon, varying in steepness according to the hardness of ore. The miners carry the ore in buckets and dump it in wooden boxes used as a measure for payment of wages. Mined ore was stacked and then loaded by hand in tubs provided by the company on the meter-gauge tracks adjacent to the stacks of ore. Nearly all the workings were along levels fed directly by tracks. The ore from the workings located at higher levels was brought down by two gravity inclines and a monocable ropeway. Finally the ore was feed into railways' ore wagons. As the ore deposits continue below the surface to great depths, waste fines could not be dumped behind as the face advance. The fines were loaded into side-tipping tubs and were hauled away to dumps situated in areas either barren of ore or with economically unworkable deposits.¹²

Anthropologist D.N. Majumdar, who did extensive field work among Hos in Singhbhum during 1934-35 and again in 1950s, drew distinction between Noamundi and Gua iron mine centres on the basis of difference in the nature of work. The work at Gua had to be done at a higher altitude than at Noamundi. The labourers had to remain there at the top of mountain -Jhandi Buru, from where they could come down only on Saturday night or Sunday morning, the *bazar* day at Gua. Majumdar argues

¹¹ *Annual report of the Chief Inspector of Mines 1945*, pp.17

¹² Pradyumna P. Karan, 'Iron Mining in Singhbhum-Mayurbhanj Region of India', *Economic Geography* Vol. 33 No.4 (Oct., 1957) pp. 357-59

that the difficulty of labour at Gua and the absence of local labour accounted for comparatively high wages there.¹³ Labour saving techniques were absent till 1950s. Picks and shovels were used for raising and transshipping ore and carried largely by man power. Iron-ore at Manoharpur mines was transshipped from the mines on light railway to the standard gauge wagons by man power.¹⁴

Labourers in iron mines were of two broad categories-Cutters and Loaders. Drillers were a sub category of Cutters. Their work was to make holes in the rock with the help of hand-drills. For drilling the man worked in pairs, one worker placing the drill in position, while the other goes on hammering from above. Labour Investigation Committee found in 1945 that normal working hour for company labour was 8 every day, but in the case of Contract labour the figure was as high as 12 hours. There were different shifts for different types of workers and night shifts were quite frequent. Single, double and multiple shifts of 8 hours in each case with varying spread-overs were worked. Mining work was done only in one shift. But, loading was often done in multiple shifts. No shelter was provided to the miners for rest or meals. During the hot days, the workers used to spread themselves under trees.¹⁵

Accidents

In comparison to underground mines like Jharia Coal Field and Kolar Gold Field, the work in Open Cast iron mines was far less risky. Accident rates were higher in 'Underground mines' than in 'Open Workings' or on Surface. The accident rates in Coal mines, both serious and fatal were higher than the corresponding rates for all mines. The rates were lower in the iron mines. Again in case of iron mines, in

¹³ D.N Majumdar, *A Tribe in Transition: A Study in Culture Pattern* (Calcutta: Longmans Green Co., 1937) pp. 186

¹⁴ D.N Majumdar, *The Affairs of a Tribe: A Study in Tribal Dynamics* (Lucknow: Ethnographic and folk Culture Society and Universal Publishers Ltd, 1950) pp. 291

¹⁵ B. P. Adarkar, *Report on Labour Conditions in the Iron Ore Industry* (Simla: Labour Investigation committee, 1945) pp. 20-23

comparison to TISCO mines, accident rates were much higher in IISCO mines.¹⁶ The unsafe workplace and the consequent affliction faced by the working people could range from 'actual accidents' and 'near-miss accidents' to 'occupational diseases'.¹⁷ However for official purpose, only fatal accidents demanded proper investigation. It is interesting to note that there is no mention of occupational or work related diseases in the iron mines in the official reports, despite the fact that most of the mining work was done manually till 1960s.¹⁸ Basically the accidents and deaths occurred in the iron mines as reported in inspection reports were categorized as occurring due to four factors - surface railways and tramways, haulage, fall of roof and sides and explosives.

On 15 Nov. 1924, Rup Singh, a quarryman working in IISCO's Gua Iron mines, was crushed by a heavy boulder of ore, which rolled down the sloping face of a quarry. He died on the spot.¹⁹ On 9 Oct. 1927, Sadhu Kole of TISCO's Noamundi mine, while placing a loaded wagon on a weigh-bridge his arm was crushed between a stationary wagon and the buffer of the moving wagon. He died after one day.²⁰ On 24 Jan. 1929, while the rope on a self-acting incline was in motion, Dayanidhi Brahmin, stood on the line with intension to oil one of the friction rollers. He was run over by descending skip.

On 7 November, 1945, a major accident occurred in TISCO's Noamundi mine. While a gang of six persons was engaged in clearing debris from the side of a 'cutting', a big boulder of stone weighing about 20 tons fell from the side and struck four of them. They dropped to the bottom of the cutting a distance of 35 feet and were

¹⁶ Stuart corbridge, "Industrial Development in Tribal India: Iron Ore Mining Industry in singhbhum, 1900-1960" in Nirmal Sengupta (ed.) *Fourth world dynamics: Jharkhand* (Delhi: Authors guild, 1982) pp. 51-52

¹⁷ Asish Mukhopadhyay, "Risk, Labour and Capital: Concern for Safety in Colonial and Post-Colonial Coal Mining", *The Journal of Labour Economics* 44, 1 (2001) pp. 63-74. Cited in Dhiraj Nite, *Work and Culture in the Mines: Jharia Coalfields 1890s-1970*, Unpublished Phd Thesis, J.N.U pp. 102-103

¹⁸ This is in complete contrast to recent newspaper reports on wide spread occupational diseases in the iron mines of Singhbhum. See the newspaper report B. Vijay Murty, "Red Dust Brings Early Death to West Singhbhum" *Hindustan Times*, March 18th 2010. "TB Mightiest Killer in Iron Ore Mines", *Hindustan Times*, 20th March, 2010. "Living by Mines often means inviting HIV" *Hindustan Times*, March 21st 2010

¹⁹ *Report of Chief Inspector of Mines in India, 1924*

²⁰ *Report of Chief Inspector of Mines, 1927*

killed under the boulder. The officer who enquired into this accident gave the following details:

Work-persons use to cut from the top and drop the debris to the bottom of the 'cutting', i.e, on the track level. There existed a 5 feet wide bench at a height of 35 feet loose debris dropped from the top used to collect on this bench. It was necessary to have this loose debris removed from the bench before engaging work-persons in loading debris in the tubs at the bottom of the cutting. Work used to be stopped on the top side when persons were engaged on the bench. At the 12 O' clock, the rest interval started and all the work persons went away for an hour's rest. They came back at 1 p.m and again started the work. They had worked there about 3/4th of an hour when a portion of the side collapsed. A big boulder of banded haematite quartzite, which rested at the edge of the side, also came down. Four persons were struck by the falling debris and they dropped to the bottom of the cutting –a distance of 35 feet. They were buried beneath the boulder and killed on the spot. The boulder measured 9'x3'---6"x4' thick and weighed over 20 tons. The mass of ore that fell from the side was about 17'x14'x3' thick. It was only with the help of a locomotive and a steel rope that it could be shifted in order to recover the dead bodies....the side fell from a 'fissure' which was not visible before the accident. During the course of my inspection I was satisfied that it was this fissure which was responsible for the unexpected fall of side. In my opinion the fissure must have been filled by the loose debris and was not visible.....a greater part of the fissure was covered by the boulder....There is no doubt that the fissure had made the side insecure. There rested a heavy boulder (20 tons in weight) on the top of the insecure side. A stage was reached when the side could not support the boulder and it collapsed....It was revealed during the course of my enquiry that two persons sat on the boulder and drilled a 6" hole in it for three days before the accident. This hole was deepened by another 6" on the day previous to the day of accident. It was the intention to blast the hole at the end of the shift on the day of accident. There is no doubt that the vibrations produced by drilling in the boulder during the two days previous to the accident produced some weakness in the side that collapsed. It is also very probable that the fissure would form an early channel for percolating rain water which would tend to soften the side which fell.²¹

It is clear from the account that drilling and blasting made hill side weak leading to fissures and ultimate collapse of hill sides leading to fatal accidents.

²¹ *Chief Inspector of mines 1945 pp 17*

Let us take an example of the report of an accident that occurred in IISCO's Gua mines:

At this mine, iron ore is excavated on the side of a hill. The ore is conveyed to a railway siding at the foot of the hill by an aerial rope-way. An automobile fan brake is used as a means of keeping the speed of the rope-way approximately uniform. When the speed of the rope-way increases, the speed of the fan also increases and as it is moving freely in the atmosphere the braking action is greater the higher the speed of revolution. Conversely when the speed of the rope-way decreases the braking action of the fan becomes less. As a general rule the rope-way is kept running continuously during a working shift. It was, therefore, sometimes necessary to oil the machinery while it was in motion. The fan brake was surrounded by a fence which was...several feet from the revolving parts. Thus in order to oil the machinery the fence had to be entered. Deceased went inside the fence to lubricate the bearing of the fan when a loose cloth which he was wearing was caught in the fan wheel. He was drawn into the wheel and instantly killed. After the accident a new fence was erected close to the wheel of the fan so as to permit of a person oiling the bearing without risk of his being struck by the revolving parts of the machinery. All machinery attendants were compelled to wear tight fitting clothes such as short trousers and sleeveless shirts. Where possible machinery should only be lubricated when standing still, but if it is necessary that oiling should be done while the machinery is in motion the precaution adopted after this accident should be taken.²²

It is the occurrence of accident that woke up authorities to lack of safety measures and equipments. While quarrying ore on the slope of hill many workers used to get crushed under mass of ore or falling debris.²³ Also many times deaths were due to falling from great height while quarrying and drilling and losing balance while handling some machinery.²⁴ Deaths were also due to accidental ignition of dynamites and gunpowder.

Administrative report of Mayurbhanj feudatory state in 1936, argued that, "Accidents are unavoidable in the mines where such a large number of labourers are working." But instead of giving details regarding nature of occurrence of these

²² *Chief Inspector of Mines 1925*

²³ *Chief Inspector of Mines 1936*

²⁴ *Chief Inspector of Mines 1935*

accidents, these reports boasted of 'promptness' and 'readiness' of the authorities.²⁵ Number of accidents in Badampahar mines in Mayurbhanj reduced only after the installation of an aerial ropeway in 1941.²⁶ Life was thus precarious in mines and despite dismissal of work process in 'open cast' mines by the authorities, accidents did occur. But for authorities only fatal accidents mattered.

Gender Division of Labour

Though Chotanagpur tribals had traditionally institutionalized sexual division of labour but the situation was very different in comparison to caste Hindus. D.N Majumdar observed that, it was the women who were often sent to the ore fields when the family was in need of some cash, to pay *malgoozari* rent.²⁷ Majumdar found in 1935 that while the proportion of women to men at Noamundi was almost equal, at Gua there were three men to every women. Further he found that many of the pairs working at Noamundi were related as brothers and sisters or as cousins, while at Gua this was not the case.²⁸

Stuart Corbridge suggests that the high female employment in the iron mines reflects both the specific structural characteristics of the local tribal societies and the particular demands of the labour. Except ploughing operations, traditionally women participated in almost all economic activities. Female labour mostly did unskilled works. Better paid, mining and drilling operations were done by men and the womenfolk were limited to loading the cut ores into baskets. More problematic aspect of the work was lack of supervision of children. With neither crèche nor nursery facilities, children would stray into mining compounds and occasionally a child would meet death by coming in the way of mine's moving tubs, rattling machinery or falling ores.²⁹ Female 'coolie' was called *reza*, which generally referred to adivasi women.

²⁵ *Annual Report on the Administration of Mayurbhanj, 1936-37* pp. 114-115

²⁶ *Annual Report on the Administration of Mayurbhanj State, 1941-42*

²⁷ Majumdar (1937) pp.186

²⁸ D.N Majumdar 'A Tribe in Transition: A study in Culture Pattern' (London 1937) pp.185

²⁹ *Ibid*

In their Memorandum submitted to Bihar Labour Enquiry Committee, miners of Noamundi, pointed out that as a result of increased dispatch of ores, the loaders, more than half of them being women, had to work in the night. As by the Mines Act, 1923, children were prohibited from being taken to the mining faces, working mothers had to keep 5 to 10 children in the jungles near the mining face under care of a girl of 7 or 8 years of age. This was rather more unsafe than bringing the children to the mining faces.³⁰ Even by 1947 there was no arrangement for child-welfare and maternity at any mines of Singhbhum.³¹

Miners' Settlement

In the mines housing facility was not accessible to all. Only a minority of skilled 'permanent' company workers were strictly entitled to free company housing. According to Adarkar Report, 25 per cent of Company labour and 90 per cent of Contract labour were housed at Gorumahisani, 49 per cent of Company labour and a smaller proportion of the Contract labour was accommodated in Noamundi. At Gorumahisani some 40 workers lived in houses let out by private landlords. These were kachcha houses and were not as good as the company houses. Non-resident workers, coming from six or seven miles daily, lived in their own huts in the villages. These were generally thatched cottages. Nearly 53 per cent of the workers thus lived in the villages at Gorumahisani, and about 10 per cent at Noamundi. "The housing provided by the Companies is mostly satisfactory, but that provided by Contractors is poor".³²

The housing facility provided by the contractors in Noamundi was very small in number. The huttings made for this purpose were normally overcrowded and in time of seasonal increase in the labour force, the huttings became crowded by 400 to 500 per cent at times. Living together of a good number of men and one single

³⁰ *Report of BLEC Vol.iii Part C pp. 237.* The memorandum argued the employment of women in night to be objectionable and demanded arrangement for crèches.

³¹ BSA Labour Department File No. VII M 23/47

³² B. P Adarkar, *Report on Labour Conditions in the Iron Ore Industry* (Simla: Labour Investigation committee, 1945) pp.17

woman in a room, who were not related or even acquainted with one another, was stated as a problem from the moral standpoint in the Memorandum submitted to Bihar Labour Enquiry Committee. However more problematic was the health condition due to insanitation. Adarkar Report found that, "at Noamundi, the Contractors' quarters were ...hopelessly bad. Almost all rooms were in dilapidated condition and sanitary arrangements left much to be desired. The quarters may be described as living dens". The number of latrines, the water supply was abnormally inadequate. Latrines were provided only near the Company Offices but nowhere near the mining faces or the work-place. Interestingly, according to the employers workers preferred to go out in open for defecation. For 'Coolie' hutting there was roughly one latrine for ten workers. The miners themselves had to carry drinking water with them to the work place. The cleaning of the *Basti* was scarcely done.³³

Radhakamal Mukherjee, who was a member of Bihar Labour Inquiry Committee found the congestion and overcrowding in the *bustees* to be 'appaling and intense'. He found in all the smaller mines and quarries in Singhbhum the hutting most 'unsatisfactory' while the water supply 'abnormally insufficient'. In Singhbhum it was not easy to excavate wells, while hill streams were a precarious source of water supply. Thus when water was brought from a distant stream on lorries, there was great clamour among the workers.³⁴ He writes, "in the more distant ore mines and quarries the hutting is a mere apology for housing, while the individual worker is left to his own resources to collect water from any source and store it in his hut."³⁵ Also the dangers of epidemics in the distant jungles and hill sides, where men and women had to work under the hot sun at places several miles from the source of water supply was more serious. In these jungle areas there is no attempt to deal with an infectious disease. He remembered with horror the case of a cholera stricken worker in an ore mine left unattended by the side of its working face in the Singhbhum jungle.³⁶

³³Ibid pp.15

³⁴ Radhakamal Mukherjee, *The Indian Working Class* (Bombay: Hind Kitab, 1945) pp. 253-254

³⁵ Ibid

³⁶ Ibid

For the quarry workers, principally employed in excavating slate and lime stone in inaccessible jungles and hills by contractors, there was little arrangement for housing. The quarry men obtained grass, tree leaf and thatch for themselves and build their own flimsy structures. These were mere leafy shelters, so low that one can only crawl in and out of them. Cooking, sleeping and nursing children were done there without protection against the blazing sun in summer and the heavy downpour in the rains. For many in the quarries the railway wagons into which they load stones served as the only shelter. For quenching the thirst of the entire family they carry water in brassware vessels to the working faces.³⁷

The effect of high insanitary condition with over-crowding of the *Bastis* was that most of the epidemic diseases originated from the *Bastis* of contract labourers³⁸. Cholera, Meningitis, Typhoid and Black-Water Fever were major epidemic diseases in the mines. Meningitis was very common in Noamundi and there were many deaths due to this every year, which was mainly due to drinking dirty water, as water was most often not filtered. Noamundi was also a Malaria prone area. A special officer was appointed to investigate the cause of malaria.³⁹ But incidence of Malaria decreased in the subsequent years due to cutting down of forests and anti-malaria campaign by the company. Venereal diseases were also common among the miners. Nageshwar Prasad, Mining Officer of Singhbhum accepted that as high as 50 per cent of miners in Gua area suffered from venereal diseases, but he attributed this to loose morality of 'aboriginal' labourers.⁴⁰ In the absence of regular medical inspection and lack of proper health care facilities, no figure/statistics was collected for occupational diseases in the mines. According to the Medical Officer at Gorumahisani there had been no case of Silicosis or Miner's Nystagmus in the locality, although there had been some cases of Cellulitis, especially in the rainy season due to wounds being exposed to rain water or mud.⁴¹ An epidemic of Meningitis commenced in the Noamundi iron mine in February 1939 and was not finally stamped out until

³⁷ Ibid

³⁸ Report of BLEC Vol. III Part C pp.232-244

³⁹ Annual Report of the Chief Inspector of Mines, 1931. pp 3-4

⁴⁰ Report of BLEC Vol. IV Part A pp. 289

⁴¹ Adarkar Report (1945) pp. 21

November 1939. Altogether there were 72 cases out of which 21 died and 51 were cured. Assistance was received from the Tropical School of Medicine.⁴² Anglican missionary Gerald Dickson's diary entry on 6 April 1935, tells us about spread of cholera in Chiriya mines: "It is good to know that Chiriya mines are to open again. But sad to say, with their opening, cholera has broken out in the camp. Six persons have died..."⁴³

Anthropologist D.N Majumdar during his field work in Singhbhum in 1934-1935, found the health of the people in the mines to be unsatisfactory. He considered Hos to be possessing 'low vitality', which according to him was further lowered by 'strenuous work and indiscriminate drinking'. He found the incidence of malaria at Gua and Noamundi incredibly high. Out of a labour population of 2000 at Noamundi, 202 persons came for treatment for malaria in the Noamundi hospital in June 1934. He further pointed out that monsoons especially June, July and August were the worst months in the mines when the incidence of malaria and other diseases were higher.⁴⁴ Majumdar notes that the diseases from which the tribal labourers suffered periodically were those malnutrition, night blindness, diarrhoea and dysentery for which they take recourse to "tribal pharmacopoeia".⁴⁵

On the basis of his field work during the initial years of 1950s, Pradyumna Karan describes the mining settlement of Singhbhum and Mayurbhanj in following ways:

The mining settlements are compact, the street patterns, especially at Gorumahisani and Noamundi, are rectangular, and oriented to the trend of the Iron Ore Hills. The settlements lie on the side from which the deposit was attacked and on which side most surface mining structures are situated.....The *transient nature of mining* is reflected in the settlements. There are no outstanding public building, residences are inferior to those elsewhere in Bihar and Orissa, and no sewage system exists. The

⁴² *Annual Report of the chief Inspector of Mines in India, 1939* pp. 4

⁴³ Diary of Gerald Dickson, his entry for 6th April 1935 pp. 220

⁴⁴ D. N Majumdar *A Tribe in Transition* pp.187-88

⁴⁵ D.N Majumdar, *The Affairs of a Tribe* pp.296

buildings bear construction dates between 1910 and 1925, reflecting the time in which settlements grew up most rapidly.⁴⁶

Drinking Culture

Workers of Tata's Noamundi iron ore mines complained to Bihar Labour Enquiry Committee that they were forced to work at night sometimes with the inducement of liquor, to help them overcome their "mortal fear" of snakes and tigers.⁴⁷ On the other hand absenteeism in the mines was generally attributed by the officials to the drinking habits of the workers. Nageshwar Prasad, the mining officer of Singhbhum in his oral evidence to BLEC told, "as soon as they get payment, they greedily go to the liquor shop or they pass their time in some other ways". According to him miners in Kolhan spent 40 per cent of their income in drinking. But the workers justified the use of liquor on the ground that the work was so strenuous that they required some kick before the work.

'*Diang*' or traditional rice beer was important part of socio-cultural life of the tribals of Kolhan. But its devaluation in the mines had started. According to D. N Majumdar the brewing of rice beer in the mining centres was beset with number of difficulties, the most important being performing all the requisite rites and rituals associated with it. Contractors operated illegal liquor business in the mining compounds. While liquor was sold at Gua at 4 as per bottle, the same was sold at Noamundi at 2 as. in 1934-35.⁴⁸ Excise shopkeepers made huge profits. Majumdar calculated the annual rent at Gua for the excise shop to be approximately Rs 1300 in 1935. At Noamundi, where the government run outstill stores were in competition with the hard liquor outlets of the Contractors, liquor retailed at 2 annas per bottle in 1935-36 and 4 annas per bottle in the late 1940s. Although liquor was costly, it was the main source of relaxation in the mining colonies. Majumdar writes, "the

⁴⁶ P.P Karan (1957) pp. 356. Emphasis added.

⁴⁷ Report of BLEC, Vol. 3-C pp. 232-244, and Vol. 4-C, pp 360-374. Cited in Dilip Simeon, *The Politics of Labour Under Late Colonialism*. pp. 149

⁴⁸ D. N Majumdar *A Tribe in Transition* pp.186

discontinuity in the service of the miners and the strong liquor which they drink after strenuous work in the mines reduce their health and limit their efficiency, so much so that skilled labourers are rare among the Hos".⁴⁹

A report of government of Bihar describes the culture of drinking rice beer among tribal labourers in Noamundi in following way:

Their main diet is rice and they habitually drink rice beer. They brew rice beer in their homes and there are several tribal families who make a business of selling rice beer to their neighbours. Generally young girls sell and manage these rice beer shops. They dress and wear ornaments and make up generally to attract customers to their shops.⁵⁰

Wages and Earnings

The mining proletariat, argues Simeon, "were transfixed by the physical product of their labour rather than the time they spent at work". They thus lent themselves readily to the remunerative form of the piece-rate which conducted to self-exploitation and the lengthening of the working day.⁵¹ D. N Majumdar described piece wage in iron ore mines as 'killing labour'.⁵² Wages in iron mines was according to nature of ore and the volume of ore extracted from mining faces. Among the two main categories of workers, Cutters were paid on the basis of four different systems- the Box System, the Tub Rate, the Cubic Foot Rate and the Tonnage Rate. Whichever system was adopted, theoretically wage came to the same. Methods of weight and measurement were often fraudulent. Workers however preferred 'Box System' as it was simple to remember the number of boxes raised by them in a particular week. The workers at Gorumahisani were paid at 0-3-9 to 0-4-6 per box (12 cubic feet capacity) by the contractors. Rates were different for hard and soft ore as work involved in both

⁴⁹ Ibid pp.187

⁵⁰ Arun Sahay and Narmadeshwar Prasad. *Impact of Industrialisation on Bihar Tribes: A Report*, (Ranchi, The Bihar Tribal Research Institute, Government of Bihar, 1960)

⁵¹ Dilip Simeon(1995) pp.32

⁵² Majumdar, *The Affairs of a Tribe* pp. 295

were variable. At Noamundi, there were two rates, 3 a. per box of soft ore and 4 a. per box of hard ore. Manager of C.P Syndicate, a Contracting agency for TISCO at Gorumahisani stated that, miners could generally raise one and half boxes per day, while some could raise two or two and half and that on an average workers earned 6 a. per day. In TISCO mines, formerly wages were paid on the basis of *Chattas* (about 130 to 150 cubic feet). Box System was introduced by F.G Percival of TISCO in 1938, which led to increase in miners' earning to some extent.⁵³

It was stated by the Workers' Representative before BLEC that by the *Chattas* system, the worker could get no more 10 pies a day, but when the Box System was introduced wages went up. However, when the contractors found that workers were earning more money, they reduced the rate per box and also compelled them to fill up the boxes 4 to 5 inches higher over the margin.⁵⁴

The Tub rate was prevalent at some mining faces at Noamundi. For soft ore, the workers were paid at Rs 1 per tub and for hard ore, the rate was Rs 1-5-6 per tub. Each tub contained 64 cubic feet of iron ore. In this system, the earning of workers was generally greater because tempted to fill the tubs and then take rest. The Cubic Foot rate prevailed in the case of cutters under some contractors at Noamundi. For the soft ore the rate Rs 1-9-0 per 100 cubic feet, and for hard ore, Rs 1-12-0 per 100 cubic feet (100 cubic feet was equivalent to 8 boxes). However this system gave rise to abuses as the *Sardars* used to reduce the number of cubic feet in the final account and thus rob the workers, who could not remember easily the exact figures of each day. Therefore, this system was objected by the workers. Tonnage System was not very common, but the Manager of C.P Syndicate (contractor) at Noamundi stated that some workers were paid 5 a. per ton in few mines. According to R. B Penman, Mining Engineer of Indian Iron and Steel Company (IISCO) at Gua, one ton of ore corresponded to 16 cubic feet. Generally the Cutters' payment, including dearness allowance, varied between Re. 0-13-6 to Re. 1-0-0 per day. The loaders were paid on daily rate basis. Differential rates were given to male and female loaders, rates of

⁵³ Adarkar Report (1945) pp.11-22

⁵⁴ Report of BLEC Vol.IV Part B pp.433

female being lower. Their wages varied between 5 a to 8 a. Drillers were paid on a piece rate basis, the rate varying from 1 anna per foot to 4 a. per foot according to hardness/softness of ore. In comparison to time rate workers, piece rate workers were not regular to work.⁵⁵

As the Payment of Wages Act was not applicable to mines and quarries, workers were not sufficiently protected from exploitation, especially those working under contractors. The payment of wage was both-weekly and monthly. Generally, wages were paid a week after they were due in the case of weekly paid and after 10 days in the case of monthly paid workers. Contractors hold up the payments for weeks at a time, putting workers in trouble. No efforts to standardize wage rates were made by the companies. The reason given was that labour supply was too unequal to justify standardization. In the case of departmental labour, at TISCO as well as at Gua, round and square paper cards were used for entering attendance, wages and allowance due and the worker was required to hang the card round his neck during working hours.⁵⁶

The way miners had to struggle even for getting the minimum wage and the great difference in the wage level and working condition between Tata Steel Plant and TISCO mines, is clearly brought out by the following section of the Memorandum submitted by the miners and workers of Noamundi mines to BLEC:

The minimum wages... of the unskilled labourers in the Mines is annas 5 only. Formerly the minimum rate was anna 4 only. *After a short strike in 1937 and also on repeated representations after the strike the rate was finally increased to annas 7 pies 6 for the males.* The labourers were not satisfied with this and they sent a petition to the General Superintendent, Ore Mines and Quarries and Prospecting, that the final rate of annas 7 pies 6 should be made the initial one. In that petition it was mentioned that in the declaration of the late Sir N.B Saklatwala, the Chairman of the Board of Directors, it had been announced unreservedly that the minimum wages of the male workers of the TISCO be annas 8 pies 9. *Under such circumstances, we fail to understand why we should be deprived of that minimum wage.*⁵⁷

⁵⁵ Adarkar Report (1945) pp.11- 22

⁵⁶ Ibid pp.15

⁵⁷ Report of BLEC Vol. III Part C pp.233. My emphasis.

In his reply to the petition filed by the workers of Noamundi, F.G Percival, the General Superintendent, Ore Mines and Quarries and Prospecting of TISCO, argued that the workers of the mines should not expect the same minimum wage as that in Jamshedpur because the cost of living in Jamshedpur was higher.⁵⁸ Workers refuted his statement by arguing that most of the commodities in Noamundi were imported from Jamshedpur, Calcutta and other place and in comparison to Jamshedpur, the prices of essential commodities were much higher here. Contradicting the paternalistic claims of Tatas, in terms of providing free quarters, Noamundi workers argued that the company was forced to do this to draw skilled labour to backward and unhealthy place where the mines were located and the health condition in the mines were so bad that the railways had to pay a 'jungle allowance' to their staff in Noamundi. Further, electricity charges were higher in Noamundi in comparison to Jamshedpur. Sick Leave was not given in this disease ridden place. From Table no.6, it is clear that wage level in mines of Bihar during the second world-war was lowest in iron-mines.

Table No.4 Wages in Bihar and Orissa Iron Mines

	Weekly earnings	Weekly Earning	Weekly Earning	Daily Earnings	Daily Earning	Daily Earning
	1923	1924	1925	1926	1927	1928
	Rs	Rs	Rs	Rs	Rs	Rs
Miners underground	2-8-3	3-4-0	3-4-0	--	--	--
Miners open working	--	--	--	0-8-9	0-6-3	0-10-6
Other workers underground	--	--	--	--	--	--
Others workers open working	--	--	--	0-8-9	0-6-9	0-7-0
Females underground	--	--	2-4-0	--	--	--
Females open working	--	--	--	0-5-9	0-5-9	0-5-9
Males surface	4-4-0	4-5-0	4-5-0	0-6-0	0-6-9	0-6-9
Females surface	2-0-0	2-0-0	2-0-0	0-5-0	0-5-6	0-5-6

Source: *Royal Commission on labour in India. Written Evidence Vol. IV – part –I*

⁵⁸ In a letter dated 13/ 14th May, 1938 to Gurucharan and others of Noamundi, Cited in BLEC Report Vol III Part C

Table No.5 Average daily earning of workers in mining industries in Bihar

	1939 Rs-a-p	1940 Rs-a-p	1941 Rs-a-p	1942 Rs-a-p	1943 Rs-a-p	1944 Rs-a-p	1945 Rs-a-p
Underground Mine							
Coal	0-9-9	0-9-6	0-10-0	0-11-0	0-13-9	1-1-6	1-2-3
Mica	0-7-9	0-8-0	0-9-0	0-9-6	0-11-9	0-13-3	0-15-3
Iron	0-5-3	0-5-3	0-5-6	0-6-3	0-6-9	0-7-3	--
Miner in Open work							
Coal	0-9-0	0-9-9	0-9-3	0-10-9	0-13-6	1-2-3	1-3-0
Mica	0-6-9	0-7-3	0-7-9	0-8-3	0-9-9	0-11-6	1-0-3
Iron	0-5-3	0-5-3	0-5-6	0-6-3	0-6-9	0-7-3	0-11-0
Women worker							
Coal	0-5-6	0-5-3	0-5-6	0-6-3	0-8-0	0-12-9	0-15-0
Mica	0-2-6	0-3-0	0-4-3	0-4-0	0-6-9	0-6-6	0-7-3
Iron	0-4-0	0-3-9	0-3-9	0-4-3	0-9-9	0-5-3	0-8-0

Source: *Indian labour year book* 1946.

Radhakamal Mukherji, who was a member of Bihar Labour Inquiry committee, found in IISCO's the iron ore mine at Gua in Singhbhum district that the company directly employed 900 workers and the contractors about 3000, the average earning of the worker was only between Re. 1- 4 and 1-12 in the week. Wages varied for loading the ore and depend upon the lead and the grade. The rates for loading the tubs varied from 1½ anna to 3 as. The wage rates of workers under the contractors were, on the whole, lower than the sarkari rates. Besides, the sardars who got the workers from the villages usually obtained ½ to 1 anna from each worker.⁵⁹ He further observed that, 7 basketfuls of stone cut, chipped and loaded by a group of 8 workers in the course of a day's work earned 12 as. Thus the daily earning was only 1 ½ anna. Earning of only one anna per diem was also quite usual. The work extended from 6 a.m to 6 p.m. under no shelter against sun and rain. He suggested that the

⁵⁹ Radhakamal Mukherjee, *The Indian Working Class* pp.100

basic rate should be uniform in all quarries, but the additional piece rate should vary according to the natural conditions of the quarry.⁶⁰

Comparing the labour conditions at Gua under IISCO and Noamundi under the TISCO, he found that whereas in Noamundi there was only one contractor working for the past 10 years and employing about 75 per cent of the labour force, in Gua there were quite a number of contractors. Competition among the latter had somewhat improved the labour condition there. At Noamundi the contractor gave the coolies 2 to 3 as. a day, while the minimum wage under direct management was 5 as. Under the contractors they sometimes worked for 12 hours, while work in the night from 2 p.m to 1 a.m or to 4 a.m was also not unknown, drink being supplied lavishly under such occasions.⁶¹

The wages of the daily-rated labourers per head was about -/4/- per day whereas that earned by labourers on contract basis worked out to not more than 2 annas per head per day. Several malpractices were prevalent in Gorumahisani mines in regard to measurement of stacks of ores.⁶²

Though B.P Adarkar Report denied the presence of Pathan or Kabuli moneylenders in the iron mines, recruiting *Sardars* were well known for lending money to workers. Their desire to have some hold on the labour employed by them and the refusal of the labour to work unless some money is advanced for the purpose were both responsible for indebtedness among the miners. The *Sardars* recovered the advances by making deductions from the wages both principal and interest. Interest was charged at the rate of 1 anna per week. The amount of indebtedness was usually of Rs.5 or 10, but in some cases it was as high as Rs.50 or more.⁶³ The Mining Officer of Singhbhum, Nageswar Prasad pointed out '*Katchies*' as a class of people who did money-lending business in the mines.⁶⁴

⁶⁰ Ibid pp 101

⁶¹ Ibid pp 101-102

⁶² *Annual Report on the Administration of Mayurbhanj, 1936-37* pp.114-115

⁶³ Adarkar Report (1945) pp.18

⁶⁴ BLEC Report Vol IV Part A. pp. 294

Working of Labour and Mining Legislations

Adarkar Report on the labour conditions in Iron mines, which was submitted to Labour Investigation Committee in 1945 found several violations in the implementations of various labour and mining legislations in the absence of inadequate and irregular inspection of the iron mines. It made following observations regarding the lack of proper inspections as well as implementation of mining legislations in the Iron mines of Singhbhum-Mayurbhanj region:

The Inspector of Mines, stationed at Dhanbad, visits these mines once in a year, but does not appear that he has any contact with the workers themselves. The Deputy Commissioner of the District is also an ex-officio inspector of mines, but he never visits any mine. He is hardly to be blamed for this, in view of the multifarious responsibilities of his office. In addition to these two, there is also a Mining Officer at Chaibasa, the headquarters of the Singhbhum District, who often visits mines, but his concern is mainly about the payment of royalties by the mines, execution of leases, their renewal and such other things. The Mayurbhanj State has its own State Inspector of Mines, who inspected the Gorumahisani Mine for ten times during the last seven years. In the state, perhaps one Inspector might be adequate, but for British India, one Inspector, who has to look up mines and quarries of various kinds throughout his circle is not enough.⁶⁵

Mines in British India were governed by the Indian Mines Act of 1923 whereas those in princely states were governed by their own set of rules. So far as the provisions of these relating to labour were concerned, generally departmental or *Sarkari* labour employed directly by the Companies fared better than Contractors' labour, but serious violations of the Act and the Order were found. In particular, employment of children under 15 and of adolescents (between 15 and 17) without doctor's certificate was frequent, no shelters were provided to the workers during rest intervals, no adequate supply of fresh drinking water was available. No abstracts of the Mines Act were exhibited in vernacular languages in prominent places. Abstracts in English were displayed in mine offices, which workers could hardly understand.

⁶⁵Adarkar Report (1945) pp. 20-23

The Indian Mines Act prohibited the employment of 'children' below 15 and of 'young people' (between 15 and 17) without doctor's certificate of physical fitness. But under the Mayurbhanj Order, the lower age limit for working in mines was only 13 years. The Indian Workmen's Compensation Act applied only to the mines in British India. Accidents were supposed to be reported to the Chief Inspector of Mines and the Deputy Commissioner of the District in the case of mines in British India, and to the State Mining Officer for those in the Mayurbhanj State. But the accidents were not always reported and compensation was paid often at a rate lower than that prescribed. The Indian Mines Maternity Benefit Act was enforced in the iron mines very late. In 1943, the Mayurbhanj State promulgated its Maternity Benefit Order and Rules and these were applicable to mines in the State. Biswamoy Pati, mentions about the prevalence of a form of forced, bonded labour called-'*Bethi*' in the iron mines of Mayurbhanj, but he does not gives us any information about exact nature and working of this form of labour in the mines.⁶⁶

The Mining Engineer at Gua stated that there was a tendency among doctors to under-estimate and among the workers to over-estimate age. According to the age statistics collected from Noamundi and Gorumahisani in B. P Adarkar Report, nearly 84 per cent of the total strength of workers was concentrated between 20 and 45 years, and also that the modal figure was between 25 and 30 years. It was also stated that workers generally entered service at the age between 20 and 40 and retired before 60.⁶⁷

As more mines gradually came to be worked, mining operations and employment of labour will necessarily give rise to problems of a far more complex nature than hitherto experienced, even princely states started formulating their own laws to regulate mining operations. But these laws came very late, and we neither know the conditions before these laws nor mere passing of laws ensured their proper implementations. The Mayurbhanj State Mines Order, 1937 represented first legislative attempt to regularise and control the procedure for the granting of

⁶⁶ Biswamoy Pati, "Tatas and the Orissa 'model' of capitalist 'development'". *Social Scientist*, Vol.34 No.3/4 (2006)

⁶⁷ Adarkar Report (1945) Table 9 and 10. pp. 18-19

certificate of approval, prospecting licenses and mining leases and inspection of mines. The law laid down definite rules for controlling mining operations and management of mines. Maximum hours of work per week (64 hours above ground and 54 hours below ground) was fixed and limitation of employment of child and women was prescribed. The law also provided for safeguards against accidents, ensuring medical aid in cases of accident.⁶⁸ The Mayurbhanj State Mines Order was amended in June 1937, to the effect that every person in charge of working partly shall, before commencing work and during the course of it, specially after blasting make careful examination of his working place and remove loose rock, stones or ground which might be dangerous.⁶⁹ The Mayurbhanj Workmen's Compensation Order was promulgated on the 17 July 1937, to provide for the payment of compensation to certain classes of workmen by their employees. The law provided compensation for personal injury caused to a workmen by accidents arising out of and in the course of his employment. Conditions and circumstances under which compensation may be claimed were laid down. The order was subsequently amended in November 1937, by way of fixing the amount of compensation in case of death, permanent total disablement, whether fatal or partial, resulting from injury received in the case of an adult or a minor as the case may be.⁷⁰ In consideration of the increasing mining operations, the Keonjhar Feudatory State also introduced the Keonjhar State Mines Act, 1936, the Fatal Accident Act and the Workmens' compensation Act from the beginning of year 1936. A Mining Inspector was posted at Joda, the centre of mining areas.⁷¹ But the most important point is that annual administrative reports of feudatory states from which we get information about existence of these mining laws, are completely silent about terms of these laws and the way they were implemented on the ground level. But it is clear that mining laws were formulated in princely states of Orissa much late.

⁶⁸ *Annual Report on the Administration of Mayurbhanj, 1936-37*, pp. 12

⁶⁹ *Annual Report on the Administration of Mayurbhanj, 1937-38*, pp.

⁷⁰ *Annual Report on the Administration of Mayurbhanj, 1937-38*, pp. 13

⁷¹ *Annual Report on the Administration of the Keonjhar State, 1937-38*, pp-40

Protest and Organization

Although industrialization requires the prior existence of a social group needing to sell its labour power, its emergence as a class is a historically and culturally determinate process. Even in the case of Tata Steel Plant, Dilip Simeon argues, the labour movement was a dynamic totality, and the mode by which a labour 'interest' was expressed was not a purely class articulation even when it was represented as such by its leader.⁷² He observes class as a social relation thrust upon uprooted groups and individuals. Over time, there emerge struggles to change immediate conditions, opening up the space for trade unions. Class consciousness develops in the course of these collective endeavours.⁷³ Different 'kinds of consciousness' were not placed in separate compartments but interacted with each other, performing different functions at different moments. Vinay Bahl argues that to understand the formation of Class relations and Consciousness, one has to consider the way in which a particular economy is situated in world market. According to her it is important to understand the particular configuration of the state and class relationship within that country.⁷⁴

With the silence of official records on the question of labour protest and organization in the iron mines, it is difficult to characterize the nature of labour force on the basis of concepts like "Working-Class" and "Class-Consciousness". Was this silence due to lack of labour protests and Trade-Unions in this mining sector or failure of official reports to document this aspect of labour. Nevertheless, with whatever sources we have, it is possible to draw a picture of labour protest and dissent in these mines, however fragmentary it may be. On the basis of the above analysis of labour relations and conditions in iron mines, it is clear that the miners were quite vocal in showing their dissatisfaction and dissent in terms of wages and contract system.

In their Memorandum submitted to BLEC and the petition given to General Superintendent, Ore Mines and Quarries and Prospecting, the workers protested against Contract System in the mines. They were also conscious about low wages

⁷² Simeon, *Politics of Labour Under Late Colonialism* p-323

⁷³ Ibid pp. 326

⁷⁴ Vinay Bahl (1995)

given to them in comparison to workers in Jamshedpur and their exploitation in the hands of Contractors. But this consciousness never took form of 'Organized' labour protest in form of strikes and Trade-Unions in the period under study. We do find instances of short strikes like that of 1937, but the exact nature of such strikes is not always clear. Dilip Simeon gives us some idea about labour disputes at TISCO's Gorumahisani mines, in the feudatory state of Mayurbhanj on the basis of his study of Tata files. A strike involving 2,300 miners and workers occurred in these mines at the height of labour movement in Jamshedpur in 1939. The dispute related to low wage rates for 'contractors' labour was soon settled, but the company's Superintendent of Mines and Quarries took the opportunity to recommend the dismissal of four technicians whom he suspected of holding meeting towards the formation of Union and instigating the strike.⁷⁵ Perhaps it was a sign of the time that Tata son's response to this showed a marked and novel sensitivity to democratic procedures. The agents insisted that, "there should be no discharge or dismissal without a written charge and without giving an opportunity..... of explanation".⁷⁶ They criticized the Mine Manager's mode of enquiry and concluded: "we cannot at this time of day discharge employees for labour activities". Simeon argues that this lesson was learned from Jamshedpur's labour movement.⁷⁷ As Radhakamal Mukherjee noted, "It is management's deliberate policy of non-recognition of unions and persistent refusal to deal with [their] accredited representatives.... That is one of the most frequent causes of strikes in India, and a labour union hardly gets recognition without the ordeal of a strike".⁷⁸ As the history of trade unionism in Coal mines and Steel plant suggests, managers opposed the formation of unions and when they were obliged to accept them, they considered it their right to certify the acceptability of their leaders.⁷⁹ In a file on conditions in the mines of Singhbhum, we get evidence of labour agitation, but it does not give any idea about exact reasons for trouble: "The relations between labourers and employees during the year under report were generally satisfactory

⁷⁵ Simeon

⁷⁶ Ibid

⁷⁷ Simeon (1995) pp. 289

⁷⁸ Radhakamal Mukherjee, *The Indian Working class* p-307

⁷⁹ Simeon (1995) pp-329

excepting at Gua....where there were labour strikes during the year 1946. The matter was subsequently settled amicably after a long strike”.⁸⁰

Evidence of Trade-Unions and their activities in iron mines are few in this period, and require more sources to be studied, to get a clear idea. Though Tata Workers’ Union tried to bring Noamundi workers under their influence, it is clear that the scale of labour movement which Jamshedpur, witnessed in 1930s, never spread in iron mines of TISCO. Though the mines felt the low intensity after-shocks, epicenter of the ‘earthquake’ remained the steel factory. Even in the case of coal mines as Dilip Simeon suggests that the mining population was not politically awakened until the mid and late thirties and the needs and demands of the workforce did not, therefore, enter as important factors in decision making.⁸¹ Adarkar Report on labour conditions in iron ore mines did not mention anything regarding the presence of trade unions, labour relations or disputes. Workers in Noamundi mine remained mostly unskilled and there was no security of job even by 1960. Workers were in constant fear of dismissal because their places could easily be taken by others. A report of Bihar Government observed: “Trade unions are very much there but perhaps more for political activities than for the welfare of those they represent. It is common fallacy.... to think that to provide games, clubs and canteens is end of all welfare”.⁸² Trade Unions became functional in two iron mines-Noamundi and Gua only in 1946, with the establishment of Noamundi Mazdoor Union and Gua Mines Workers Union.⁸³ One of the main demands of Prajamandal movements in Mayurbhanj in 1940s was for trade- unions in the state.⁸⁴

In restoring agency to workers our focus cannot be fixed just on times of mass upsurge when existing hierarchies and structures of power are turned upside down. Workers act in their daily life in small ways, resisting pressures as well as submitting to demands, in small ways, being silent at times and vocal at others, conforming to rules as well as negotiating them, and through small acts of self assertion seeking to

⁸⁰ Bihar State Archive Labour Department File No. VII M 23/47

⁸¹ Simeon (1995) p-34

⁸² Prasad and Sahay, *Impact of Industrialisation on Bihar Tribals...* pp.57-58

⁸³ Bihar District Gazetteer Singhbhum (Supplementary) 1984

⁸⁴ All India State Peoples Conference Papers, File No. 112, Nehru Memorial Museum and Library

retain a sense of dignity. Everyday practices are not always acts of resistance.⁸⁵ It is reflected in grievances of workers of Noamundi iron mines on the question of medium of language in schools of the mine. The workers objected against Hindi being the only medium of instruction in the Primary Schools of the mine. The school was started by the miners with the subsistence from the Company. In the beginning the medium of instruction was Hindi, Oriya and Bengali. But after the Company took over the school, all languages other than Hindi were abolished. Workers asserted that the primary education cannot be given in any language other than the mother tongue. In Jamshedpur also the company tried to abolish Oriya and Telugu classes but ultimately it was forced to retain them after stiff opposition from the workers.⁸⁶

The absence of trade unions did not reflect a lack of consciousness among workers but suggested rather that they could not easily be sustained in the face of hostility from employers and the state, which in turn was facilitated by wider political context.⁸⁷ As Chandavarkar suggests, Class and ethnicity are more fruitfully conceived as discursive categories. The principal historical question which their analysis raises are why at particular moments diverse groups with often conflicting interests and varied cultures came together in often fragile associations.

Work and Culture

In what way workers made sense of their work and of their being as wage labourers. Anthropologists have made use of rituals and folklore associated with work and social conditions to make sense of their world-view. June Nash and Michael Taussig have made important contribution in this direction. Historians of Indian labour have started taking folklores and rituals seriously. Recent work of Dhiraj Nite on coal miners has contributed significantly in this direction. He has made brilliant use of folklore to understand the meaning of work as the miners associated with it. Janaki Nair has also

⁸⁵ Chitra Joshi, *Lost World: Indian Labour and its Forgotten Histories* (Delhi: Permanent Black, 2003)

⁸⁶ Report of BLEC Vol.III Part C pp.135-244

⁸⁷ Rajnarayan Chandavarkar, *Imperial Power and Popular Politics: Class, Resistance and the State in India, c. 1850-1950* (Cambridge: Cambridge University Press, 1998) pp. 348

made use of oral interviews. Unfortunately we don't have such material for iron miners of Singhbhum. Nevertheless the way tribal people made sense of industrialization and proletarianization is reflected in some of their folklores. Let us take example of a song in Mundari that refers to effect of industrialization, specifically to the industrial complex of Heavy Engineering Corporation on the lands of what used to be Hatia village.

Ranchi road shines!
The steps of the white men sound
as torrential rain [satob satob].
Hatia village trembles [in the distance while]
The metallic sound [jirab jirab] of the
Workers' tools can be heard....
Ah! From the slopes they did *uproot rocks and stones*.
They made the god of the mountain [Marang Buru] flee.
When they brutally threw away the guardian god,
Hatia collapsed in the dust like stones
falling on green leaves.....⁸⁸

In this song we find a sense of strong reaction against mining activities which 'uproot rocks and stones' through drilling, blasting operations which is expressed in the metaphor of stones being collapsing as dust. Perhaps this is because hills and mountains form part of sacred landscape of 'tribal groups', which appears from the way the God of mountain-Marang Buru who is perceived as the guardian of mountains is forced to flee from his abode.

Let us take the example of this Ho song, which reflect Ho workers' negotiation with work in cement factory and limestone quarries of Singhbhum:

Oh! Hear, Oh! My sister , you see,
The factory was established in 1946.
We are witnessing it, Oh!
Oh! My kin, Oh! my sister,
Chadda company has come from Bombay

⁸⁸ Song written by Ram Dayal Munda from R.D. Munda (ed.) *Hisir: Anthology of Twelve Munda Poets* (Ranchi: Sahkari Prakashan Samiti, 1967). Cited in Susana Devalle p-225-226.

It is expanding the mines and the factory
It is taking away our lands, our home and homestead
Where shall we do our agriculture, and fetch our livelihood?
Oh! my kin, Oh! my sister
There cannot be any good for us in this.
The rate of one rupee and eight annas
We cannot live upon
But we have to do *much work and quickly*,
After such a toil we get our food.
If the rate is not increased
If the paise is not increased
Oh! my kin Oh! my sister,
We shall not go to work
If one goes to work, we shall drive him out with bows and arrows⁸⁹.

Here again the angst towards private companies who acquire agricultural lands for mining operations is reflected. Forced out of lands, tribals are converted to wage labourers but are made to work according to new rhythms of time. Working of capitalism requires forcing workers to work on meager wages which is hardly sufficient to keep their body and soul together. It is against these exploitative conditions that the song ends with a sense of rebellion against low wages and to stop work under threat of bow and arrows.

⁸⁹ Literal translation of a Ho song collected by Pranab Kumar Dasgupta during his field work in Jhinkpani Cement Factory and its limestone quarries in Singhbhum during 1969-70. It is published in his work "*Impact of Industrialisation on a Tribe in South Bihar*" (Calcutta: Anthropological Survey of India, 1978)

Chapter 5 Conclusion

Development of iron ore mining industry in 'South Chotanagpur' was the result of the immediate requirement of raw material for growing 'Iron and Steel' industry. This emergence of modern extractive industry led to a corresponding decline in indigenous iron smelting industry and was facilitated by the active cooperation between indigenous capitalists like Tatas, colonial state and Princely States. On the one hand while mobility of itinerant communities of iron smelters was restricted by colonial forest policies, the development of modern 'Iron and Steel' industry was facilitated by support of colonial government in laying complex network of railways in the region. Princely states not only provided mining concessions to private companies like Tatas but also played important role in suppressing agrarian and industrial agitation. We saw how the ruler of Sereikela State and the management of TISCO collaborated in imprisoning militant trade union leader of Jamshedpur Maneck Homi.

I have tried to show how mines generally acted as backyard to factories from where raw material was extracted. As such I have made the distinction between factory as site of production and mines as site of extraction. Mines being a wasting asset, capitalists usually don't invest much capital in it, but they demand for 'captive mines' to secure their requirement of raw material against fluctuations in market, which often led to the opening of new mines. When the reserve is exhausted the mines are to be abandoned. As a result mines by themselves did not give rise to urbanization and remained 'enclaves' in the midst of agrarian economy. I have argued against looking at TISCO as a homogenous entity making it synonymous to steel production, neglecting its involvement in various mining enterprise as well.

I have also shown the particularity of 'Open cast mines', mostly situated in hills and forests of Bihar and Orissa, which made it different from underground mines like coal mines. Spatial demarcation between surface and below ground was absent in 'Open cast mines'. Hence I have argued that these mines be understood in their own terms, in their own specific features. By doing so I move away from coal-centered

understanding of 'mining project', which has given rise to complete neglect of metallic mining in economic and labour history. There is need to study the history of mining of various minerals like mica, copper, manganese, which also developed during colonial period. This would give a new dimension to understand 'Indian Industrialization'. This work on iron ore is a step toward understanding metallic mining.

Rather than blurring all boundaries, I have maintained the distinction between factory and mines and have stressed on the need to look at economic linkages to understand the particularity of iron ore mining. As Shahid Amin says, "all histories are accounts of particular pasts".¹ Rather than essentializing the experience of industrialization and proletarianization in "periphery" (read third world countries), only on the basis of experience of urban centres and factory, there is need for looking into experiences of other economic phenomenon as well. economic historians have shown that in Europe there was no single path towards industrialization.² Both core and periphery are then relative terms. We have to look at the way various regional economies were linked to national economy. I have shown how in the national discourse "steel" becomes so important as a symbol of national development and empowerment that backward linkages of raw materials was overshadowed.

Like coal mines, labour in iron mines was also seasonal. But here substantial labour came from surrounding villages, though migration was significant from neighboring districts and states. Village connection was an important factor in these mines. If we see overall demographic scenario of Singhbhum, one finds great deal of mobility and fluidity during this period. There was not only long distance tribal migration towards Assam Tea Plantations, but also significant internal mobility within the region due to opening of iron mines and Jamshedpur steel plant. Since majority of labour force was not permanent and worked under contract System, there were serious violations of labour laws here, in the absence of adequate inspection in these mines.

¹ Shahid Amin, *Alternative Histories: A View from India*, (Calcutta: Centre for Studies in Social Systems, 2002) pp. 17-18

² See Aristide R. Zolberg, "How many Exceptionalisms?" in Katznelson and Zolberg, *Working Class Formation* pp.397-455

Dilip Simeon has pointed to the existence of multifarious forms of 'informality' in Jharia Coal Fields which played an important role in keeping labour cost as low as possible. I have carried forward his argument of 'informality' in the case of iron mines as many of the features were same here. This 'informality' increased in the case of iron mines as most of the mines were dispersed in the forests in the border of Bihar and Orissa. The element of ethnicity was important in these mines as a majority of the labourers were tribals.

In particular, the tribal village economy subsidized many of the cost involved in the production and reproduction of a mining labour force – costs which would otherwise have fallen on the mining companies. These mining centers remained an "enclave economy" as effect of capitalist development was never felt on surrounding tribal/village economy. Another significant question is regarding characterizing the nature of mining labour force. There are a few instances of labor protest and organization in these mines in comparison to the steel factory at Jamshedpur and Jharia coal fields. The growth of labour movement in Jamshedpur during the 1930s had few ripples on iron mines. This does not mean that labourers in iron mines were not conscious about their condition and exploitation. Quite the opposite: memoranda and petitions of miners drawing the economic disparity between Jamshedpur and mining centres show class consciousness of miners. There was an absence of trade-unions in these mines till late 1950s. On the other hand, the society of south Chotanagpur underwent tremendous transformation during this period. I have shown how during various periods of time community consciousness and solidarity developed among Hos and Santhals. While there was an absence of militancy in the iron mines of Mayurbhanj, Santhals of the same region rose in rebellion against recruitment for labor corps in France during World War I. Solidarity and collective action in terms of ethnicity and community was clearly visible during the Santhal rebellion of 1917 in Mayurbhanj and during the merger of Mayurbhanj in Indian nation state during independence. Also boundaries of the community were redefined during various socio-religious movements among Hos and Santhals from the beginning of the twentieth century onwards. It is not easy to characterize these movements or to say with certainty the reasons for these movements, but internal

hierarchy within the community became apparent. The major impetus towards solidarity and community consciousness came from efforts to invent the scripts for the different languages of the region: Ho and Santhali, Warang Chiti and Ol Chik. Language and script became important symbols of community assertion.

Appendix I Tables

Table 1: TISCO's Iron Ore Mines in Mayurbhanj

<u>Year</u>	<u>No. of Workers</u>	<u>Production</u>	<u>Royalty Paid</u>
1913-14		2,47,018 tons 15 cwt	Rs 12,046-13-4.5
1914-15	2,296	2,84,603 tons 7cwt	Rs 21,300-12-6
1915-16	--	--	--
1916-17	2232	2,48,870 tons and 19 cwts	Rs 27,011-1-5
1917-18	2333	3,80,262 tons 10 cwt 3qr	Rs 41,638-13-9
1918-19	3005	338936 tons 2 cwt	Rs. 31,43609
1919-20	3317	4,29870 tons 11 cwt 2 qrs	Rs 36,241-14-6
1920-21	2667	4,03,783 tons 16 cwt	Rs 45,290-8-9
1921-22	--	--	--
1922-23	3,132	3,93,409 tons and 6 cwts	Rs 50,919-3-0
1923-24	3,597	6,88,977 tons 15 cwt. 3qrs	Rs. 78,679-9-6
1924-25	6956	9,05,784 tons 5cwts 1 qr.	Rs 98,979-12-0
1925-26	6982	9,08,016 tons 19 cwt	Rs 1,17,901-9-6
1926-27	7,888	10,04,047 tons 8 cwt	Rs 1,43,859-14-9
1927-28	--	--	--
1928-29	5129	4,86,336- 4 -1 tons	Rs. 79,500-3-3
1929-30	5744	7,17,183-4-0 tons	Rs. 1,08,439-11-6
1930-31	5443	6,98,324-13-0 tons	Rs 1,06,040-9-3
1931-32	7651	8,32,251 tons 9cwt. 2qrs	Rs1,22,781-7-0
1932-33	6932	7,35,689 tons 19 cwt. 2 qrs	Rs 1,10,711-3-9
1933-34	4,412	7,99,044 tons 15 cwt. 3 qrs	Rs 1,18,630-10-3
1934-35	5,940	8,35,307 tons 7 cwt	Rs 1,23,163-6-9
1935-36	6,606	8,83,920 tons 11 cwt. 3qrs.	Rs1,29,240-1-0
1938-39	--	800,000 tons	--
1941-42	--	986,421 tons	--
1943-44	--	9,30,479 tons	Rs 2,74,131-6-0
1944-45	--	9,16,293-15-3.5 tons	--
1945-46	--	9,01,44-13-1.5 tons	--

Source: Compiled from *Annual Reports on the Administration of Mayurbhanj*. There are few gaps due to unavailability of Reports. Also missing data regarding number of workers from 1938 onwards is due to reluctance of these reports to record this aspect.

Table 2: Iron Ore Tonnage Despatched from TISCO's Mayurbhanj Mines

	Gurumaisini	Sulaipat	Badampahar
1918	338,936	.....	.....
1919	429,873	.....	.....
1920	403,450	.....	.....
1921	438,808	.....	.....
1922	359,437	30,093	3,004
1923	362,782	125,831	174,634

Source: *Records of Geological Surveys of India*

Table No. 3 Iron Ore Production of TISCO'S Mayurbhanj and Singhbhum mines

Year	Gurumahisani	Suleipat	Badampahar	Noamundi	Total
	Tons	Tons	Tons	Tons	Tons
1929	361,721	124,893	258,038	449,981	1,194,633
1930	344,616	145,178	223,034	433,300	1,146,128
1931	422,161	157,924	259,334	462,541	1,301,960
1932	339,016	141,407	261,711	378,307	1,120,441
1933	372,289	135,775	287,670	497,351	1,293,085

Source: *Records of Geological Surveys of India*

Table No. 4 Production of Saleable Steel, Gross Revenue, Profit after Tax and Rate of Dividend, TISCO

Year	Production of Saleable Steel	Gross Revenue	Profit after Tax	Dividend for Ordinary Shares	Dividend for Preference Shares
	Ton	Rs million	Rs million	(%)	(%)
1911-12	1,000	0.8	0.3		
1912-13	19,000	6	0.7		
1913-14	49,000	8	1.3	6	
1914-15	67,000	8.9	1.9	8	25
1915-16	91,000	16.4	5	15	180
1916-17	99,000	26.4	7.1	20	292
1917-18	124,000	24.9	5.5	20	292
1918-19	102,000	19.3	2.8	5	
1919-20	122,000	29.3	4.9	16	203
1920-21	122,000	39	5.4	16	203
1921-22	126,000	40.8	4.2	3	
1922-23	115,000	33.3	0.5		
1923-24	163,000	46.4	0.1		
1924-25	248,000	64.5	0.3		
1925-26	320,000	69.9	3.6		
1926-27	374,000	74.5	7.1	1	
1927-28	429,000	60.5	6		
1928-29	288,000	40.9	5.2		
1929-30	425,000	56.1	0.7		
1930-31	443,000	57.3	2		
1931-32	456,000	53.1	1		
1932-33	431,000	52.7	3.8		
1933-34	535,000	68.1	10.2		
1934-35	610,000	77.2	14.8		
1935-36	661,000	75.5	12.1	8	25
1936-37	680,000	94.2	14.6	13	120

1937-38	674,000	133.5	24.2	21	253
1938-39	715,000	125.9	24.3	24	313
1939-40	777,000	138.1	31.4	33	480
1940-41	834,000	179.9	30.4	39	576
1941-42	839,000	188.3	33.6	36	528
1942-43	728,000	177.9	22.0	31	433
1943-44	831,000	221.0	24.2	31	433
1944-45	747,000	225.9	27.2	31	433
1945-46	746,000	223.7	26.2	31	433
1946-47	753,000	231.2	21.9	25	336

Source: *Tata Iron and Steel Annual Reports*. Courtesy: Rudrangs Mukherjee, *The Century of Trust: The Story of Tata Steel Delhi*: Penguin, 2008 pp.43-44

Table No. 5: Output of Messrs. Bird and Company's Barabil mines in Keonjhar

Year	Iron Ore	Manganiferous iron ore
	Tons	Tons
1929	187,733	8,196
1930	23,544	5,842
1931	111,556	20
1932	186,144	7,064
1933	195,937	10,025

Source: *Record of Geological Survey of India*

Table No. 6 Number of Persons Engaged in Mining of Iron Ore in Mayurbhanj State, 1931

	Total Following occupation	As Principal Occupation		As Working Dependents		As Subsidiary to Other Occupations	
		Male	Female	Male	Female	Male	Female
Bamanghati Subdivision	9,366	3,648	3,544	18	8	1,696	452
Sadar Subdivision	73	51	6	.....	.....	16	.....
Panchpir Subdivision	581	145	184	1	.....	192	59
Kaptipada Subdivision	2	1	.....	.....	.....	1	.....
Mayurbhanj State Total	10,022	3,845	3,734	19	8	1,905	511

Source: Mohammad Laeequddin, *Census of Mayurbhanj State, 1931, Vol. II-Tables*, (Calcutta, 1935) pp. 256-257

Table No.7 Accident rate in Iron-ore Mines

Year	Fatal	Serious
1944	0.12	2.45
1945	0.58	3.35
1946	0.28	2.99
1947	0.60	2.70
1948	0.14	2.82
1949	0.19	1.26
1950	0.12	3.34

Source: *Indian Labour year book 1950-51*

Table No. 8 Age Distribution at Gorumahisani Mine, Mayurbhanj, 1945

Completed (a) but not (b)		Males	Females	Total
(a)	(b)			
12	15	.....	1	1
15	17	5	2	7
17	20	30	15	45
20	25	87	53	140
25	30	249	71	320
30	35	201	58	259
35	40	199	10	209
40	45	130	13	143
45	50	69	13	82
50	55	34	8	42
55	60	17	2	19
Above 60		1	.....	1
Total		1,022	246	1,268

Source: *B.P Adarkar Report*(1945)

Table No. 9 Age Distribution at Noamundi Mine, Singhbhum, 1945

Completed (a) but not (b)		Males	Females	Total
(a)	(b)			
12	15	.....	.....	.....
15	17	.....	4	4
17	20	147	267	414
20	25	421	312	733
25	30	627	184	811
30	35	446	115	561
35	40	327	49	376
40	45	190	12	202
45	50	76	6	82
50	55	19	2	21
55	60	8	2	10
Above 60		1	.....	1
Total		2,262	953	3,215

Source: *B.P Adarkar Report* (1945)

Table No. 10 Employment in iron ore mines in Singhbhum

Year	1929	1934	1939	1940	1941	1942	1943	1944	1945	1946	1947
No. of worker	8,119	5,214	8,855	10,118	10,162	10,332	9,347	8,166	6,883	7,043	6,655

Source: *Indian labour year book 1948-49.*

Appendix II Photographs of Field Work



Abandoned Railway Siding, Manoharpur, West-Singhbhum, Jharkhand

Source: Field Work, Sept-Oct 2010



Mining Face of an 'Open Cast' Mine, Dhobil Lease, Manoharpur Iron Ore Mine, W. Singhbhum, Jharkhand. It is oldest surviving iron mines. Once captive mines of IISCO, now taken over by SAIL

Source: Field Work, Sept-Oct 2010



Stack of Iron Ore fines

Source: Field Work Sept-Oct 2010



Iron Ore waiting to be loaded

Source: Field Work Sept-Oct 2010



Sign-board showing Dhobil lease of Manoharpur Ore mines

Source: Field Work Sept-Oct 2010



A private iron ore crusher unit, Sundergarh district, Orissa

Source: Field Work Sept-Oct 2010



Abandoned Aerial Ropeway, Ajita Buru, Manoharpur Ore Mines

Source: Field work Sept-Oct 2010



View of Saranda forest tract. Despite almost a century of mining operation in the region dense forest still survive



Scene of Saranda forest tract from top of mining face.

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