

2296

**Production Relations and  
Patterns of Accumulation in the  
Context of a Stalled Transition  
Agrarian Change in Contemporary Central Bihar (India)**

*Rosalind Kalpana Wilson*

*PhD Thesis*

*SOAS  
University of London*

*1999*

ProQuest Number: 11015824

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 11015824

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code  
Microform Edition © ProQuest LLC.

ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 – 1346

## Acknowledgements

This thesis could not have been written without the help, support and inspiration of many people both in Britain and India, and only a few of them can be named here.

My supervisor, Terence J. Byres, has given me all possible help, providing me with intellectual guidance and inspiration, as well as encouragement and moral support when I have most needed it. I also benefitted a great deal from my discussions with Sudipta Kaviraj, who was joint supervisor of the thesis in its initial stages.

In Patna, Pradhan H. Prasad gave me his valuable suggestions and practical help; and I would like to mention the support and help of many friends including Shahida Hasan, whose home in Patna became my haven there, Saroj Chaubey, and Ramji Rai. In Hilsa, I received the hospitality and help of Ghauli Devi, Gulabchand Das and their daughter Maya; others who helped me a great deal included Aratiji, Ramjayal Paswan, Ashok Kumar, Dwarika Yadav, Rameshji and Bhimji. In Calcutta, I would like to mention the warmth, affection and help of Bela and Nripen Bandyopadhyaya.

Although she can't yet read this, I would like to mention my daughter Ananya, who since her arrival last year has put everything in perspective, as well as of course her father, who has continued to believe in my ability to finish this thesis and in the future. Finally, this thesis is for my mother and my father, who in their different ways have made it all possible, and who have shared in every aspect of its progress.

*Kalpana Wilson*  
*October 1999*

## Abstract

My thesis examines the series of changes which have occurred in the patterns of accumulation by cultivating landowning groups in Central Bihar from the early 1970s to the mid-1990s, and the specific impact upon production relations of sustained struggles waged by agricultural labourers.

Based primarily on fieldwork carried out in 1995-96 in Nalanda district of Bihar, it investigates changes in the structure of landholdings, the use of technology, the forms, conditions, and extent of agricultural labour and other interrelated variables.

I conclude that conditions in the 1970s in this area, which is dominated by cultivating landowners from the intermediate Kurmi caste, indicated a potential for a transition to capitalism based on rich peasant accumulation. However this development has essentially come to a standstill during the period from the early 1980s to the present.

This 'stalling' is traced to the failure of land reforms and the persistence of a highly skewed pattern of resource endowment which has meant that unproductive economic activities such as moneylending, the sale and hire of agricultural inputs to the growing section of small and marginal cultivators, and more recently, contracting and organised crime have remained more profitable than investment in agricultural production.

Further, State power, rooted as it is in this same agrarian structure, has been used by successive landed groups to appropriate development resources through institutionalised corruption. This is intensifying a crisis in the availability of key inputs and the virtual collapse of the infrastructure.

The initial spurt of capital accumulation among larger landowners employing wage labour provided the catalyst for the emergence in the late 1970s of an organised movement of agricultural labourers, the majority of whom were from 'dalit' castes.

I discuss the questions of class, caste and gender which have shaped this movement, and conclude that it has succeeded in effecting a number of significant changes in production relations which have occurred from the early 1980s onwards.

Finally, I place the changing phenomenon of private armies and criminal gangs associated with landowning groups in this context of a stalled transition to capitalist agriculture on the one hand, and a challenge from below to both the economic as well as the political bases of the power of the dominant classes on the other.

## **Table of Contents**

INTRODUCTION.....	10
CHAPTER 1: The Political Economy of Agrarian Change in India.....	13
1.The Identification of Agrarian Classes and the Development of Capitalism in Agriculture (13-17)	
Capitalism from Above and Below (15-16)	
The Complexities of Transition (16-17)	
2.India's Mode of Production Debate: Semi-Feudalism or Emerging Capitalism (17-23)	
The Inverse Relationship (21 - 23)	
3. Identifying Classes in Indian Agriculture (23 -29)	
4.The 'New Technology' and Class Formation (29-35)	
Proletarianisation and 'Unfreedom' (30-33)	
Class-for-itself action by rich peasants (32-35)	
5. Gender, production and Agrarian Change (35-39)	
6.Regional Differentiation (39)	
7.Agrarian Movements, Political Power, and the State (40-41)	
Conclusion (41-42)	
CHAPTER 2: Profile of the Fieldwork Area and Central Hypotheses.....	43
1.Bihar in the All-India Context: 1970s to 1990s (43-50)	
Some Macro-Level Indicators (43-45)	
Agrarian Structure (45-46)	
Agricultural Production – Elements of Change (47-48)	
New Political Forces (48- 50)	
2. The Fieldwork Area: A Block in Central Bihar (50-54)	
3.Chandkura: A Profile (54-56)	
4. Central Hypotheses (57)	
CHAPTER 3: Fieldwork Methodology.....	58
1.Design of Fieldwork (58-60)	
a)Household Survey, Chandkura Village (58)	
b)Village Surveys, Hilsa Development Block, Nalanda District (59)	
c)Survey of Contractors (59)	
d) Further Interviews and Fieldwork(59)	
2.Class Categorisation Used in Fieldwork (60-65)	
3. Account of Fieldwork (65-71),	
a)Establishing Contacts and Pilot Study (66)	
b)Survey of Contractors (66)	
c)Household Survey, Chandkura (67-69)	
d)Village Surveys (69-72)	
e)Further Interviews(70-71)	
CHAPTER 4: Agriculture, Technology and Class in the Fieldwork Area.....	72
Introduction (72-73)	
1.Irrigation: the 'leading input' (73-79)	
a)The Ishikawa Hypothesis (73-74)	
b)The Boyce Modification of the Ishikawa Hypothesis (74-75)	

- c)Economies of Scale, the Role of Consolidation and Water Markets (75-76)
- d)Timing and Quantity and the Importance of Power Supply (77-79)
- e)Mechanisation (78-80)
- 2.An Overview of Technological Change in the Study Area (79-88)
  - a)The Spread of Tubewell Irrigation (79-81)
  - b)The Power Crisis and the Spread of Diesel Pumpsets (81-82)
  - c)Cropping Patterns: the Boyce Effect (82-83)
  - d)Fertiliser Consumption (83-86)
  - e) Fragmentation and Consolidation (86-88)
- 3.Class and Technological Change(88-97)
  - a)Irrigation (88-93)
  - b)High Yielding Varieties and Fertilisers (93-94)
  - c)Mechanisation (94-97)
- 4. 'Rental Markets' For Technology (97-102)
- 5.Small Peasants and Technological Change (102-111)
  - a)Subsistence Production Using the New Technology (102-103)
  - b)The role of fixed rent tenancy (103)
  - c)Credit, marketed surplus and cropping patterns (103-104)
  - d)Non-viability of small and marginal holdings (104-105)
- 6.The 'Income Diffusion' Hypothesis (105-109)
- 7.The 'Arrested Green Revolution' Hypothesis (109-111)

**CHAPTER 5: Changing Patterns of Landownership and Access to Land in the Fieldwork Area .....112**

- Introduction (112)
- 1.Capitalist Development and the Concentration of Landholdings: the Marxist Approach (113-114)
  - 2.Landholding Size, Scale and Class in India (114-120)
  - 3.Changes in Land Distribution Patterns in Bihar: Is Land Concentration Occurring? (120-133)
    - a)Changes in Land Distribution by Size Groups (122-126)
    - b)Inequality and the Gini Coefficient(126-130)
    - c)Tenancy (130-133)
  - 4.The Problems of Disaggregated Data in Bihar (133-134)
  - 5.Changing Patterns of Landholdings in Chandkura (134- 138)
  - 6. The Absence of a Land Market in Chandkura(138-141)
  - 7. Tenancy in Chandkura(142-148)
  - Conclusion : Land, Class and Accumulation Strategies (148-151)

**CHAPTER 6: Agricultural Labour in the Fieldwork Area.....152**

- Introduction: Agricultural Labour in Bihar (152-164)
- a)The Growth of Agricultural Labour (154-156)
  - b)The 'Feminisation of Agricultural Labour' Hypothesis (156-160)
  - c)The Impact of Technological Change on Labour Use (160-164)
  - 1. Agricultural Labourers in the Fieldwork Area (165-180)
    - a)Class, Caste and Gender (165-168)
    - b)Forms and Conditions of Agricultural Labour (168-169)
    - c) The Changing Nature of Interlocked Relationships (169- 170)
    - d) Changes in Labour Demand and Composition of Agricultural Labour (170-174)
    - e) Alternative Sources of Employment for Rural Labour Households (175-180)

2. Agricultural Labourers' Struggles in Hilsa (180-194)	
a) Issues and Strategies (180-184)	
b) Women's Participation (185-187)	
c) Changing Relationships (187-188)	
d) Wage Increases (188-190)	
e) Employers' Responses (190-193)	
f) New Aspects of Class Confrontations (193-194)	
Conclusion (194-196)	

CHAPTER 7: Patterns of Accumulation in the Fieldwork Area.....	197
Introduction (197-201)	
1. Credit, Usury and Agricultural Production (201-213)	
a) Access to and use of Traditional Credit (202-203)	
b) Interest rate variations and interlocking relationships (203-206)	
c) Lending and Accumulation (206-207)	
d) Access to and Use of Modern Credit (207-211)	
e) The Integrated Rural Development Programme (211-213)	
2. Major Expenditures in Chandkura (213-221)	
a) House Construction (213-215)	
b) Expenditure on Marriage and the Nature of Dowry (215-221)	
3. Development, the Administration, Crime and Accumulation (221-226)	
4. Politics and Power: Competition and Collaboration Among the Rural Rich (226-229)	
The Ranvir Sena (227-229)	
Conclusion (229-233)	

CONCLUSIONS.....	234
Comparisons and Contrasts (235)	
Technological Change (236-237)	
Land Ownership and Access to Land (237-238)	
Patterns of Accumulation and Investment of Surpluses (238-240)	
Relations of Production and Struggles of Agricultural Labourers (240-243)	

APPENDICES.....	244
Appendix 1: Chandkura Census Survey Questionnaire - All Households (244-246)	
Appendix 2: Agricultural Labourers' Questionnaire (247-250)	
Appendix 3: Self-Cultivating Landowners' Questionnaire (251-256)	
Appendix 4: Tenants' Questionnaire (257-263)	
Appendix 5: Leasing Out Landowners' Questionnaire (264-268)	
Appendix 6: Assets and Expenditure Questionnaire (269-271)	
Appendix 7: Contractors' Questionnaire (272-288)	

REFERENCES.....	289
-----------------	-----

## **List of Tables**

Table 1:	Sectorwise employment growth,GDP growth at constant prices, and employment elasticities in Bihar and India,1981-91	44
Table 2 :	Nalanda District: Selected Indicators	53
Table 3:	Some indicators of technological change in Chandkura between 1981/83 and 1995/96	80
Table 4:	Extent of irrigation and use of fertiliser in Bihar, 1970s and 1980s	81
Table 5:	Per Capita Electricity Consumption (kwh), Central Bihar and India, 1965-1985	82
Table 6:	Fertiliser Prices in Bihar, 1980-1994	85
Table 7:	Distribution of cultivating households in Chandkura by diesel pumpset use and landholding size group (acres)	90
Table 8:	Annual costs of cultivation in 1995/96 for a typical household cultivating 2.5 acres in Chandkura (1995-96 prices)	91
Table 9:	Percentage of HYV wheat cultivating households using tractors and mechanical threshers - Punjab 1971-72 and Chandkura 1995-96	95
Table 10	Distribution of cultivating households in Chandkura by tractor use and landholding size (acres), 1995/96	98
Table 11:	Population density, population growth and dependence on land, Nalanda, Bihar and India	112
Table 12:	Mean land cultivated per household by class and caste in the ANSISS/ILO study of twelve villages in Bihar, 1981-82	117
Table 13:	Percentages of holdings and of area operated by size-groups of operated holdings, selected States and all-India 1970-92	124
Table 14:	Average size of operational holding in each size group, selected States and all-India, 1981-82 and 1991-92	126
Table 15:	Percentage shares of total area operated by percentile groups of holdings, selected States and all-India, 1981-82 and 1991-92	128
Table 16:	Gini coefficient of owned and operated holdings in major states, 1981-82 and 1991-92	129



Table 17:	Gini Coefficient of Operational Holdings for Selected States, 1970-71 to 1991-92	129
Table 18:	Percentage of tenant holdings by size-class of holdings, all-India and Bihar, 1981-82 and 1991-92	130
Table 19:	Percentage of area leased in by size-class of holdings, all-India and Bihar, 1981-82 and 1991-92	131
Table 20:	Percentage of tenant holdings and operated area leased in for major states, 1981-82 and 1991-92	132
Table 21:	Percentage distribution of area leased in by terms of lease, all-India and Bihar, 1981-82 and 1991-92	132
Table 22:	Distribution of households in Chandkura by size categories of owned and operated land, 1981-82 and 1995-96	135
Table 23:	Percentage of area owned and operated by percentile groups of households in Chandkura, 1995-96	135
Table 24:	Number of households and mean area cultivated per household, 1981-82 and 1995-96	137
Table 25:	Percentage Distribution of Main Workers by Occupation in Major States, 1991	152
Table 26:	Percentage of Female, Male and Total Main Workers in Agricultural Occupations, Nalanda, Bihar and All-India, 1991	158
Table 27:	Distribution of households in Chandkura by caste and economic class, 1995-96	167
Table 28:	Use of Adult Family Labour (persons per acre) in Cultivation by Size of Operated Landholding in Chandkura, 1995-96	173
Table 29:	Interest Rates on Traditional Loans in Chandkura in 1995-96 by Land Owned by Borrowers	204
Table 30:	Interest Rates on Traditional Loans in Chandkura in 1995-96 by Economic Class of Borrowers	205
Table 31 :	Use of Institutional Loans for Capital Investment and Value of Capital Goods in 12 Bihar Villages, 1981-82	208
Table 32:	Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by amount of land owned	218

Table 33:	Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by caste	218
Table 34:	Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by economic class	218
Table 35:	Occupational Profiles of Some Landowning Contractors	224

**Figure**

Fig. 1:	Location of the Fieldwork Area	51
---------	--------------------------------	----

## INTRODUCTION

'In the old days, there was one big *malik* - he went but instead there were ten or twelve landowners, all trying to crush us. Then the year of the first strike, we had a chance to move forward. We got the courage to fight. Things have changed, we answer back, we talk to them as equals...We are prepared to die to get our rights.'

*Shanti Devi, agricultural labourer, describing the situation in her village in Central Bihar, 1995.*

That Bihar is India's 'most backward' State has become a cliché: those who repeat it often do so with a mixture of contempt and fascination and the phrase encompasses everything from grinding poverty to endemic corruption, the tenacity of caste divisions to the ubiquity of violence. In fact it takes many of the contradictions which are universal in dependent capitalist India, and makes them safely 'Bihari' and 'other', defining them as somehow unique to this State where they are manifested in their most extreme form.

Yet, since the early 1980s, Bihar has also become a symbol of hope and potential change for those who believe that only a revolutionary transformation which places power in the hands of the exploited and oppressed can resolve these contradictions. It was in the plains of Central Bihar that a new chapter of India's history of communist-led agrarian struggles began. These districts witnessed the rapid spread of a mass movement of mainly dalit women and men from agricultural labourer and poor peasant households, demanding land, a living wage and the right to live with dignity, basic demands which struck at the roots of social and economic power in the region. The revolutionary trend which had begun in Naxalbari in West Bengal, and was all but crushed by the early 1970s, re-emerged here in a new, more deep-rooted and more resilient form.

During the last two decades, this movement has continued to grow, adopting new strategies in response to changing conditions. At the same time, the response of the dominant landowners, and of the state, has also changed. The daily humiliations to which the exploited were subjected, the brutality with which any small attempt at assertion on their part was met, are no longer tolerated and have been abandoned by many individual landowners. A number of so-called 'armies' or Senas set up to defend the interests of

specific caste-based groups of landowners against the rural poor have also come and gone. But today, Central Bihar is witnessing heterogeneous landed classes, the political parties who represent them, and the state structures they dominate, come together behind a 'Sena' of a new kind, marked not only by the unprecedented scale and viciousness of its attacks, but by its organic links with parties of the far right, and its coherent fascist ideology.

This was the context in which I set out to investigate the political economy of agrarian change in Bihar. One of the first things which struck me was that while Bihar's agriculture is frequently characterised as semi-feudal, and agrarian conflict ascribed to its 'stagnant' and unchanging nature, the areas where struggles were most intense were also those where signs of nascent capitalism in agriculture had been identified. A process of accumulation and investment in agriculture was argued to be underway among a section of mainly intermediate caste rich and middle peasants. It was this new accumulation, and the increase in the rate of exploitation which accompanied it, which had intensified tensions between employers and labourers and acted as a catalyst for the movement.

But by the time I first visited Central Bihar in the early 1990s, there was a strong sense that this emerging 'peasant capitalism' had come to a standstill. Smaller cultivators were barely able to survive, and their share in total holdings had multiplied. Meanwhile those farmers who were still able to produce surpluses were now directing them into other channels: moneylending, hiring out of equipment, buying up inputs for resale on the black market, and for those who could afford it, larger scale corruption, crime and political careers. Old patterns seemed to have reasserted themselves.

Yet in the same period, the movement of agricultural labourers and poor peasants had continued to gather momentum. Indeed it appeared that a number of changes which had already occurred in agricultural production relations were a direct result of the movement.

If this was the case, it clearly had significant implications for the agrarian strategy of the left in countries like India where a transition to capitalism had not been completed. It also raised key questions relating to patterns of accumulation, the dynamic at the heart of capitalist development. As the widely respected Indian political economist Krishna Bharadwaj argued, 'The question...is one of the *process* of transformation, of the dissolution of feudal features and the onset of pervasive dominance of capitalist relations'.

Bharadwaj identifies 'a struggle between the forces promoting productive accumulation and those stabilising, perpetuating and reinforcing unproductive investment. The balance of forces may turn one way or the other. If the forces of productive accumulation, nurtured by a set of favourable initial conditions, generated a critical minimum pace, they could succeed in breaking through the fetters of the pre-capitalist remnants' (Bharadwaj, 1985:21).

In summary, then, this study aims to establish whether or not this 'critical minimum pace' has been generated in Central Bihar, and if not, the reasons for its failure. Further, it asks whether the left-led movement of the most exploited section of rural society is in fact proving a more effective agent of agrarian transformation.

To ask these questions is to address the very nature of power in this region, and the challenge to it posed by the most powerless. The way in which ownership of land and other assets, caste dominance, political position, and control over the state apparatuses and their resources intersect is particularly potent in Central Bihar. But the pattern is replicated in a multitude of forms across India. It is therefore hoped that the study will both contribute to an understanding of the specific experiences of the 'flaming fields' of Bihar, and have a relevance which extends beyond them.

## **CHAPTER 1: THE POLITICAL ECONOMY OF AGRARIAN CHANGE IN INDIA**

This chapter provides a brief review of the existing literature on the political economy of agrarian change in India. It begins by highlighting some of the key Marxist writings which have formed the starting point for much of this work, and goes on to examine the specific themes and discussions which have emerged in the Indian context, beginning with the influential 'Mode of Production Debate' which was initiated in the late 1960s.

The aim of this chapter is not primarily to examine the substantial body of empirical evidence which has been collected in the course of earlier studies, but to summarise those debates which have sought to clarify issues of definition, criteria and methods of identification as well as, on a political level, strategy and tactics. And in an extensive field, this review is not an exhaustive one: rather it focusses upon those themes which have a direct relevance to the present study.

### **1. The identification of agrarian classes and the development of capitalism in agriculture**

Historically, attempts to identify and characterise agrarian classes within the framework of political economy have been closely linked with the analysis of the development of capitalism in agriculture. They have also been linked to a varying degree with the formulation of political strategy.

For late nineteenth century Marxists, the agrarian question was inseparable from the wider question of achieving revolutionary change in countries which continued to have large peasantries, where pre-capitalist agrarian classes were undergoing transformation, but had not yet polarised into the two opposing classes of capitalist farmers and agricultural labourers as predicted by Marx. It was addressed in the context of the formulation of agrarian programmes by European socialist/Marxist parties: debates focussed around which sections of the peasantry could be drawn to and mobilised by these parties. An analysis of the nature of differentiation which was occurring in varying forms and at varying paces across Europe inevitably emerged as a central theme of these debates.

Thus in 'The Peasant Question in France and Germany', Engels emphasised that the only two regions where the peasantry ceased to be of importance were Britain and Prussia East of the Elbe. Yet these peasantries were in most cases highly differentiated; while noting significant regional variation, Engels suggested that there was a broad division between 'small peasants' on the one hand, and 'big and middle peasants' on the other. Small peasant families did not hire wage labour, but they were generally able to survive on the land they operated without hiring themselves out as wage labour. However in some areas, Engels implied, they were being forced to do so to supplement their income. Big and middle peasants meanwhile were characterised by their exploitation of wage labour. Engels emphasised that the small peasants, despite the precariousness of their existence, had a 'deep-rooted sense of property' and he strongly opposed what he saw as the opportunism of socialist parties who appealed to this sense, rather than 'effecting a transition of his private enterprise and private possession to cooperative ones, not forcibly but by dint of example and the proffer of social assistance for this purpose' (Byres, 1986 pp xiv-xv).

However, it was Lenin who in 'The Development of Capitalism in Russia', produced the first detailed analysis of the dynamics of the process of differentiation and class formation, in the context of an agricultural economy at a much earlier stage of capitalist development than the English countryside described by Marx in Capital. The publication of this work in response to Kautsky's 'Die Agrarfage' shifted the debate away from agrarian policy formulation and focussed explicitly upon the emergence of capitalism in agriculture.

Lenin divides the Russian peasantry into three groups according to size of cultivated landholdings. The 'top group' are 'well-to-do peasants' many of whom employ non-family labour; the 'middle group' in total 'provides more workers than it hires'; while the 'rural proletariat' cultivates little or no land, obtaining income from selling their labour-power and from leasing out the plots of land traditionally 'alloted' to them by the landowners, to the top group.

However, Lenin also focusses on the dynamics of the process which he refers to as 'disintegration of the peasantry' which is not simply the rise of 'property inequality' but the emergence of 'new types of rural inhabitants': 'a class of commodity producers in agriculture and a class of agricultural wage workers'(Lenin, 1956:174). This process involves the concentration of land, assets such as draught animals, and improved

agricultural implements in the hands of the 'well-to-do peasantry', who employ wage labour, market their produce, and whose increasing net income is 'under favourable conditions... invested in the purchase of land, farm improvements, etc.' (Lenin, 1956:177), transforming them into a 'peasant bourgeoisie'. Meanwhile the mass of producers - at least 50 per cent of all peasant households - are transformed into wage labourers, while the middle group, lacking the resources to cultivate their land effectively, is in an 'unstable' and 'transitional' position between the two (Lenin, 1956:61) and is gradually eliminated.

Lenin's central aim of demonstrating the existence of powerful capitalist trends in Russian agriculture and countering the Narodniks' idea of a 'peasant community' which could be treated as essentially homogeneous led him to emphasise the most striking examples of the disintegration of the pre-capitalist mode of production in agriculture and its replacement by a capitalist mode dominated by the peasant bourgeoisie. But he also refers to powerful factors 'retarding disintegration' and in particular to the fact that it is often still the 'village usurers and the neighbouring landowners' and not the representatives of the peasant bourgeoisie who are the 'real masters of the contemporary countryside' (Lenin 1956:188).

### *Capitalism from Above and Below*

In fact 'The Development of Capitalism in Russia' highlights two further interrelated questions which are of vital relevance to contemporary India in general and to Central Bihar in particular.

Firstly, Lenin contrasts two distinct possible 'paths' to capitalist development: 'capitalism from above' in which feudal landlords dominated the process of transition and developed into a capitalist class; and 'capitalism from below' in which, as we have seen, a capitalist class emerged from within the peasantry itself.

The former path is associated with the experience of Prussia and is characterised by the retention of many pre-capitalist elements: 'The basis of the final transition...to capitalism is the internal metamorphosis of feudalist landlord economy. The entire agrarian system of the state becomes capitalist and for long retains feudalist features' (Lenin, 1956:8 ). These features acted as a brake on the development of the productive forces. Meanwhile the mass of the peasantry were pauperised. This had implications for capitalist development



not only in agriculture but in the economy as a whole: on the one hand the development of the home market for consumer goods remained constrained by peasant impoverishment; on the other, the sluggish development of the productive forces, particularly mechanisation, implied a limited market for the products of 'Department I' industries (Byres, 1996:28-29).

'Capitalism from below' which has its roots in the process of differentiation of the peasantry itself, implies either that there is no landlord class (or only a weak one) or that, alternatively, decisive control over land and resources has been wrested from it by the peasantry. This path, designated the 'American Path' by Lenin, is characterised by 'class-for-itself' action pursued by rich peasants/capitalist farmers'; the growth of the capital/wage labour relationship, and the rapid development of the productive forces and of the home market. (Byres, 1996:30-32).

### *The Complexities of Transition*

Secondly, 'The Development of Capitalism in Russia' contains some of the earliest discussion of the complexities of agrarian transformation as it actually occurs, and identifies the mechanisms by which, while certain elements from an earlier mode may be retained, their significance changes as another mode emerges as dominant. As one would expect, this is most striking in Lenin's treatment of the emergence of landlord capitalism. He describes how the pre-capitalist 'otrabotki' system, which consists of the landlord's land being cultivated with the implements of the neighbouring peasants, payment in this case being made in 'land or grounds', 'sometimes passes imperceptibly into the capitalist system of providing the estate with agricultural workers by allotting patches of land to them', and is used to 'guarantee' landowners 'a supply of workers at the required time' (Lenin, 1956:200).

Thus while Lenin's work is more often cited for the clarity of its exposition of the process through which one set of production relations becomes obsolete and is replaced by another, it also referred to continuities and the changing significance of relationships which might remain outwardly the same during periods of transition. These are questions which are of vital relevance to contemporary Indian agriculture and whose interpretation remains unresolved: according to one observer, for example, the weakness of 'recent Marxist discussion' of tenancy has been 'in grasping that, during transition, tenancy relationships

may exhibit contradictory pulls and pushes, symptomatic of the pre-existing and emerging relationships. At the same time with the penetration of capitalism, some underlying trends can be discerned, even if the form of tenant relationship remains superficially unchanged' (Srivastava, 1989a).

However in order to understand current discussions of the development of capitalism in Indian agriculture, we must at least briefly examine the work in this area which was carried out in the 1960s and 1970s, which drew upon many of the key ideas - as well as methods - employed in 'The Development of Capitalism in Russia', and which came to constitute the 'Mode of Production Debate'.

## **2. India's Mode of Production Debate - semi-feudalism or emerging capitalism?**

A major focus of the debate was the extent to which capitalist development was occurring, whether such development represented a dominant tendency, and the criteria through which emerging capitalism could be identified (Thorner, 1982:1961). This focus reflected the transformations which had occurred in India's agricultural sector - at least in some parts of the country - since independence, and in particular the impact of the 'New Agricultural Strategy' adopted from the mid-60s onwards. The initial striking success of High Yield Varieties of wheat in the north-western states in increasing yields, and the strong associations observed between the biochemical inputs they required and the introduction of mechanisation generated a series of studies which aimed to define and locate the new breed of 'capitalist farmers', and which laid the foundations for the debate.

Ashok Rudra et al.'s report on a sample survey of big farmers in Punjab (Rudra, Majid and Talib, 1969) suggested that the following tendencies characterise capitalist farmers: a) to cultivate his land himself rather than give it out on lease; b) to use hired labour in a much greater proportion than family labour; c) to use farm machinery; d) to market an important share of his produce; and e) to organise his production so as to yield a high rate of return on his investments. Rudra et al. argued that if a category of capitalist farmers existed, there would be a strong positive correlation between all pairs of variables which represented these tendencies. Finding no such strong correlation, they concluded that no such category existed at the time. But this conclusion was quickly challenged. In her influential articles based on a 1969 survey of 66 big farmers in Orissa, Andhra, Mysore, Madras and Gujarat,

Utsa Patnaik argued that Rudra's criterion was unrealistic: it could only be satisfied 'if the process of capitalist development has been carried out to its limit so that capitalism is already the dominant mode of production'. The former landlords or rich peasants, she stressed, 'will not overnight be transformed into a readily identifiable group of pure capitalists' but will 'necessarily carry evidence of their class origins and retain some pre-capitalist attributes even while tending towards capitalist operation' (Patnaik, 1971).

However, Patnaik identified one indispensable characteristic of this tendency towards capitalism: the accumulation and reinvestment of surplus in agricultural production, leading to the generation of surplus values on an ever-expanding scale. This was manifested in the growth of outlay on both constant and variable capital with respect to a given land area, and, over time, a tendency towards a higher than average organic composition of capital, leading to higher productivity of land and labour. Patnaik emphasised that in the absence of this expanded reproduction, neither the employment of wage labour nor production for the market could be considered to be evidence of the existence of capitalism. Both commercialisation of agriculture and the pauperisation and proletarianisation of the peasantry were effects of imperialism which existed during the colonial period. In this context the choice between leasing out to tenants or operating with cheap hired labour represented for landowners 'a purely contingent, reversible decision taken on the basis of current circumstances' (Patnaik, 1971). Other commentators however have suggested that operating with wage labour may not be a 'necessary' condition for capitalist development either. For example, 'where there is difficulty in ejecting, share-cropping may change from a semi-feudal to a capitalist form of exploitation: with the landowner taking on greater direct interest in cropping patterns, etc, and providing a large part of the necessary investment - at the same time extracting a far larger share' (Byres, 1972). This has been an important focus of more recent work on Indian agriculture.

But while a number of the major contributors to the mode of production debate were concerned with the criteria through which capitalist development - or individual capitalists - could be identified, the apparent lack of evidence of any such capitalist transformation in many parts of India (especially eastern India) formed the starting point for a very different thesis: that of the perpetuation of semi-feudalism. Drawing upon a survey of 26 West Bengal villages carried out in 1970, Amit Bhaduri defined semi-feudalism as having four

main features: the prevalence of sharecropping, the perpetual indebtedness of small tenants, the concentration of two modes of exploitation - usury and leasing of land - in the hands of the same class, and the lack of access to the market for small tenants. In his study, Bhaduri found that 40-50% of cultivators were sharecroppers, (known locally as 'kishans') with little or no land of their own and little security of tenure. The kishans provided little or none of the capital used in production. (Bhaduri, 1973, 1986).

A substantial proportion of the kishan's own share of the harvest was taken away immediately after the harvest to pay off past debts with exorbitant interest. This left kishan households with less than a subsistence, forcing them to re-borrow later in the year to meet their consumption needs, and thus perpetuating a cycle of indebtedness. Bhaduri assumed here that the entire amount owed was paid off after the harvest - the reality, he suggested, is often accumulated debt.

The fact that it is the landowner who is the kishan's creditor means that 'the feudal element of tying a kishan to a particular landowner operates indirectly' since the kishan cannot move without settling the debt, and as a 'loyal' tenant he has a credit-worthiness which he may not be ascribed by another landlord. The extraordinarily high rate of interest faced by the kishan reflects the fact that having no assets he has no access to the modern capital market. In addition, Bhaduri suggested, the kishans do not have access to the commodity market: forced to borrow at a time when current market prices are high, and pay back when they are lowest, they are unable to take advantage of price fluctuations and are in fact victims of them. Other writers have observed that even when the poor peasant sells directly to the market, a similar phenomenon occurs. The poor peasant is forced to market a 'distress surplus' immediately after the harvest to meet non-foodgrain consumption needs - the same commodity may well be bought back later at higher prices (see Narain, 1988, for a discussion of the 'distress surplus').

On the basis of his analysis of the 'combination of modes of exploitation' by the 'semi-feudal' landowner, Bhaduri concludes that 'technological improvements which raise the productivity level of the kishan become undesirable to the landowner to the extent that they reduce his requirement for consumption loans. For it weakens the system of semi-feudalism, where economic and political power of the landowner is largely based on his being able to keep the kishan constantly indebted to him. Further...the semi-feudal

landowner...will be discouraged from introducing any technological improvement so long as his gain from increased productivity...falls short of his loss of income from usury due to a reduction (or complete elimination) of the consumption loans required by the kishan' (Bhaduri, 1973:135).

Nirmal Chandra endorsed the basic features of semi-feudalism proposed by Bhaduri, on the basis of another study of West Bengal. However, he argued that 'technological improvements have taken place on share-tenanted land in different parts of West Bengal with working capital often provided by the landowner. If one allows for a variable share-cropping ratio, then semi-feudal relations of production can persist even after the new high-yielding varieties of crops have been introduced. By lowering the tenant's share, the landowner can keep him as poor as he always was'(Chandra, 1974). Massive underemployment in the countryside underpins the 'stability of semi-feudalism' by ensuring that the real income of a share tenant can be kept as low as that of an agricultural labourer, and that the landlord can 'arbitrarily alter the share-ratio in their own favour in case new production possibilities occur' (Chandra, 1974). However, as Bharadwaj points out, there may well be a 'limit on exploitation due to convention, tradition or economic factors'; in such circumstances, interlocked relationships can 'substantially increase the exploitative power of the dominant classes' (Bharadwaj, 1974b:4).

Thus once again the question arises of the real dynamic of production relations underlying the formal structure. While a 'semi-feudal' form - sharecropping - is being maintained, it is not clear whether Chandra's landowners are investing their surplus primarily in 'technological improvements' (which would surely imply some form of capitalist development) or whether the usury facilitated by keeping the peasant 'as poor as he always was' remains a more significant channel of investment. The key to this question thus lies in the nature of accumulation which is taking place, and the presence or absence, as in Patnaik's formulation, of a process of expanded reproduction in agriculture (Patnaik, 1971).

Krishna Bharadwaj has emphasised the need for a less static approach to the 'mode of production', highlighting the centrality of the accumulation process to an understanding of agrarian transition:

'The question at issue is not whether there exist at any moment certain pre-capitalist features....The question, rather, is one of the *process* of transformation, of the dissolution of feudal features and the onset of pervasive dominance of capitalist relations. I have briefly indicated the forces that work towards retarding and muting such a dynamic outcome. They can be seen, in summary, as a struggle between the forces promoting productive accumulation and those stabilising, perpetuating and reinforcing unproductive investment. The balance of forces may turn one way or the other. If the forces of productive accumulation, nurtured by a set of favourable initial conditions, generate a critical minimum pace, they could succeed in breaking through the fetters of the pre-capitalist remnants' (Bharadwaj, 1985:21).

It is the likely outcome of precisely this struggle, in one specific region of India, which the present study aims to assess.

### *The Inverse Relationship*

Overlapping with the 'Mode of Production Debate' both chronologically and in terms of its concerns, was the discussion which took place among Indian economists about the so-called 'Inverse Relationship': that between farm size and value of output per acre.

This debate was initiated in the immediately pre- 'Green Revolution' period by Amartya Sen (1962), who suggested that 'by and large', productivity per acre decreases as farm size increases. The most significant reason offered for this was the differential application of labour, which was applied more intensively on small farms using mainly family labour than on larger farms using mainly wage labour. Sen argued that a 'dualism' existed between the two types of labour - family labour could not be imputed 'a wage equal to the market one', since family workers would continue to apply labour beyond the point where the marginal product of labour was equal to the wage rate.

Rudra (1968a and b) challenged the empirical basis of the 'inverse relationship' hypothesis, arguing that disaggregated data showed little evidence of the relationship's existence. However, as has been pointed out, Rudra used data referring to output per 'gross' acre rather than per 'net' acre. This data does not take account of the intensity of cropping, which is 'one of the main avenues of greater use of labour for farms with cheaper labour

cost' (Sen, 1975:149). Sen also argued, more contentiously, that Rudra's data was flawed because it compared farms within villages, whereas 'labour market dualism' was more marked across villages because small cultivators were 'typically' willing to accept wage employment within their own village but not outside (op cit.:150).

Sen emphasised that he was not advocating the promotion of small farms: the factor which made a crucial difference to productivity was not size itself but the system of farming, 'whether it is wage based or family based'. Therefore, he argued, large-scale co-operative farming using non-wage employment 'in an integrated communal set-up' would also have a relative advantage over capitalist farming'(op cit.:153).

However, Sen's analysis did not explore the particular conditions which compelled small cultivators to apply labour so intensively. Bharadwaj (1974b) argues that the concept of the marginal product of labour is not a useful one when applied to agricultural production, where the impact of labour applied by a given worker at a given time is always partially determined by both labour applied in other periods, and labour applied by other workers. In any case, Marxist economists pointed out, 'differential factor prices facing different farm sizes are not the only determinants of factor-use intensities. More important and fundamental are the nexus of property rights and tenurial conditions that shape market characteristics, resource endowments, and the nature and extent of market participation by different size-holdings'(Dyer, 1991: 60).

Decisions to apply labour more intensively were thus not a matter of 'choice' or 'preference' for small cultivators, it was suggested. A higher value of output per acre on small and marginal farms reflected a desperate attempt to survive by poor peasant households, and far from indicating the 'viability' of their holdings, masked 'semi-starvation' for these households (Patnaik, 1979). These households were compelled to market a part of their output in order to meet vital consumption needs and service debts, even though this meant buying back later at unfavourable prices. This 'compulsive involvement' in produce and credit markets also led to small and marginal cultivators planting a higher proportion of high value commercial crops, which further increased the value of output per acre on their holdings relative to that on larger holdings (Bharadwaj, 1974b).

But while the initial discussion concerning the inverse relationship assumed more or less uniform technology across size-groups, the advent and consolidation of the 'Green Revolution' inevitably focussed attention on technological differentiation. As we will see, the new technology was subject to powerful economies of scale (Byres, 1972, 1981). The advantages enjoyed by larger cultivators were reflected in several studies which found that the inverse relationship had 'either become much weaker in the later period or ...disappeared altogether'(Roy, 1981: 214).

In theory, the disappearance of the inverse relation can be seen as resulting not only from technological change itself but from changes in the relations of production associated with the development of capitalism. Thus as 'share-tenancy and pre-capitalist peasant proprietorship' decline, 'the basic causes of the inverse relation disappear' (op cit.: 218). However, as has been suggested, the transformation of these relationships has often not been a thoroughgoing one and certain aspects of pre-capitalist relationships have been maintained. The present study does not offer any evidence specifically concerning the operation of the inverse relationship in the fieldwork area. But the question of the continuing existence of large numbers of small and marginal holdings, the 'compulsive involvement' in various markets of poor peasant households - and in particular the significance of the adoption of new technology by these households, is a key one for the study, and one for which the debate on the inverse relationship is clearly of considerable relevance.

### **3. Identifying classes in Indian agriculture**

The focus of this chapter is upon the methods of analysis of the relations and forces of production which have been proposed within the framework of political economy. In practice however, these have usually been presented in the context of particular studies which attempted to apply these methods. The conclusions of these studies inevitably had implications for political strategy. Academic developments in the field of Indian political economy have always been organically linked to developments in left political parties, and in the early 1970s, this link became particularly significant once again as different sections of the left participated in or responded to the emergence of the Naxalite movement. The studies suggested specific and very different answers to questions such as whether left-led agrarian movements must be primarily anti-feudal in focus, creating conditions for the



development of capitalism before socialism can be considered; whether certain sections of the exploiting groups within the agricultural sector can be considered 'progressive'; and which classes can be potential allies for such movements. Underlying these questions was that of the potential for different paths to capitalist development, spearheaded by different pre-capitalist rural classes (in particular the landlord capitalism/ 'capitalism from above' and peasant capitalism/ 'capitalism from below' compared and contrasted by Lenin) although it was not until somewhat later that this question was addressed explicitly in the Indian context.

As a result the 1970s saw an increasing number of attempts at a more detailed classification of peasant classes within agriculture, reflecting the fact that while on the one hand substantial changes were occurring even in those regions whose agriculture had most convincingly been characterised as stagnant and 'semi-feudal', on the other hand polarisation into two distinct and opposing classes (and the elimination of any intermediate groups) did not seem to be taking place very rapidly anywhere in India.

Inevitably, these attempts drew most directly upon those earlier Marxist characterisations of peasant classes which dealt explicitly with consciousness, mobilisation, and the building of alliances. One of these is Lenin's 'Preliminary Draft Theses on the Agrarian Question', written in 1920 in a context where a proletarian party had seized state power without substantial transformation to socialism yet having been effected in the countryside. Whereas 'The Development of Capitalism in Russia' emphasised the distinction between the rural proletariat and other 'intermediate' groups, the Preliminary Draft Theses' focus on strategy and potential consciousness led Lenin to bring together three groups who jointly constitute the 'working and exploited people of the countryside'.

These are firstly, the agricultural proletariat, who 'obtain their livelihood by working for hire at capitalist agricultural enterprises'; secondly, the 'semi-proletarians', who gain a subsistence partly by selling their labour power and partly by working their own or leased-in land; and thirdly, the 'small peasantry', who own or lease-in small plots which satisfy the needs of the family, and do not hire outside labour. Of these, the support of the third group is considered the least dependable - it will 'inevitably vacillate towards unrestricted freedom of trade and the free enjoyment of the rights of private property' -

but can be secured 'if the victorious proletariat deals very resolutely with the big landowners and the big peasants' (Lenin 1965:371-374).

Meanwhile the 'middle peasants', who were earlier analysed as a more or less self-sufficient group which would ultimately disappear as capitalism advanced are now described as producing a surplus 'under capitalism' as well as frequently hiring in labour. This group cannot be won over 'in the immediate future or in the initial period of the dictatorship of the proletariat' but it can be 'neutralised' through a combination of measures such as the abolition of rent with a 'ruthless struggle against the bourgeoisie' (Lenin 1965: 374-376).

Finally, there are the 'big peasants' the 'biggest of the bourgeois strata who are open and determined enemies of the revolutionary proletariat' - they as a rule employ 'several hired labourers' but also perform manual labour on their own farms (Lenin 1965:376).

But whereas Lenin's categorisation referred to a situation where capitalism was advancing rapidly (even though it was not yet fully established), and 'capitalist agricultural enterprises' were significant, Indian writers were confronted with an extremely unevenly developed agrarian economy, distorted by the effects of colonialism and by the terms of its continuing integration into a global system of surplus extraction, an economy in many regions of which pre-capitalist rent and usury remained important forms of accumulation. (For a discussion of how production relations in India were shaped by colonialism, see Bagchi, 1982). These were factors which had been incorporated into Mao's analysis of classes in Chinese agriculture, which emerged out of an anti-imperialist revolutionary struggle in which the role of different sections of the peasantry was perceived to be of vital importance.

While applying to the Chinese situation much of Lenin's analysis, Mao incorporated an assessment of the landlord class, which 'lives by exploiting peasants' and whose 'principal form of exploitation is land rent' (this class also includes those for whom 'exploitation by usury' is the main source of income), and also conveyed the heterogeneity within the 'rich peasant' group who may lease out land or lend money as well as exploiting hired labour (Mao Tse-Tung, 1975).

While the Chinese experience has a particular relevance for Marxist analyses of India, Indian agriculture inevitably has unique features stemming from the specificity of the Indian social formation and the particular transformations occurring within it. For example, despite a number of changes, caste continues to be a significant factor in determining whether members of a household will participate in manual labour, so that 'in some cases even very small and impoverished landholders will not take to the plough because they belong to upper castes' (Thorner, 1982:1995). Thus Lenin and Mao's stipulation that 'rich peasants' must participate in manual labour may not be appropriate in the Indian context. As such cases demonstrate, caste and class are no longer synonymous. However, economic contradictions are still frequently expressed and understood through caste identities. Further, the ideology of caste supremacy plays an important role in maintaining the power of the dominant classes in many regions, while in others, newly emerging classes have explicitly challenged this ideology on the basis of an assertion of their own caste identities. The question of the complex interconnections between caste and class, as they can be observed in rural Central Bihar, is explored further in this study.

Many of the Indian studies of rural class structure carried out in the 1960s and 1970s, based as they were in particular regions (often only a few districts) identified a range of farm size which corresponded to each of the agrarian classes, or even used farm size as a proxy for economic class as defined by a household's position within the relations of production. However, some writers did attempt to evolve specific criteria for assessing economic class in Indian conditions.

One of the most systematic of these attempts was Patnaik's 'labour exploitation criterion' (Patnaik, 1976, 1987), which looks at the extent of use of outside labour, or conversely the extent of labour working for others, (whether as wage labourers or as tenants) relative to self-employment. This method of assessment was contrasted with that based on farm size, which, as had been pointed out earlier, fails to take account of either differences in land resource endowment (irrigation levels, cropping patterns, size of the family), or the differential degrees of present investment of capital on similar physical areas. This is a vital indicator of economic class defined in terms of the relations of production: 'agricultural production of peasant farming households depends not only on the investment of capital per unit of area and the associated level of technology. The potential for investment of capital in turn is a function of the extent of surplus generated per unit of area. Whether

surplus is retained by the household for potential investment, or parted with, depends entirely on the specific position within the relations of production, namely the class position of the household which is a function of the per capita real resource endowment, or the property structure' (Patnaik, 1987:303-304).

As Patnaik herself later pointed out, 'the criteria discussed in the Marxist literature are in fact multiple, though associated: namely (1) the resource endowment, that is, possession of means of production; (2) the nature of labour use, that is, whether exploiting, whether self-employed, or whether exploited; and (3) the production of a retained surplus above subsistence needs as compared to breaking even or a deficit situation which entails borrowing'(op cit.:305). However on the basis that the extent of exploitation/being exploited relative to self-employment is 'the single most accurate index of class status within the peasantry which subsumes other criteria'(op cit.:483), the second of the three criteria was chosen and formally expressed in the 'Labour exploitation ratio'.

The 'Labour-exploitation ratio' was defined as :

$$E = (H_i - H_o)/F \text{ where}$$

$H_i$  = Labour-days hired in

$H_o$  = Family labour-days hired out

$F$  = Family labour-days in self-employment

By calculating the surplus labour-days represented by rent paid for leased land and interest paid on loans, as well as hired labour, this formula was extended to include exploitation through leasing out and moneylending <sup>1</sup>. Following Lenin and Mao, Patnaik defines both rich and middle peasants as net employers of others' labour, 'the former to a substantial extent and the latter to a minor extent' (op cit.: 59). Specifically, 'if labour days employed

---

<sup>1</sup> The labour-exploitation criterion then becomes for a given household:

$E$  = Net surplus labour appropriated through hiring, leasing, and loan interest/surplus labour in self-employment

$$= s(H_i - H_o) + s(L_o - L_i) + (m_1M_1 - m_2M_b)/F.s$$

$$= (H_i - H_o) + (L_o - L_i) + [(m_1M_1 - m_2M_b)1/s]/F$$

Where  $L_o$  = Total labour-days on land leased out

$L_i$  = Total labour-days on land leased in

$M_1$  = Labour-days of household to which money is lent by A

$M_b$  = Labour days of household A which borrows money

$m_1$  = Interest received by A as proportion of output of household to which money is lent

$m_2$  = Interest paid by A as proportion of its output (Patnaik, 1987: 55-59).

exceed or are at least as high as labour-days in self-employment, the household is rich peasant. This is the same as saying that, if at least half the total labour-days worked in a holding are from outside labour, then it is rich peasant: if the percentage is less than half, the household is middle peasant' (op cit.:59).

By contrast, Athreya, Djurfeldt and Lindberg (1990) have suggested a 'surplus criterion' for the identification of agrarian classes, in which the extent to which a household produces a 'surplus over the needs of family and farm reproduction' (op cit.: 182) - or falls short of meeting these needs - is central. They thus argue that middle peasants should be distinguished from rich peasants on the basis of the source of the surplus they produce: that of the rich peasant 'primarily derives from the exploitation of hired labour' whereas the middle peasant may also be hiring in labour but can only produce a surplus through continuing to exploit family labour (op cit.:197). However, while this approach may generate data with important implications for patterns of accumulation, it appears to partially shift the focus away from the location of different classes within the relations of production - and therefore in relation to each other - which are central in Patnaik's work. These relationships are of vital importance if one is seeking to understand (as were Lenin and Mao) the process of class formation and, in particular, potential class consciousness.

Bharadwaj (1974a, 1974b, 1979, 1985) has analysed the differential nature of exchange and market involvement for different classes of rural households, providing a cogent critique of neo-classical assumptions about the functioning of markets. She identifies 'three types of market involvement that may emerge, depending upon the economic position of the participant and his bargaining strength'. Firstly there is that of the 'big landlord in the land (lease) market or the moneylender in the credit market' who can 'exploit the market from a position of vantage, and more importantly, shape the market relations through contracts which interlock markets.' Secondly, there is the position of the landless agricultural labourers, small owners, or tenants who are compulsorily involved in market operations through hiring out labour and hiring in land. 'Not having enough circulating capital to produce even their subsistence they have to rely on credit...this element of compulsive involvement of the poorest farmers is reflected in their cropping pattern, their land and labour utilisation as well as the higher degree of monetisation of inputs and outputs under conditions of distress'. The third, 'middle farmer', group 'can make

provision for more or less adequate circulating capital (and) possess bullocks or implements of their own. A part of them (whom we call 'small' farmers) still want to protect themselves from the market, playing a defensive role. Another part may be...playing the market game with some advantage'(Bharadwaj, 1974a: A12).

#### **4. The 'New Technology' and Class Formation**

By the early 1980s, changes in patterns of agricultural production, at least in certain regions, were marked and widespread enough to allow observers to go beyond identifying the characteristics of individual farmers and to analyse the broad contours of these changes. In particular, it was now possible to assess the impact of the 'new technology' which had first been introduced in the mid-1960s. A number of studies had established that, in practice, biochemical innovations (which had initially been portrayed as 'scale-neutral') were almost inseparable from mechanical ones (which clearly were not). In particular the increased advantages of tubewell irrigation when the new seeds and fertilisers were used, and the more 'time-bound' nature of agricultural operations, which intensified seasonal peaks of demand for labour, thus increasing the labourers' bargaining power, were two features which set up strong pressures towards mechanisation (for a discussion of this evidence and its sources, see Byres, 1981).

The extent and impact of mechanisation - and of tubewell irrigation in particular - in the fieldwork area is an important theme of the present study. The class nature of these technological developments and their implications for relationships between different categories of cultivators as well as between employers and labourers are key questions for exploring the overall process of agrarian change which has occurred in the area.

Mechanisation is generally perceived as inextricably linked to the processes of differentiation, land concentration and proletarianisation. A number of studies in this period suggested that while the land market remained largely a tenancy market, land concentration was occurring through leasing in by large farmers. This allowed them to circumvent land ceiling laws which applied only to owned land (Jodha, 1981; Omvedt, 1981). This factor also explained the fact that despite an apparent decline in landlessness between 1953-54 and 1971-72 (Omvedt, 1981) and more specifically between 1961 and

1971 (Bardhan, 1977), there was a large rise in the proportion of rural households not cultivating any land. Increasing numbers of small owners were compelled to lease out their land because their access to additional leased-in land, which would make their total landholding viable, was reduced by growing competition; because the economies of scale of the 'new technology' had intensified their resource disadvantages making self-cultivation unviable; or because of reduced access to wage labour as demand increased.

While these trends appeared to point to a clear process of differentiation of the peasantry, the extent to which a rural proletariat, 'free' of any property of its own, and 'free' to sell its labour power, was emerging, remained a source of debate.

### *Proletarianisation and 'Unfreedom'*

Were 'the 65 per cent of rural families who together operate 9 per cent or less of the total assets...essentially a proletarianised, or proletarianising, section' (Omvedt, 1981: A151)? Was the persistence of tiny landholdings among the rural exploited groups a permanent feature of capitalist wage labour in 'third world' countries (op cit.: A153-154)? Or did it indicate 'partial proletarianisation', a process whose 'most significant contribution has been to throw into increasing wage employment large numbers of poor peasants who continue to own some land, and to bring some sharecroppers near to the state of pure wage labour' (Byres, 1981:432)?

Equally significantly, how were the terms under which wage labour was employed in agriculture changing? Was technological change associated with the emergence of a 'free' labour force? Or were forms of control over labour implying 'unfreedom'(Brass, 1995) proving to be compatible with, or even necessary to, capitalist development in the conditions under which it was occurring in Indian agriculture?

As early as 1976, a study of Haryana revealed that employers were using 'new forms of debt' to tie labourers in 'model Green Revolution' districts of the State (Bhalla, 1976). Formal contracts for labourers lasting unprecedentedly long periods of up to five years, and various forms of interlocking, including three-way credit arrangements between labourer, shopkeeper and employer (which compelled the labourer to purchase

consumption goods only from one shop) were among what Bhalla describes as 'threads in the redesigned fabric of conservative rural power'(op cit.:A-27). Subsequently further evidence has emerged suggesting that, firstly, forms of labour previously regarded as 'pre-capitalist' have persisted or been reinforced in a wide variety of regions witnessing technological change and expanded reproduction in agriculture; and secondly, that employers in these regions were developing new strategies of control over labour (Rudra, 1987, Srivastava, 1989a, Brass, 1990, Breman 1993). At the same time there has been a widely-observed shift away from permanent or long-term 'tying' of labour at the all-India level since the mid-1970s(Sen, 1997)

In the context of Haryana a detailed debate has taken place more recently on the significance of 'attachment' of labour through debt. Brass argues that attachment acts to limit the commodification of labour power (proletarianisation) and the growth of proletarian consciousness by preventing the labourer from re-entering the labour market (Brass, 1990). Jodhka(1994, 1996) suggests that the attached labour system is on the decline in Haryana due to the erosion of the power of the dominant class, new employment opportunities outside the village for local labour, and greater assertiveness among labourers themselves. But according to Brass, this is 'precisely the situation in which resort to the debt mechanism as a method of labour discipline/control is intensified': attachment is thus a response by capital to struggles waged by labourers, amounting to 'deproletarianisation' (Brass,1995). Brass also extends the definition of 'attached' (and, according to his definition, therefore 'unfree') labour beyond the traditional one of debt bonded permanent labourers, and includes the increasingly prevalent practice of 'seasonal' debt bondage - often of migrant labour - during months of peak demand for labour. His observations therefore do not contradict the wider trend towards a decline in permanent attached labour.

The question of the strategies adopted by employers in response to increased assertiveness by agricultural labourers is one which is particularly relevant to Bihar, where organising by labourers has been especially marked in areas which have undergone technological change in agriculture, and will be examined further in this study. However caution should be exercised in applying the concept of 'deproletarianisation' which implies that the process of 'proletarianisation' has already taken place.



On a more theoretical level, further discussion has centred around the notion of 'unfreedom' in the context of agrarian class relations. Singh (1995) argues that if the arrangement is entered into 'voluntarily', 'over-exploitation of labour through debt-binding does not amount to a change in the character of fundamental relations of production': economic compulsion is consistent with capitalism, unlike the juridical, social or political 'unfreedom' of pre-capitalist social formations. Similarly, Mohan Rao (1999) argues that 'exit' from such an arrangement is also 'voluntary' as long as the labourer can end it by paying off the debt (i.e. there is no non-economic coercion involved); 'unfreedom' therefore, only exists where debt is inherited and thus not voluntarily acquired by the debtor.

However, this clear-cut division between capitalist 'economic compulsion' on the one hand and pre-capitalist 'politico-juridical coercion' (Mohan Rao, 1999) proves difficult to sustain in the context of the reality of agrarian economies in transition. For example, as in Bhaduri's model (Bhaduri, 1973), interest on a debt may be set at deliberately unrealisable rates, or it may be calculated by the lender in a way which is fraudulent or not comprehensible to the labourer, as was commonplace in Bihar until not long ago. More recently, acute violence and the threat of violence by dominant landowners has become endemic in parts of Bihar and other States which have witnessed at least some elements of a transition to capitalism. Today, this violence does not have the explicit social or juridical sanction which punitive violence enjoyed in semi-feudal society (see for example Guha, 1989): it is backed rather by economic power. But, as we will see, it is an institutionalised reality which impinges upon any interaction between the economically powerful and the economically weak making it anything but 'voluntary'. On a more general level, the idea of 'free' participation in labour, credit and other markets in the context of the acute inequality and poverty which continues to characterise most of rural India has been repeatedly challenged using concepts such as 'compulsive involvement' (Bharadwaj, 1979) and 'forced commerce' (Bhaduri, 1983, 1986).

#### *'Class - for -itself' action by rich peasants*

While the debate around proletarianisation and 'unfreedom' had significant implications for the question of 'class-for-itself' action among the exploited, the increasing political assertion by forces articulating the interests of rich peasants and emergent capitalist farmers also generated considerable analysis and debate among Marxists. The late 1970s

and 1980s saw the growing militancy of 'kisan' (peasant) or 'farmers' movements which claimed to represent the entire peasantry in a contradiction between town and countryside, 'urban, industrial India and rural Bharat' (Byres, 1988). In terms of the significance of these movements for the process of agrarian transition, two key points emerged. Firstly, in the regions where they were strong, they were effective in ensuring the implementation of policies which could facilitate the completion of the process of transformation of rich peasants into capitalist farmers. Secondly, while the ideology of these movements was based on the myth of an idealised homogeneous 'peasantry', they actually represented the interests of rich and to a lesser extent middle peasants at the expense of all other sections of the rural population (Byres, 1988, Patnaik and Hasan, 1995).

But these movements also had wider implications for the Indian economy. While they demanded improvements in the rural infrastructure, checking price rises on agricultural inputs and effective supply of these inputs, their key demand was for 'remunerative prices' for their output (Gill and Singhal, 1984; Patnaik and Hasan, 1995). In the discourse of these movements, agricultural prices were portrayed as a medium through which the surplus produced by the 'peasantry' was being siphoned off to the industrial sector. But changes in the terms of trade between the two sectors suggested that agricultural price policies in India in the 1960s, 70s and 80s actually tended to favour agriculture<sup>2</sup>. Thus relations between the agricultural and industrial sectors, and by implication the whole process of capitalist development in the economy as a whole, came into focus for observers of agrarian change.

In the debate on the intersectoral terms of trade between industry and agriculture which had taken place in the Soviet Union in the 1920s, Preobrazhensky had argued that manipulation of the intersectoral terms of trade in favour of industry has a dual role in the process of industrialisation. On the one hand, with agricultural prices kept relatively low, the availability of cheap food and raw material allows the rate of profit to rise. On the other hand it is a means of mobilising financial resources, since the marginal rate of surplus

---

<sup>2</sup> According to Mitra (1977), the 'Green Revolution' period beginning in 1965-66 saw a shift in the Net Barter Terms of Trade (price index of exports/price index of imports) between industrial and agricultural sectors of nearly 50 per cent in favour of agriculture. And while a reversal of this trend seems to have begun in the mid-1970s, it was clearly not of the same magnitude, with a shift against agriculture of only 17 per cent (Thamarajakshi, 1985). It also appears that this shift may have peaked in 1984-85.

is generally higher in industry than in agriculture. However, there may be a danger of a fall in the marketed surplus if prices for agricultural output are set too low (Mitra, 1977).

It was suggested by several writers that the failure of the Indian state to mobilise resources from the agricultural sector (either through taxation, or the manipulation of the inter-sectoral terms of trade) in the face of sustained resistance by dominant landowning groups had led to a 'crisis of accumulation' and forced the state to turn to external Aid and the forcible reduction of the living standards of the urban proletariat as alternative sources of resource mobilisation (see for example Byres, 1982; Patnaik, 1984).

The class implications of demands for higher agricultural prices have also been analysed (see for example Mitra, 1977, Krishnaji, 1985). As has been noted, poor peasants have no choice but to sell their produce immediately after the harvest, often to rich peasants and landlords from whom they may be forced to repurchase later at higher prices. And a large part of their income may be used to pay off loans and interest in kind, whose valuation 'may have nothing to do with the prevailing market price' (Vittal, 1986). Furthermore, since along with agricultural labourers poor peasants depend on the market for a large proportion of their consumption needs, agricultural price rises are likely to actually reduce their real income. Meanwhile every rise in prices strengthens the economic position of the surplus producing peasants and thus enhances their ability to hold stocks, enabling them to bid for even higher prices in the next season.

However, the strength of the 'farmers' movements' as a political force, particularly in Western and North-Western India, clearly necessitated a practical response from the left, and this resulted in further debate around their significance, this time centred upon political strategy. For example, in a series of articles published between September 1987 and September 1988, Balagopal (1987a, 1987b, 1988) argued that the farmers' movements essentially represented the interests of the 'provincial propertied classes' at the expense of the rural poor, while Omvedt and Gala asserted that this view 'seems to disdain the involvement of the masses' in such movements (Omvedt and Gala, 1987), which they regarded as primarily representing the interests of petty commodity producers, whose dependence on the market for sales and inputs renders them subject to 'primitive accumulation' by the state and by the multinational companies which produce agricultural inputs such as fertilisers (Omvedt and Gala, 1988). Dev Nathan further argued that the left

should support the demand for 'remunerative' prices for output, as these would actually create more favourable conditions for the struggles of agricultural labourers for higher wages (DN, 1988). The question of different 'paths' of capitalist development once again came to the fore, with a struggle for dominance between 'landlord' capitalism (capitalism from above) and 'peasant' capitalism (capitalism from below) being postulated and the latter being regarded as progressive. However, as a rationale for support for movements demanding higher agricultural prices, this was clearly problematic: in those regions where such movements emerged, peasant-based capitalist development was fairly advanced and 'non-landlord' classes had already come to dominate the countryside; they found themselves in conflict not with a 'semi-feudal' landlord class, but, as we have seen, with the urban bourgeoisie on the one hand, and with the rural exploited classes on the other. In other regions which appeared to be witnessing much weaker trends towards peasant capitalism, this type of 'class-for itself' action by rich peasants, aimed at increasing the profitability of agricultural production, was marked by its absence, with 'unproductive' investment remaining significant or even rising. It is the nature of class formation and class action in one such region in Bihar which is explored in the present study.

## **5. Gender, Production and Agrarian Change**

The late 1980s and 1990s have seen patriarchy and gender relations being more widely recognised as an important aspect of the political economy of agrarian change in India. The assumption that categories such as 'the household' and 'family labour' represent homogeneous units have been challenged and the significance of unequal relationships within rural households emphasised, although many writers have continued to use these terms uncritically. Once again, academic work has been influenced by developments in the political arena, with the emergence of the women's movement in India in the early 1980s.

In fact, the relationship between Marxism and feminism has historically been a complex though productive one. Socialist feminists have sought to address the question of women's oppression within a political economy framework, using the basic Marxist concept of human nature as something created historically through the dialectical interrelation between human biology, human society and physical environment, mediated by human labour or praxis. Central to a socialist feminist approach is the recognition of 'procreation' or reproduction as economic activity (Jaggar, 1988). Marx and Engels had stated

explicitly that there are two aspects to the 'production of life - both of one's own in labour and of fresh life in procreation' (op cit.:134), and had warned against an ahistorical approach to procreation. But in their later writing, socialist feminists argue, they began to make assumptions about the 'natural' determination of reproductive activity which failed to apply their own concept of 'human nature' to the question of gender (op cit.:129).

In 'The Origin of the Family, Private Property and the State', Engels argued that 'the first class opposition that appears in history coincides with the development of the antagonism between man and woman in monogamous marriage, and the first class oppression coincides with that of the female sex by the male'(Engels, 1972:129). He traced women's oppression to the production of surplus and the accumulation of wealth: with the development of cultivation and the domestication of animals, human societies began to produce a surplus. Men's control over this surplus and the accumulation of wealth which was to be passed on to identifiable heirs led to the establishment of monogamous marriage, patrilineal inheritance, and private property, all of which necessitated and reinforced women's subjugation, and the appropriation of their reproductive labour. However, 'an opposition is often evident in Engels' analysis between the production of things, which depends on the organisation of labour, and the production of people, which depends on the organization of the family....By equating human labour with the production of objects, and more narrowly, of objects with exchange value, women's bodies and women's labour in maintaining bodily existence are assigned to the domain of nature' (Kabeer, 1994: 45-46).

A second and related issue which has been highlighted by socialist feminists and is of particular relevance to the political economy of agrarian change is that of the opposition between the 'public' and 'private' spheres. The development of capitalism as it was observed by Marx in 'Capital' involved a shift from petty commodity production, in which production took place in the home, to generalised commodity production, in which 'the formal exchange of capital and labour power becomes general'(Marx,1976:951) and takes place in the 'public' sphere of the marketplace, while the reproduction of human life and labour continues to take place within the household, which is now designated the 'private' sphere. However, many Marxist writers in their neglect of women's labour in the home appear to have implicitly accepted this division between the 'public' and the 'private'

sphere rather than recognising it as an ideological construction specific to the capitalist mode of production.

This is clearly particularly problematic when dealing with agrarian societies in transition from pre-capitalist to capitalist modes. Here the peasant household remains the primary unit of production, and women's labour, not only in the fields but also within the confines of the home, is vital to the direct production process as well as to reproduction. In fact, the extent to which, in the dominant ideology of a given agrarian society, the home is being redefined as a 'private' sphere distinct from production, and women in surplus-producing households are being confined to this sphere, is often an important marker of the development of capitalist relations of production in agriculture. The class (and caste) specific social practices surrounding marriage - for example those relating to dowry, child-marriage and widow remarriage - also reflect the value assigned to the (productive and reproductive) labour performed by women of different classes, and is thus linked to the prevailing relations of production and patterns of accumulation.

Conversely, some writers in attempting to redress this neglect by focussing upon women's experiences have also fallen into the trap of accepting the 'public'/ 'private' dichotomy. One example of this in the context of an agrarian society in India is the Stree Shakti Sanghatana group's influential work on women in the Communist-led Telengana peasant uprising of 1948-51 'We Were Making History'. They highlight the distinction between 'the private world of the family, domestic labour and reproduction, and the public world of production, politics and war'(Stree Shakti Sanghatana, 1989:259), and consciously emphasise the former. Before they joined the movement, it is argued, women were relegated to the 'private' sphere, and once in the movement it was the 'hidden' struggles of this sphere which 'absorbed women's efforts and their attention'(op cit.: 30).

This approach not only appears to be inadequate to comprehend the complexities of a struggle for social and political change occurring in an agrarian society in transition, but, as the authors themselves partially acknowledge, the rigid distinction between 'public' and 'private' spheres effectively excludes the experience of women from poor peasant and agricultural labourer households. In Telengana (as in contemporary rural Bihar) these women were not confined to their homes: they had no choice but to work in the landlords'

fields and houses. Relations of exploitation and oppression outside the family were as central to their lives as those inside it.

The mechanisms through which unequal gender relations within the household actually facilitate the intensification of the exploitation of women's wage labour in agriculture has been a focus of more recent writing, which has analysed how women's experiences of the diverse processes of agrarian change in India have differed from those of men in the same or similar households (for example, Agarwal, 1994; Kapadia, 1996). Studies have looked at 'women labourers' increasing responsibility for household income, the increase in female headed households, the ways in which caste norms prohibited some women's entry into better-paid 'outside' work, the growing work participation rate of labouring women, women's greater contribution to the household, and gender differentiated participation in strikes and resistance' (Kapadia and Lerche, 1999:5).

Considerable evidence has been presented that the period between 1961 and 1991 saw the 'feminisation' of agriculture in general and agricultural wage labour in particular at the all-India level (Bennett, 1992; Chadha, 1997). This is discussed in more detail elsewhere in this study. Several writers working within a framework which appears to broadly conform to the 'socialist feminist' one we have outlined have examined this phenomenon in regionally specific contexts (Kapadia, 1992, 1996; Chowdhry, 1993; da Corta and Venkateshwarlu, 1999). They suggest that given a growing gender-based divergence of experience, women labourers should actually be considered as belonging to a 'different class' from male members of the households they belong to, who do not participate in, or have withdrawn from, agricultural wage labour. However in the context of the debates indicated above, it is worth noting that this approach unwittingly negates the importance of gender as a theoretical tool, implying that the phenomenon of 'feminisation' cannot be understood in terms of the ways in which the particular form taken by the capital-labour relationship is shaped by unequal gender relations.

This study attempts to maintain a consistent critical awareness of gender-based contradictions in all the questions it addresses. In particular, it discusses the gender-specific implications of changes in the relations of production, organisation by agricultural labourers, technological change and patterns of accumulation.

## 6. Regional Differentiation

The 1980s also saw a greater focus on the nature and dynamics of uneven regional development in India, an area of research which had previously been neglected. A phenomenon which gave a particular impetus to this work was the rapid growth of regionally based movements demanding autonomy of a greater or lesser degree from the Indian state. The relationship between a centralised industrial bourgeoisie and regionally based agrarian capitalists played a key role in the growth of these movements (Sathyamurthy, 1985). This was perhaps most striking in the case of Punjab, where the blocking of investment opportunities beyond the agricultural sector for capitalist farmers, together with the lack of local employment opportunities outside agriculture, even as small farms became unviable and the expectations of educated youth rose, have been identified as crucial factors which fuelled the demand for an independent 'Khalistan' in the 1980s (Gill, 1988, 1995).

Studies of uneven regional development emphasised the historical determinants of differential patterns of growth and transformation, including systems of land tenure under colonialism; the extent and nature of agriculture-industry linkages; and patterns of post-Independence state intervention (see for example Bharadwaj, 1982; Bhattacharya and Mitra, 1983; Banerjee and Ghosh, 1988; Prasad, 1988; Srivastava, 1989c). The role of ecological factors in regional differentiation has also been highlighted (see for example Sengupta, 1980; Athreya et al., 1990).

The increasing awareness of the importance of regional differentiation is however reflected not only in these writings but in an increase in comparative studies using data from more than one region, and, more generally, in the regional specificity of more recent work on agrarian change in India. These studies do not draw automatic conclusions about all-India level trends but place their findings within the context of the particular conditions prevailing in the region concerned. This is not to suggest that such findings do not have implications for India's political economy as a whole: not only are patterns of development likely to be reproduced in other regions given comparable conditions, but regional differentiation itself can be regarded as playing an integral role in perpetuating the power of a heterogeneous alliance of ruling classes and indeed the Indian state itself in its current form. It is in this context that this study of one particular region in Bihar should be viewed



## **7. Agrarian Movements, Political Power and the State**

The relationship between economic power and social and political power is a central concern of Marxist theory, and clearly, processes of change in agriculture cannot be understood in isolation from social formations to which agricultural sectors belong, nor from the state. Linkages between agricultural and industrial sectors, the relationship between the state and the various agrarian classes, social and cultural practices relating to gender or caste which may be retained from earlier modes of production or adapted to new conditions - these are just a few examples of the wider factors affecting, and being affected by, the nature and pace of agrarian transformation. They are particularly important for an understanding of the political and social movements which are often the agents of such transformation. As we have seen, much of the early Marxist work on agrarian change was explicitly political and concerned the formulation of strategy in the shape of 'agrarian programmes'. Thus the wider political and economic context was inscribed in these analyses.

As far as Marxist scholarship on Indian agriculture during the last four decades is concerned, its scope and breadth of vision has varied considerably in this respect. The complex inter-relationship between agrarian movements representing different classes, groups of classes or sections of classes, the state at various different levels, and the process of agrarian change have been touched upon by a number of writers. Notably, questions relating to political mobilisation and state power have been addressed by political economists in the context of land reforms, so-called 'farmers' movements', and, to a lesser extent, the struggles of rural labour. In the context of Bihar, as we will see, several writers have referred to the processes by which state institutions themselves have become sources of accumulation for those with access to them. However, this is an area in which much work remains to be done.

Both the state as well as a movement for social, economic and political transformation are incorporated into the framework of the present study. Processes of agrarian change occurring in Central Bihar are examined in the context of the emergence and development of a left-led movement of agricultural labourers and poor peasants which poses a threat to

the very basis of power in the region. At the same time the role of the state is considered, not only in terms of policy and legislation, but in terms of the actual operation of local state structures. In particular, the question of the relationship between these structures, social and political power, and patterns of accumulation in the fieldwork area is a key theme.

## **Conclusion**

In conclusion, this chapter has identified a number of themes in the existing literature on the political economy of agrarian change which this study hopes to address in the context of Central Bihar. Discussion of the 'agrarian question' among nineteenth century Marxists culminated in Lenin's 'The Development of Capitalism in Russia', which provided the first detailed analysis of the dynamic of the process of differentiation of the peasantry. It also highlighted two further questions of particular relevance to the present study: the possibility of two distinct 'paths' to capitalist development - 'capitalism from above' and 'capitalism from below' - and the role of survivals from earlier modes in the complex processes of transition.

In India, the political economy of agriculture has been a central concern for Marxists, and academic debates have been linked, although to a varying degree - to questions of political strategy for the left. India's Mode of Production Debate involved an in-depth discussion of not only the extent to which Indian agriculture was witnessing the development of capitalism, but the methods through which capitalist production could be distinguished from its predecessors. The process of expanded reproduction was identified as a key criterion for capitalist production, and is one which we will make use of in this study. Other participants in the debate formulated the 'semi-feudal' thesis, in which the existence of interlocked modes of exploitation or 'interlinked markets' played an important role in stifling potential change. Related to this is the central question of accumulation: of alternative avenues of investment of agrarian surpluses, productive and unproductive, the balance of forces which determines this, and the implications for agrarian transformation. Meanwhile the debate surrounding the 'inverse relationship' between landholding size and the productivity of land focussed attention on the economic implications of the conditions of acute poverty and dependence faced by marginal cultivators.

Indian Marxists have also addressed the question of the identification of agrarian classes, building upon the work of Lenin and Mao. Patnaik's 'Labour Exploitation Criterion' is one of the most systematic and detailed attempts to deal with this problem. The class categories used in the present study are based on the same principles and are discussed further in Chapter 3.

As the impact of the New Technology deepened, further debate was generated on the issues of class formation and class-for-itself action in agriculture. Questions relating to the extent of 'proletarianisation', and the nature of 'unfreedom' among agricultural labourers were examined in the context of the implications of technological change and the potential for organising by labourers. At the same time the nature of political assertion by landed classes also became a focus of debate as the left attempted to assess the significance of 'farmers' movements'. The role of political assertion by rich peasants in securing the state policies required to complete the transition to capitalist farming, as well as the implications of such assertion for the economy as a whole, were discussed in this context.

In the wake of the emergence of the contemporary women's movement in India, the importance of gender and patriarchal relations for an understanding of the political economy of agrarian change was highlighted. Questions relating to marriage, sexuality and familial relationships were recognised as falling within the scope of political economy. The assumption that concepts like 'the household' and 'the family' could be treated as internally undifferentiated were challenged, as was the failure to recognise women's labour in its various forms, and the problematic use of the 'public'/'private' dichotomy.

There was also an increased awareness of the question of uneven regional development, which is reflected both in studies of the phenomenon itself and the increase in region-specific case studies and the use of the comparative method.

Finally, the relationship between economic power and social and political power is a central concern of Marxist theory. However, in the context of the political economy of agrarian change in contemporary India it is an area which has not yet been fully explored. It is hoped that the present study will make a contribution towards extending this exploration a little further.

## **CHAPTER 2: PROFILE OF THE FIELDWORK AREA AND CENTRAL HYPOTHESES**

### **1. Bihar in the all-India context: 1970s to 1990s**

Bihar has frequently been characterised as one of the 'most backward' States of India. This is borne out, on the one hand, by aggregate quantitative measures of economic growth and poverty such as per capita income, per capita State Domestic Product, and the percentage of the population below the poverty line, and on the other, by qualitative and structural features which reflect the nature of production relations. However, this characterisation also masks the substantial changes which have occurred in the State.

#### *Some Macro-level Indicators*

In 1970-71, per capita income in Bihar was lower than that in any other State, and approximately two-thirds of India's average per capita income (Prasad 1988:1690); it declined to less than half by the late 1980s (Mathur, 1994).

Per capita net State Domestic Product (SDP) at current prices during 1991-92 (Rs/year) was Rs. 2,904 in the State, only 52 per cent of per capita Net Domestic Product for India as a whole. The growth rate of per capita SDP during 1980-90 was 1.8 per cent in Bihar. Although this was an improvement upon growth rates during the 1970s, it was still far below the national average of 3.1 per cent (Sharma 1996).

Bihar has remained the State with the highest percentage of its population below the poverty line. While the Planning Commission's Modified Expert Group Methodology put the level of rural poverty in Bihar at 58.2% in 1993-94, estimates using 'state specific' poverty lines based on state-specific middle range consumer price indices put the figure considerably higher at 65.5 per cent. As a recent study points out, Bihar's share in the all-India rural poor population has actually increased in the decade 1983-1993 from 16.6% to 19.6% (Chelliah and Sudarshan, 1998:14).

Underlying this is an employment structure characterised by continuing dependence on the agricultural sector. The 1991 Census showed that Bihar had the highest proportion of main workers engaged in agriculture of any State, with more than 80 per cent directly

dependent on the land. Not only has there been a marked absence of a shift of workers from agriculture to manufacturing, but during the decade 1981-91 the dependence of the workforce on agriculture has actually marginally increased while that on manufacturing has declined (Sharma 1996). Taken together with growing employment in services, this implies an overall increase in low-paid employment in the unorganised sector in both rural and urban areas. As Table 1 suggests, although the pattern of sector-wise GDP growth in Bihar in this period was comparable to the all-India pattern, the pattern of employment growth differed markedly, implying negative employment elasticities in the Manufacturing, Mining and Quarrying, Construction, and Transport sectors in the State.

Bihar also has a low percentage of rural workers engaged in non-farm activities. In India as a whole, rural non-farm employment increased significantly during the 1970s and 1980s. Bihar is one of the few States where this expansion did not occur: between 1983 and 1987-88, there was hardly any growth in non-farm employment (Chadha, 1993)<sup>3</sup>.

**Table 1 Sectorwise employment growth, GDP growth at constant prices, and employment elasticities in Bihar and India, 1981-91**

Sector	Bihar			India		
	GDP Growth (1980-81 to 1990-91)	Employment Growth (1981-1991)	Employment Elasticities	GDP Growth (1980-81 to 1990-91)	Employment Growth (1981-1991)	Employment Elasticities
Agriculture	2.33	2.28	0.98	3.58	2.06	0.58
Mining and Quarrying	6.71	-0.45	-0.07	7.78	3.02	0.39
Manufacturing	7.87	-2.5	-0.32	7.51	1.3	0.17
Construction	6.65	-0.36	-0.05	4.31	4	0.93
Transport	4.96	-1.48	-0.3	6.93	2.59	0.37
Trade	5.5	1.83	0.33	5.75	4.07	0.71
Services	5.53	5.94	1.07	6.5	4.22	0.65
All Sectors	4.75	2.13	0.45	5.53	2.37	0.43

Source: Exercises carried out by the LEM Division, Planning Commission, cited in Sharma, 1996

In the 1990s, the dependence of Bihar's workers on the agricultural sector has been intensified sharply by all-India level developments. After the introduction of the New Economic Policies in 1991, rural areas have borne the brunt of the workforce

<sup>3</sup> Some writers have argued that the process of uneven regional development has been reinforced by the policies pursued by the State at an all-India level. For example, Prasad (1988) suggests that instruments of resource mobilisation and public investment have been used in such a way as to intensify regional inequalities.

restructuring process, with agriculture in particular reverting to its traditional role as the residual sector for rural born workers who have not been able to find more productive non-farm jobs, either in rural areas, or in the cities' (Bhalla, 1997:222). Bhalla notes that 'after 1991, not only the rural secondary sector, but all of non-agriculture, suffered a rout....The number of persons who settled for work in agriculture...is roughly four times the number who obtained work in the non-farm sectors from 1987-88 to 1993-94. This compares decidedly unfavourably with the numbers for the preceding quinquennium. From 1983 to 1987-88, roughly three times as many fresh jobs had been generated in non-agriculture as were generated within the farm sector.' (op cit.:219).

Further, with a high proportion of Bihar's rural poor migrating to other States in search of employment (almost 42% of total interstate migrants in search of work originated in Bihar and U.P. in 1981 [Jha, 1997: 31]), the decline in secondary sector employment at an all-India level has inevitably hit the workers of these States particularly hard.

Meanwhile in Bihar itself, the growth rate in manufacturing has declined from the level of 1980s. The annual growth in the State Domestic Product in the manufacturing sector was 3.36 per cent during 1992-94: 2.78 per cent in the registered sector and 4.32 per cent in the unregistered sector (Sharma, 1996).

### *Agrarian Structure*

If, as Marxist economists have argued, the growth of the secondary sector and the associated transition in the sectoral structure of employment requires a large scale mobilisation of resources from agriculture itself (see for example Mitra, 1977, Byres, 1982, Bharadwaj, 1982), then the absence of effective reform of the agrarian structure is clearly a key factor responsible for Bihar's overall economic stasis.

Immediately after Independence in August 1947, Bihar became the first State to attempt to introduce legislation abolishing the rights of intermediaries in land (the Bihar State Abolition of Zamindari Bill).<sup>4</sup> But as has been amply documented, the subsequent record of implementation of land reforms in the State has been a dismal one (Jannuzi 1974; Sengupta 1982; Land Reforms Unit 1990; Das 1992). Of the three major planks of land reform -

<sup>4</sup> After much litigation by zamindar interests, the Bihar Land Reforms Act of 1950 was finally upheld by the Supreme Court in 1952. Thus 'five years had been purchased' by those who opposed the legislation (Jannuzi, 1974:13).

zamindari abolition, ceilings on land ownership, and tenancy rights, only the first has become a tangible reality in Bihar. The class of rich peasant 'Occupancy Tenants' who had played a dominant role in the pre-Independence struggles for zamindari abolition now became the owners of the land in substantial parts of the State. In caste terms, this generally meant 'the replacement of the landed power of most Kayasthas and many Rajputs with Bhumihars, Yadavs, Kurmis'(Das, 1992:36).

The big landowners' strategy of retaining quantities of land far above the legal ceilings through falsification of records and transactions among family members was particularly blatantly and effectively pursued in Bihar. Even where ceiling surplus land has been identified for redistribution, each stage of its acquisition and redistribution has been interminably delayed through litigation, corruption, and the inertia of state apparatuses dominated by landed classes.

But perhaps the most lasting failure has been that of tenancy legislation. Large scale evictions of small tenants in the period immediately after the introduction of the Zamindari Abolition Bill in 1947, affecting up to seven million people, led to the creation of a class of unprotected sharecroppers. By 1958, two-thirds of these households held an average of only 0.04 acres and were dependent upon agricultural wage labour for subsistence (Mitra and Vijayendra, 1982:99).

Thus Bihar's agrarian economy is today marked by extreme inequalities in access to and control over land and other resources; by a high proportion of agricultural labourers among main workers (37.21 per cent of main workers in Bihar are classified as agricultural labourers according to the 1991 Census, as compared to 26.15 per cent at an All-India level - only in Andhra Pradesh is the figure higher); by the proliferation of marginal landholdings; and by a high incidence of tenancy, particularly sharecropping tenancy, with land almost exclusively leased-in by poor or landless households (Government of India 1996). Much of tenancy is completely unrecorded. (For a detailed discussion of changes in land distribution and tenancy see Chapter 5, 'Changing Patterns of Land Ownership and Access to Land in the Fieldwork Area').

### *Agricultural Production: elements of change*

However, if the phenomena cited above suggest that little more than the successive pauperisation of the productive classes has been occurring in Bihar since Independence, other changes which have occurred in the agrarian economy, particularly since the early 1970s, are indicative of a more complex scenario.

Bihar's post-independence experience until the early 1970s did little to change the overall picture of a state with a stagnant and unproductive agricultural sector. During the period 1962-65 to 1975-78 triennia, all Bihar districts recorded low (2% or less) growth in overall yields (Mahendra Dev, 1988:A-111). In terms of foodgrains output, the overall compound growth rate in Bihar between 1962-65 and 1970-73 was only 1.74%, with no district showing high growth rates (Bhalla and Alagh, 1979:29-30).

Figures suggest that during the period between the triennia ended 1970-71 and 1983-84 this meagre growth rate actually declined further to only 1% per annum (CMIE, 1995). However, a wide-ranging study conducted in 1981/2 and 1982/3 by the A.N Sinha Institute of Social Studies (ANSISS) in conjunction with the ILO (Prasad, Rodgers et al., 1988), while confirming much of this picture, did identify certain trends which suggested that potentially transformative changes might be occurring among a specific group and in specific regions of the state.

This group were 'backward' caste - predominantly Kurmi - peasants employing a combination of wage and family (including female) labour, cultivating anything between 0.5 and 10 acres and using tubewell irrigation. Areas where this group is dominant are concentrated in the Central Bihar districts, particularly Patna and Nalanda (where two of the twelve villages in the study were located).

In summary, the study found that this group of households were at the forefront in the installation of tubewells which were the major source of assured irrigation, and in the adoption of High Yield Varieties and the use of fertilisers. While overall it was found that 'the extent of innovation which was witnessed in the area of biological technology has yet to unfold in the realm of mechanisation'(op cit.:549), the larger landholders among this group also had the highest value of machinery, productive assets, and capital investment in



agriculture, and obtained more and larger 'modern' (institutional) loans than others. Kurmi peasants were characterised by relatively high values of marketed output per acre, and these values were substantially higher for larger landholdings.

The nature of the patterns of accumulation subsequently adopted by this group is one of the main questions addressed in this thesis. This is of particular significance in the light of other recent studies which suggest that the pattern which occurred in parts of Central Bihar in the 1970s and early 1980s was to some extent replicated in other parts of the State in a later period (see for example Shah and Ballabh, 1997; Jha, 1997). In the 1980s these changes appear to have been widespread enough to be reflected in aggregate statistics. Thus at the all-Bihar level, foodgrain production between 1979-82 and 1989-91 increased at the annual compound rate of 3.30 per cent, while foodgrain yields increased by 3.5 per cent per annum (Sharma, 1996).

Once again however, there is considerable inter-regional variation. A recent district-level study (Bhalla and Singh, 1998) finds that while the number of 'low productivity and low growth' districts across the country has declined from 73 in the period between 1962-65 and 1980-83 to only 24 between 1980-83 and 1990-93, seven of these 'hardcore problem districts' are located in Bihar (op cit.:119). Equally significantly, the overall growth in foodgrains production which occurred in the 1980s does not appear to have been sustained in the post-reforms period of the early 1990s. Foodgrains production averaged 12.04 million tonnes during 1989-90 and 1990-91 but fell to 10.64 million tonnes in 1991-92 and further to 9.17 million tonnes in 1992-93 while food prices rose sharply (Sharma, 1996).

### *New Political Forces*

Inseparable from the emergence of new patterns of accumulation, as well as the perpetuation of existing ones, is the complex process of class formation and the development of class contradictions. Different regions of Bihar have historically witnessed a series of 'agrarian movements' which have expressed these contradictions in a variety of ways. Two phenomena which have emerged since the early 1970s are of particular relevance to this study.

Firstly, this period has seen the completion of the process of political consolidation of a class of rich peasants from the Backward Castes, challenging historical upper caste dominance, a process which had been underway since before Independence. This has been increasingly reflected in the political arena, culminating in the electoral victory of Laloo Prasad Yadav's Janata Dal in 1990. Laloo Yadav's rhetoric of 'social justice' for the poor and against caste-based inequality reflects an ideological continuity with earlier Backward Caste movements such as that waged by the Triveni Sangh in the 1930s (Mukherjee and Yadav, 1980) as well as with the 'Socialist' political trend epitomised in the 1970s in Bihar by the 'Total Revolution' movement led by Jaya Prakash Narayan. But, as has become increasingly evident during the period in which Bihar has been ruled by the Janata Dal (subsequently the Rashtriya Janata Dal), it is the Party's character as the organic expression of the interests of sections of the 'new' rural rich in Bihar which determines its actions. While it has been able to retain the allegiance of some middle peasants (particularly of the Yadav castes), the contradiction with agricultural labourers has continued to intensify. In fact the Janata Dal has even been prepared to align itself with upper caste landowners in attempting to crush organised assertion by this class. Currently the Kurmi rich peasants of Patna and Nalanda districts are represented politically by the Samata Party, which was formed in 1995 in response to perceived Yadav dominance within the Janata Dal. In this case, the adjustment with upper caste landed interests takes an explicit shape in the electoral arena in the alliance between the Samata Party and the Bharatiya Janata Party (BJP), which has emerged as the most effective representative of these interests in Bihar.

Secondly, Bihar has been the centre of the revolutionary left movement in India for the last two decades. The earlier historical role of the Communist Party of India in the pre-Independence agrarian movements waged by the Kisan Sabha has been well documented (see for example Das, 1983; Hauser, 1994), as have the sharecroppers struggles the Party initiated in North Bihar in the 1950s (see for example Sinha, 1991). The late 1960s saw the emergence of a new, more radical strand within the Indian communist movement, which grew out of the peasant uprising which had taken place in Naxalbari in northern West Bengal in 1967. By the early 1970s, the wave of 'Naxalite' agrarian uprisings elsewhere in the country had been crushed and the Communist Party of India (Marxist-Leninist), formed in 1969, had itself fragmented and virtually collapsed in the face of intense state repression (Banerjee, 1984). But it was at this point that struggles

by labourers and poor peasants for land, living wages and an end to caste-based oppression by the landed classes took off in Bhojpur and Patna districts of Bihar under the leadership of CPI(ML)(Mukherjee and Yadav, 1980; Mishra, 1999).

The turning point for the movement in Bihar came in 1978 when the CPI(ML)(Liberation)<sup>5</sup> launched a 'rectification campaign' aimed at reversing some of the mistakes of the earlier period. In terms of agrarian struggles, this involved building democratic structures from the village level upwards and the establishment of mass organisations which functioned openly, while the Party itself remained underground until 1992. By the mid-1980s, the movement had a strong base in large parts of Patna, Nalanda, Gaya, Bhojpur and Aurangabad Districts of Central Bihar - the same areas which had witnessed some 'peasant capitalist' development in the 1970s - as well as pockets spread across 21 other Districts of the State (CPI(ML) 1986: 62). Elections were fought for the first time in 1985 under the banner of the Indian People's Front, a mass political organisation linked to the Party. After 1992 the CPI(ML) itself contested elections in the areas where it was involved in leading struggles. By the mid-1990s, its area of influence had spread to include several districts of North Bihar as well as parts of Jharkhand.

## **2. The Fieldwork Area: a Block in Central Bihar**

Bihar is marked by considerable regional variation and uneven development. The State is conventionally described as consisting of three distinct regions: 'North Bihar', the plains north of the River Ganga; 'Central Bihar' the plains south of the River Ganga (also sometimes called South Bihar); and the forested, mineral-rich 'Chhotanagpur' plateau, a geographically as well as economically and culturally distinct area which is currently witnessing a powerful movement demanding the creation of a separate State, Jharkhand.

North Bihar is a fertile but flood-prone region watered by several large rivers, with high population density. The proportion of agricultural labourers among main workers is over fifty

---

<sup>5</sup> The CPI(ML)(Liberation) has emerged as the strongest of the groups which were formed with the fragmentation of the original CPI(ML), and is the only one which operates as an all-India level political party. It is also the only one which is active in the fieldwork area, where it is generally referred to as the 'Ma-Le' (i.e. the M-L). References to the CPI(ML) in the following chapters are to this group.

**Fig.1: Location of the Fieldwork Area**

**a) Bihar in India**



**b) Location of Central Bihar Districts**



**c) Location of Hilsa Block**



per cent in many districts. The region is also characterised by the survival of a number of very large landowners and the prevalence of sharecropping tenancy.

Central Bihar, which constitutes approximately 21 per cent of the total area of Bihar, was until recently comprised of ten districts: Rohtas, Bhojpur, Aurangabad, Jehanabad, Gaya, Patna, Nalanda, Nawada, Munger and Bhagalpur. In the 1990s, Rohtas has been divided to form two new districts, Bhabua and Sasaram, while Buxar and Jamui districts have been carved out of Bhojpur and Munger respectively<sup>6</sup> (Figure 1).

In comparison to North Bihar, Central Bihar has relatively few very big landlords: the pre-Independence anti-zamindari movement was strongest in these areas and as a result the process by which rich peasants, engaging in various combinations of leasing out and self-cultivation, came to dominate the countryside was most effective here. The proportion of agricultural labourers among main workers, though slightly lower than in North Bihar, is still approximately forty per cent or more in most of the region. The rural infrastructure is somewhat more developed than that of North Bihar, and the irrigation ratio is considerably higher, with the proportion of gross cropped area irrigated falling between 60 and 80 per cent in all the districts (CMIE 1993). As suggested above, it was in Central Bihar that changes thought to indicate a potential for capitalist development in agriculture were first identified in the early 1980s (Prasad, Rodgers et al.: 1988); these areas also saw the emergence of strong movements of labourers and poor peasants in the same period.

However, these regions themselves are economically heterogeneous, a fact that is underlined by the cluster analysis carried out as part of the ANSISS/ILO study (Prasad, Rodgers et al. 1988). The analysis, which was restricted to north and central Bihar districts, used population growth and density, urbanisation, tenancy, cropping intensity, use of HYV paddy, and tubewell irrigation as variables to categorise districts, and concluded that 'these clusters did not correspond to the traditional North Bihar-South Bihar division...the more advanced-more backward axis was West to East rather than South to North' (op cit.:46)

---

<sup>6</sup> The reasons for the extraordinary proliferation of districts in Bihar are described in Chapter 7, 'Patterns of Accumulation in the Fieldwork Area'

Fieldwork for this study was carried out in Hilsa Community Development Block in Nalanda District. As Table 2 shows, more than 83 per cent of main workers in Nalanda District are dependent on agriculture. The District is characterised by high values of proportion of net sown

**Table 2 : Nalanda District: Selected Indicators**

		Nalanda	Bihar	All India
1	Percentage of main workers in agriculture	83.32	80.62	64.9
2	Persons per sq.km.	844	496	273
3	Average size of operational holding (hectares)	0.61	0.87	1.69
4	Net Sown Area as % of Reporting Area	76.21	44.43	46.3
5	Gross Irrigated Area as % of Gross Cropped Area	76.16	36.31	30.72
6	Fertiliser consumption per hectare (kgs)	133	58	72
7	Value of output of major crops(Rs) per hectare per capita	4034 566	3017 368	3576 758
8	% of Cultivating Households Leasing in Land	16.5	19.73	15.85
9	% of Tenancies Sharecropped	45.7	61.94	38.74

Sources

Row 1: Census of India 1991

Rows 2-7: Centre for Monitoring Indian Economy (CMIE) Profiles of Districts, November 1993

Rows 8 and 9: Column 1 - Census of India 1981, Columns 2 and 3 - National Sample Survey 37th Round, 1981-82 (Note: NSS figures refer to operational holdings, Census figures refer to cultivating households)

area to reporting area, irrigation ratio, fertilizer consumption per hectare and output of major crops per hectare, in relation to both the all-Bihar and the all-India figures. Given a high population density in Nalanda, per capita output of major crops, while well above the State average, is however considerably lower than the national average. The incidence of tenancy - and more markedly of sharecropping tenancy - is low in relation to Bihar as a whole, although above average for India.

The major crops grown in Nalanda are rice (accounting for 55 per cent of net sown area); wheat (33.35 per cent); gram (4.33 per cent); maize (2.31 per cent) and potatoes (2.09 per cent) (CMIE 1993).

While, as has been noted, the dominant landowners in Nalanda District and elsewhere in Central Bihar do not generally own the vast amounts of land still controlled by landlords in many North Bihar districts, Nalanda is noted for the existence of a number of large tracts owned by 'maths' (religious trusts) and controlled by priests known as 'mahants'.

Struggles which have been waged over such land in Hilsa Block are described in Chapter 6.

According to the 1991 Census, the community-wise distribution of the population of Nalanda is as follows: 'Scheduled Castes' - primarily consisting of Dusadh, Chamar and Musahar castes, are the largest single group forming 20 per cent of the population. Yadavs account for another 13 per cent, Kurmis 11 per cent, Muslims 10 per cent, Bhumihars and Kahars around 6 per cent each and Rajputs and Koeris around 5 per cent each. Brahmans and Telis are also present in significant numbers.

Hilsa Block, comprising 102 inhabited villages, was originally in Patna District, and when Nalanda District was carved out from Patna District in 1972, Hilsa became the north-western tip of Nalanda, adjoining Patna and Jehanabad districts. It thus lies in the heart of Central Bihar (Fig.1). It falls within a belt which has been relatively well-irrigated since the mid-1960s: according to the 1971 Census, 'the area under irrigation is over 60 per cent in a compact tract comprising the districts of Patna, Gaya and Shahabad'<sup>7</sup>. Hilsa was originally irrigated by the system of reservoirs and channels known as 'ahar-pyne' which covered much of the Patna-Gaya region in the zamindari era (Mitra, 1985:207). Subsequently, groundwater became the most important source of irrigation, although some areas are partially irrigated by a small river, the Lokayan.

### **3. Chandkura : a Profile**

Chandkura village was one of twelve villages included in the study carried out by the A.N.Sinha Institute of Social Studies and the ILO in 1981-83. I carried out fieldwork in

---

<sup>7</sup> Shahabad district was subsequently bifurcated to form Rohtas and Bhojpur districts.

the village during 1995 and 1996. This fieldwork and the comparisons it generated with the earlier period form the core of the empirical material used in this study.

Chandkura is situated approximately five kilometres from the market town of Hilsa, the Block and Sub-Divisional headquarters. From the village, a mud road winds through the fields for about one kilometre before joining the main road which runs between Fatuha, a market town and railway junction in the adjoining Patna district, and Hilsa.

Chandkura is a village of 236 households, of whom almost half belong to the 'scheduled' Chamar and Dusadh castes. More than 90 per cent of this group of households are primarily dependent on earnings from agricultural wage labour in the same village. None own more than 2 acres or operate more than 2.7 acres of land.

Kurmi Mahatos, classified as an 'Other Backward Caste' (OBC), in Bihar constitute the most numerous single caste in the village, accounting for 65 households. These are predominantly landowning households with cultivation as their main source of income, and both men and women working in the fields. However there is considerable variation both in the size of owned and operated holdings, and in the combination of wage and family labour employed. Much smaller numbers of 'OBC' Yadav and Koeri households are similarly distributed among the poor, middle and rich peasants of the village. Those belonging to service castes such as Beldar(potter), Barhi(carpenter) and Nai(barber) account for another 42 households relying on a combination of traditional 'jajmani' occupations, agricultural and other manual labour and the cultivation of very small landholdings. Although not all classified as 'Scheduled Castes', these groups have a very low caste status in the region. Among upper castes, there are three Rajput households, all primarily dependent on urban white-collar employment, and one Brahman household, which combines performing ceremonies with auto-rickshaw driving and cultivating a marginal landholding.

50 per cent of households in Chandkura are completely landless, and a further 21 per cent own less than one acre. At the other end of the spectrum, nine households own and operate more than ten acres. Despite the absence of any landholdings greater than 25 acres in the village, this leads to a very skewed distribution of both land owned and land operated. 70 per cent of households own only 7.5 per cent of the total land cultivated,



compared to 64 per cent owned by the top 10 ten per cent of households. In terms of land operated, 70 per cent of households operate 13 per cent of the land, with the top 10 percent of households operating 53 per cent of the land.

Only 19 per cent of households lease in land, with the vast majority of tenants owning less than one acre, and leasing in small amounts of land averaging 1.2 acres from the biggest landowners in their own and neighbouring villages. Nearly all these landowners retain most of their land for self-cultivation. There are no instances of leasing in by rich peasants, or by those owning more than 5 acres. Except for one household sharecropping one acre belonging to a Brahman family living in another village, all leases are today on a fixed rent basis.

The major dividing line according to which the majority of inhabitants of Chandkura and other villages in Hilsa define themselves is that between 'kisans' (literally peasants) and 'mazdoors' (labourers). This is partly an expression of the fact that the area is dominated by landowners of the Kurmi Mahato caste, traditionally a peasant caste. It also reflects contemporary reality in which the central class contradiction is between landless or near-landless agricultural labourers, and employers who themselves engage in cultivation, with very few non-cultivating landlords.

However, it also underlines the complex relationship between caste and class in the area. While the vast majority of Scheduled Caste households hire out agricultural labour, and include virtually no 'middle' or 'rich' peasants, Kurmis and other 'intermediate' castes are widely distributed among different peasant classes and there are even a handful of households among them who hire out agricultural labour. In this situation the 'kisan' identity plays a vital role in unifying the intermediate caste peasantry under the hegemony of the small number of rich peasants who are the major employers, sources of credit and leasers of land in each village. This becomes particularly significant in periods when class conflict between rich peasants and labourers intensifies: the 'kisan' identity combines elements of caste and class, but is primarily defined by its distinction from the 'mazdoors', those who depend on selling their labour power for survival, and who, by definition, belong to lower castes.

#### **4. Central Hypotheses**

The central hypotheses to be tested in this study are as follows:

i) that during the decade from the mid-1970s to the mid-1980s, those areas of central Bihar dominated by medium sized cultivating landowners of the 'backward' castes saw the growing prosperity of this group, who cultivated using both hired-in and family labour, increasingly adopted new technology, and had a tendency towards higher rates of capital investment in agriculture, and accumulation, than the classes which dominated other areas. This development, which was associated in particular with the spread of private tubewells facilitated by electrification, can be regarded as consistent with the idea of a potential 'peasant capitalist' transition.

ii) that this development has essentially stalled during the period from the mid-1980s to the present. In cases where substantial accumulation is still occurring, it is being diverted into unproductive channels. These phenomena are related to the overall class nature of the state in Bihar which leads to the continual appropriation of development resources through institutionalised corruption, and to a social formation which perpetuates unproductive economic activities at the expense of investment in production.

iii) that the changes which took place in agricultural production in the 70s and early 80s were the catalyst for the emergence of movements of the most exploited sections within agrarian society in central Bihar, of which the central element was class-for-itself action by agricultural labourers. This movement continues to grow in strength and in the context of the slowing down or stalling of a transition to capitalism appears to be currently the most significant force for change. It is responsible for various changes in production relations in the last decade, which nearly all represent either an acceptance of the demands of the movement or a defensive reaction to these demands.

## **CHAPTER 3: FIELDWORK METHODOLOGY**

### **1. Design of Fieldwork**

The field study was designed as follows:

*a) Household Survey, Chandkura Village, Hilsa Development Block, Nalanda District, Bihar*

i) 'Census' survey of households in Chandkura village, where a survey had previously taken place as part of the ANSISS/ILO study (Prasad, Rodgers et al.:1988) in 1981/82 and 1982/83. This would use a general questionnaire (see Appendix 1) to ascertain basic information such as amount of land owned and operated by the household, size of household, hiring in and out of labour and use of family labour, extent of irrigation, ownership and hiring in of traditional and modern technology and of livestock, and involvement in credit relationships. The questionnaire also included general questions about perceived changes during the previous fifteen years.

ii) The results of this survey would be used to carry out a broad class categorisation. In order to make valid comparisons, the class categories used for the ANSISS/ILO study would be adopted, although some modifications were made to address certain methodological problems with these definitions (see below).

iii) A stratified sample of about 20 per cent of the original households would then be selected for in-depth interviews. Separate questionnaires were prepared for agricultural labourers, self-cultivating landowners, tenants and landlords relating to cultivation (cropping patterns, inputs, technology, yields etc), terms and conditions of agricultural employment and tenancy, other occupations/sources of income etc (Appendices 2-5). Respondents would be interviewed using one or more of these questionnaires as appropriate, and would also all be interviewed using a single questionnaire about expenditure and assets (including indebtedness) (Appendix 6).

*b) Village Surveys, Hilsa Development Block, Nalanda District*

This involved general surveys of twelve villages in this block, which were purposively selected on the basis that conflicts over agricultural wages and/or land redistribution had taken place there. These would be carried out through group discussions and individual discussions with agricultural labourers and different classes of cultivators, as well as others in the village such as schoolteachers, village-level activists and others. The discussions covered areas including landownership patterns, caste composition, forms of agricultural labour and tenancy present, extent and nature of irrigation, cropping patterns, biological and mechanical inputs and yields, terms and conditions for agricultural labourers and forms of organisation and agitation by them (if any), sources and terms of credit, prices, outmigration from the village, amenities in the village, practices relating to marriage and dowry, and perceived changes in all of these during the previous ten years.

*c) Survey of Contractors*

This would consist of in-depth interviews with individuals currently resident in, and originating from, Central Bihar districts, who had received contracts to carry out various kinds of work from the Bihar State government between 1984 and 1994. A questionnaire was prepared which covered individual and family patterns of accumulation, with a particular focus on land resource endowment, land and labour use, relations of production in agriculture, the relative importance of different sources of income, and the way in which agricultural surpluses are used

(Appendix 7).

*d) Further Interviews and Fieldwork*

Discussions with officials, academics, activists, journalists and other individuals; and further village visits in Central Bihar. Video as well as audio cassettes would be also used in some cases to record interviews, group discussions, events such as rallies and demonstrations, and songs and poems of the area.

## 2. Class Categorisation Used in Fieldwork

Given the central themes of class formation and patterns of accumulation, an appropriate and consistent system of categorisation to determine the economic class of the respondents was clearly necessary to effectively analyse the fieldwork material and use it to test the hypotheses. The question of the identification of agrarian classes in Marxist analysis has been discussed in Chapter 1 'The Political Economy of Agrarian Change in India'. As we have seen, perhaps the most detailed and rigorous attempt to construct a Marxist model for the identification of peasant classes is that of Utsa Patnaik, which, building upon Lenin and Mao's approaches, is based primarily upon the 'labour exploitation criterion' i.e. the extent to which a household is exploited or exploits others relative to self-employment (Patnaik, 1987).

While we have attempted to incorporate aspects of Patnaik's approach in this study, we are also constrained by the need to generate data which is comparable with that collected as part of the ANSISS/ILO study in 1981-83. The latter used a class categorisation designed by P.H. Prasad (Prasad, Rodgers et al., 1988), which as we will see, also prioritises the 'labour exploitation criterion' while taking account of some of the specificities of the patterns of class formation observed in rural Bihar. But there are also several methodological problems with these categories. We have therefore used a modified version of Prasad's categories, as explained below. Where direct comparisons are being made between the two periods in terms of classes, these modifications are noted and their quantitative impact indicated.

Prasad's class categorisation involves seven basic classes of household:

### *1. Agricultural Wage Labour*

This includes all those households hiring out wage labour, regardless of other activities.

### *2. Poor-Middle Peasants*

This includes cultivating households who neither hire in nor hire out agricultural wage labour, and do not lease out land.

### *3. Middle Peasants*

This includes cultivating households who hire in, and do not hire out, agricultural wage labour, and do not lease out land, and in which both male and female household members work in cultivation.

### *4. Big Peasants*

This includes cultivating households who hire in, and do not hire out, agricultural wage labour, and do not lease out land, and in which only male household members work in cultivation

### *5. Gentleman Farmers*

This includes cultivating households who hire in, and do not hire out, agricultural wage labour, and do not lease out land, and and in which household members carry out only supervisory work in cultivation.

### *6. Landlords*

This includes all households leasing out land, regardless of other activities

### *7. Non-Agricultural*

This refers to households not engaged in agricultural labour, cultivation or leasing out of land.

A number of points arise from this.

### *Agricultural Wage Labour*

Since this category includes all households who hire out wage labour, it is inevitably heterogeneous. However since it brings together all those who at some point share the experience of selling their labour power, it is a useful category for analysis of class identity and the potential for class-for-itself action. Both Lenin, for whom this group were defined as the proletariat and semi-proletariat (Lenin, 1965), and Mao, for whom they were workers and poor peasants, (Mao Tse-Tung, 1975) emphasised this aspect. In the Bihar context, the association between participating in agricultural wage labour and caste status reinforces the significance of Prasad's definition. In my fieldwork area - though this is not

the case throughout Bihar - there were very few non-dalit households falling into the 'Agricultural Wage Labour' category.

In theory the category could include households which hire in more wage labour than they hire out and are net 'exploiters'. However, given the pattern of resource distribution, wage levels, attitudes to wage labour and other conditions in the fieldwork area, such households would be expected to be rare, and I did not identify any in 1995-96.

But the breadth of this category also means that there are contradictions within it, which will be overlooked if it is assumed to be homogeneous. For example, distinctions between those wage labour households who also cultivate and those who do not has been found to be significant in terms of conditions of employment as well as class consciousness in several regions (Byres 1981; Bhalla 1976). While Prasad's original category was further subdivided in order to identify landowning and leasing-in households as well as the nature of wage labour (attached or casual), the data available for 1981-83 specifies only the latter. However, these questions are examined in relation to the 1995-96 data.

Prasad's categorisation also effectively excludes cultivators who participate in wage labour (Mao's 'poor peasants') from the ranks of the peasantry. When dealing specifically with issues affecting poor cultivating households we have therefore used the category of 'small and marginal cultivators' based upon size of landholding, in parallel with Prasad's categories (see Chapter 5, 'Changing Patterns of Land Ownership and Access to Land in the Fieldwork Area' for a discussion of the relationship between landholding size and 'scale' of operation).

### *Poor-Middle Peasants*

This group is defined as those neither hiring in nor hiring out labour - but poor cultivators may be compelled to hire in wage labour at certain points if there is a shortage of family labour. This is a phenomenon we would expect to increase if the new technology, with its increasingly timebound labour requirements, is spreading to poor cultivators. In this situation, the question of whether or not a household is producing a surplus becomes particularly important. Significantly, Lenin distinguished 'small' from 'middle' peasants on the basis that middle peasants can produce 'not only a meagre subsistence' but 'a certain surplus which may... be converted into capital'; middle peasants also 'frequently' (but not

invariably) employed hired labour (Lenin, 1965: 374). We have thus referred to surplus and non-surplus producing households in some contexts (see 'Agriculture, Technology and Class' for a discussion of what constitutes a surplus). However, as with the Wage Labour category, the question of buying and selling labour power, which Prasad's distinction between Poor-Middle and Middle Peasants reflects, is a key one for an assessment of class identity and potential class action.

### *Big Peasants*

One of the most problematic aspects of Prasad's categorisation is that 'middle' and 'big' peasants are distinguished only on the basis of women's participation in family cultivation. In Bihar, women's participation in cultivation is as much an indicator of caste as of class. While households from lower castes may in some cases withdraw women from field labour as their economic position improves, the converse has not been observed : even if their economic status declines to that of poor peasants, upper caste households do not bring women out to engage in work of this kind. Thus, Prasad's definition effectively brings a caste element into the definitions of 'middle' and 'big' peasants.

In our study of Chandkura village, which was and continues to be dominated by landowners of the intermediate Kurmi caste, in which women traditionally do carry out field labour, there were very few 'big' peasants according to this definition. We also found that several households who were recorded in our initial census survey as having only male members cultivating, were found in more detailed interviews to have both women and men working in the fields. This was hardly surprising given that women's non-participation in field labour is considered an important marker of status, and there is also tendency for women's labour in general to be underestimated by male respondents. Where these households met Lenin and Mao's criteria of possessing 'abundant means of production and liquid capital' and relying on exploitation 'for a part or the major part of their income' (Mao Tse-Tung, 1975) we continued to classify them as 'big' or 'rich' peasants. It should be noted that had we used only Prasad's definition, the decline in the number and proportion of rich peasants, which is an important element in the argument we present in this study, would have been even more pronounced.



### *Gentleman Farmers*

This category refers to cultivating households in which household members engage only in supervisory work and not in manual labour. The term 'gentleman farmer' itself is borrowed from eighteenth and nineteenth century England and in the post-Independence Indian context was originally used to refer to the small group of salaried professionals (notably ex-Army officers) who in the initial period of the 'Green Revolution' were observed to be taking up cultivation using the new technology (see for example Rudra et al., 1969). It thus has specific implications which are not appropriate to the context in which it is used here.

However, in terms of production relations, there is clearly a need to distinguish those cultivators who perform manual labour from those who do not. According to Lenin's categories, all peasants, including 'big' peasants, by definition perform manual labour. However, once again, in the Bihar context the issue of caste arises. Even small and impoverished cultivators of the upper castes may not be prepared to engage in manual labour. One therefore has to be wary of drawing any conclusions about a transition to capitalism solely on the basis of the existence of landowners who only supervise cultivation. In practice, no households were found in this category in Chandkura village in the 1981-83 study. During the 1995-96 study, only one such household was found and given the specific circumstances, this household was categorised as rich peasant.

### *Landlords*

All households which lease out land are categorised as 'landlord' households. This fails to take account of the possibility that there is leasing out by poorer to richer peasants of land which on its own is unviable, or which the owners do not have the resources to cultivate effectively, a phenomenon which often occurs as part of the process of capitalist concentration of land. However this possibility is explored in the thesis and this type of leasing is found to be non-existent in the fieldwork area in both periods under discussion.

More significantly for this study, in a transitional agrarian economy rich peasants who cultivate part of their land using wage labour (and often engaging in manual labour themselves) may also lease out some land. In fact in Chandkura, the majority of leasing-out households fell into this category. Unlike agricultural wage labour, in which any participation has implications which are social as well as economic, leasing out land

was not a defining activity for households in the fieldwork area. In other words, there had not been a 'landlord class' as such since the departure of the feudal zamindars with Zamindari Abolition. On the other hand, tenancy was a significant element within the relations of production, and needed to be looked at in terms of the extent of rental exploitation, interlocked relationships, the access of poor households to land and a number of other questions. The category was therefore useful as one of the measures of change in the extent of leasing. But we have avoided drawing conclusions on the basis of the existence of households falling into this category without further investigation.

Finally, as the above discussion suggests, concrete conditions are generally too complex to be fully captured by a classification of households according to class categories. In reality, single households may engage in activities associated with more than one class; and these activities may be determined by a range of factors (notably caste, gender of household members, and household size), whose relationship with class is itself a matter for investigation. Criteria which are based on quantitative data and can yield continuous measures as well as discrete categories, may prove to be more sensitive in this context.

Despite these limitations, a broad class categorisation remains an important tool of analysis, particularly if class is understood in Marxist terms, as a political as well as an economic concept. Membership of a particular class increasingly becomes a conscious collective identity as contradictions between classes deepen and struggles intensify. In addition, such a categorisation is particularly useful in identifying broad patterns of change across time, as we aim to do in this study.

We have therefore, as described above, used a basic categorisation which allows us to make comparisons with the data available from the earlier period, but have taken note of its limitations and inconsistencies whenever they arise, and supplemented it where necessary with other continuous and discrete measures which help to locate households within the relations of production in the fieldwork area.

### **3. Account of Fieldwork**

I first visited Hilsa Block in August 1992, when I travelled there from Patna to meet activists of the then underground CPI(ML) and talk to people in the villages where

struggles between the rural poor and powerful landowners were most intense. During the next five years, I made a series of visits to this area, as well as to other parts of rural Central Bihar, in order to learn more about conditions there from the various different perspectives of its inhabitants. I was therefore quite familiar with the area as well as with many of the key issues facing those who lived there, when I began the fieldwork for this study in January, 1995.

*a) Establishing Contacts and Pilot Study*

I spent January and February 1995 gathering secondary data and establishing a network of contacts who would be able to help me in my fieldwork. In particular, scholars at the A.N. Sinha Institute of Social Studies and the Asian Development Research Institute (both in Patna), Bihar-based journalists, administrators and ex-administrators in various departments, activists of the CPI(ML) at State, District and Block level, activists of several women's organisations and friends and acquaintances from previous visits to Bihar helped me with information and introductions. I also looked for someone who could accompany me on my field trips and interpret for me if necessary. This proved remarkably difficult. However eventually I was introduced to Mohammed Khurram, then a first-year student at Patna University, who accompanied me on nearly all my field trips subsequently. During this period I also made several village visits in Sahar and Sandesh Blocks of Bhojpur District, during which I carried out a pilot study for the sample survey of households. On the basis of this pilot study I later finalised the questionnaires used in the Chandkura survey.

*b) Survey of Contractors*

I worked on this survey between February and April 1995. I used a number of sources to identify individuals who had been granted contracts for construction and other tenders by the administration. These included the Public Works Department Offices in Patna and Ara, the Public Works Department State Secretariat, the Irrigation Department Offices (Patna) as well as personal contacts. I met and interviewed contractors in Patna, Ara, and Jehanabad Town. However, tracing these individuals proved problematic, partly because the lists provided by government departments were invariably outdated. In some cases where the respondent was involved in large scale illegal activities (for example smuggling),

and was suspicious of the nature of the interview, considerable effort and time went into setting up an interview. The Bihar Assembly Elections in April 1995 also made travel extremely difficult as buses were requisitioned by the State Government. Ultimately it was not possible to complete the survey before I had to leave Bihar, and only 15 contractors from various Central Bihar Districts could be interviewed. And by the time of my next field trip the emphasis of my study had shifted, so that the Hilsa survey was the main priority. However, a number of interesting trends appeared to be emerging from the contractors' survey which have some relevance to my hypotheses.

*c) Household Survey, Chandkura*

This survey was carried out in November and December, 1995, and March and April, 1996.

On first arriving in Chandkura I began by having several sustained discussions with groups of residents in different parts of the village (Chandkura is quite segmented spatially along caste lines). This allowed me to get a picture of the broad landholding and caste composition patterns in the village, while at the same time explaining the nature of my research.

I then began the 'census' survey by visiting each house in turn, beginning with the 'Chamar' huts on the fringe of the village nearest the road, and working my way through the Dusadh, Beldar, Yadav and other caste areas into the heart of the village where most of the two storey whitewashed homes of the larger Kurmi landowners were located. Although some of these initial interviews also took place in the fields themselves where people were taking a break from work, the majority took place in or in front of homes. I decided to interview any member of the household who was prepared to talk to me, and did not have obvious problems in answering my questions. The result was that for each class, caste or landholding size-group, a variety of perspectives were recorded depending on the gender, age and position within the household of the respondent. This had particular significance for the questions relating to perceived changes, and for the wider discussion which often accompanied the formal interviews.

In practice, the interview often took place collectively with several household members. When discussions took place sitting outside houses or on verandahs, it was inevitable that

many others also joined in. However, while this often led to livelier and more revealing discussions, I realised that the presence of others might also inhibit the respondent, depending on their class and relationship to him or her. For this reason, all the labourers' interviews took place in their own homes or in those areas of the village which their employers hardly ever entered, and never in the employers' fields or homes. But other factors emerged during the survey. For example, those who lent money or foodgrains were often unwilling to discuss this in the presence of others. Many younger women were unwilling to sit down or to talk freely in the presence of older male relatives and neighbours. In this situation it was better to arrange to return later to complete the interview.

On the other hand, there were some issues concerning which the larger landowners were wary of giving information to someone from outside the village. The most significant of these were the amount of land owned, and, in particular, the amount of land leased out. The reasons for this are discussed in Chapter 5. In this context, it was always necessary to cross-check information with other people in the village, and the presence of members of other households actually made it more difficult for the respondent to give incorrect information.

The 'census' survey took much longer to complete than I had originally anticipated. The main reason for this was the agricultural season when I began the survey - the kharif harvest. This period is one when conflicts and tensions between labourers and employers come to a head, and thus from the point of view of my study, it was an important time to be in the village. I witnessed arguments taking place over for example the size of the bundles which labourers took home after a day's work harvesting, or the hours they worked. With several agricultural processes in full swing, there was also an opportunity to see these processes for myself, and this inevitably triggered further discussion about technological changes, costs, labour relations and much else. However it is a time when nearly everyone is busy in their own or other's fields. Formal interviews could therefore only take place either early in the morning or in the evening.

In order to be in the village at times when people were free to talk, it was necessary to stay in the village itself. This, I felt, was also vital if I was to gain insight into other aspects of life in the village. As in the majority of Bihar villages, staying in the village meant staying

in someone's home. This was made possible by the hospitality of Ghauli Devi, her husband Gulabchand Das, and their seven year-old daughter, Maya, who not only put us up but looked after us in many other ways. Given the highly segmented and hierarchical social structures in the village and the existing tensions, as well as the subject of my research, it was perhaps inevitable that staying in the 'chamar tola' was seen by some respondents among higher caste rich peasants as an indication of my loyalties. However in general I was able to overcome these suspicions and convince them to talk openly with me.

After categorising the households according to class, I identified a small stratified sample reflecting the class composition of the original survey. Because of time constraints respondents from only twenty households could be interviewed in detail at this stage. In addition, several respondents to the 'census' survey who could not be interviewed during the second stage because of prolonged absence from the village had given detailed information during discussions accompanying the census questionnaire.

The only major problem I faced in carrying out the sample survey related to the questionnaire on assets and expenditure. Several respondents were reluctant to give detailed information about savings and about the lending they were involved in. As a result, although all the respondents were asked these questions, they did not generate useful data. Instead, I approached these issues from other angles (see Chapter 7, 'Patterns of Accumulation in the Fieldwork Area' ).

#### *d) Village Surveys*

I visited twelve other villages in Hilsa Block in three separate field trips lasting a total of two and a half weeks, during November 1995, December 1995, and April 1996. The following villages were surveyed: Baradih, Sirinagar (November 1995); Bhokila, Murarpur (December 1995); Pakhanpur, Masarhi, Fatehpur, Kamarthu, Pakri, Fatehpur, Bariganj, Makrauta (April, 1996). I also visited two more villages - Indaut and Painsapur, and collected some data, although it was not possible to carry out a full survey of these villages.

All these villages were purposively selected on the basis that some conflict over issues relating to wages and/or land had occurred there. I identified them through discussions with a number of local people, in particular activists of the CPI(ML) in Hilsa.

Group discussions proved to be a productive method of generating an overall picture of the village. I was able to gather information on the key themes of landownership patterns in the village; caste composition of the village; forms of agricultural labour and tenancy; extent and nature of irrigation, cropping patterns, biological and mechanical inputs and yields; terms and conditions for agricultural labourers and forms of organisation and agitation by them (if any); outmigration from the village, amenities in the village; major problems faced; and perceived changes in all of these during the previous ten years. But many other areas were often covered in the discussions. However, a number of issues had to be borne in mind. Firstly, all the villages were spatially segmented along caste lines. It was therefore necessary to hold such discussions in at least two separate locations within each village to ensure that people belonging to the various classes and castes present in the village could talk openly about class and caste tensions and conflicts. Secondly, as I have noted in the case of Chandkura, the agricultural season and the time of day affected the extent to which those engaged in agricultural activities could participate in the discussion. Whenever possible I therefore arranged to spend the night in the village. Thirdly, there is a gender aspect to the timing of discussions: men were generally free to talk at the end of the day's work in the fields, in the earlier part of the evening before the evening meal; or early in the morning before breakfast; whereas women were usually busy preparing food at these times, and could only talk at leisure late at night. In any case, women were much more outspoken in discussions where the men were not present and I therefore tried to hold such discussions whenever possible. Fourthly, there were questions relating to security - in areas where tensions were high at the time of my visit, and armed exchanges had taken place in the recent past it was necessary to be sensitive to issues of safety for the people who talked to us and for ourselves. This was particularly the case when we met with members of an armed squad belonging to the CPI(ML).

#### *e) Further Interviews*

Extensive interviews and discussions with a wide range of people in Bihar contributed greatly to my understanding of the themes of this study. They included academics,

activists, administrators, politicians, journalists and many others. Other experiences were also useful in deepening my insight into the questions addressed here: of particular note were the 1995 Assembly Elections, when I interviewed a number of candidates from different parties and observed their campaigns - I also witnessed the phenomenon of 'booth-capturing' taking place at first hand in Jehanabad constituency; my visit to Belaur village, where conflicts between landowners and agricultural labourers had just led to the formation of the Ranvir Sena (see Chapter 7); and the 'Adhikar Rally' organised by the CPI(ML) in Delhi in March 1996, when I travelled with agricultural labourer and poor peasant families from their villages in Hilsa Block to the Capital.



## **CHAPTER 4: AGRICULTURE, TECHNOLOGY AND CLASS**

### **IN THE FIELDWORK AREA**

#### **Introduction**

This chapter will look at the technological changes which have occurred in Chandkura and elsewhere in Hilsa, firstly from the period when tubewell irrigation was first introduced after 1965/66 until Chandkura was surveyed in 1981/82, and secondly during the 1980s and early 1990s until my own survey was carried out in 1995/96.

One of its conclusions is that while the first period saw a process of accumulation among larger cultivators, with the extension and improvement in irrigation being accompanied by a change in the cropping pattern and the pattern of input use as well as some initial mechanisation, the second period did not see further development along the same lines. While irrigated area and per hectare fertiliser use continued to increase, in the second phase this increase represented primarily the adoption of these inputs by small and marginal cultivators cultivating less than 2.5 acres.

Irrigation has largely been extended through larger cultivators hiring out diesel pumpsets to smaller cultivators. With the electricity supplies cut off from the early 1980s onwards, irrigation costs have increased steeply, with much of the burden of the increase being borne by those who hire in irrigation facilities. Fertiliser costs have risen steeply in the 1990s with subsidies withdrawn. All this has made poor and middle peasants more dependent on the rich peasants for loans to cover consumption and input costs, which are provided at very high rates of interest. In any case, the limited supply of fertiliser, seeds and diesel at the block level is frequently cornered by rich peasants linked to the bureaucracy, who resell it at prices higher than they pay. Thus small cultivators' dependence may have actually increased as a result of their adoption of new technology, and their integration into a number of markets.

Meanwhile it appears that the rich peasants who were identified as potential 'capitalist farmers' in the early 1980s have not continued to invest their surpluses in agricultural production. While using their existing assets (tractors, threshers, diesel pumpsets) largely to appropriate surpluses produced by smaller cultivators through rent, they are involved in

moneylending and other non-productive activities, while there has been little further technological change.

The underlying question raised here is whether the conditions exist, or have existed in the past, for the emergence of capitalist farming to establish itself not simply as an observable phenomenon, but as a dominant trend, and what, in fact, these conditions might be.

### **1. Irrigation: the 'leading input'**

According to the report of the ANSISS/ILO study, 'the most important factor explaining the differences in the level of development (between villages) is the availability of the crucial input of irrigation.' (Prasad, Rodgers et al, 1988:116) Two key technological variables, the value of chemical fertiliser used per unit of land and the percentage of cultivated area under High Yielding Variety seed, were both found to be correlated with the percentage of cultivated area irrigated (op cit.:151).

The central importance given to irrigation in the report echoes much of the literature relating to the introduction of the 'new technology' (see Byres, 1972 for an early review of the literature on India).

#### *a) The Ishikawa Hypothesis*

Ishikawa (1967) analysed production conditions in a number of Asian countries in which paddy rice was the main crop. He argued that basic investment in the 'control of water' could substantially increase yields. The control of water 'implies both the supply (here defined as irrigation) and the elimination (flood control or drainage) of water in such a way as to maintain it in the crop field at the appropriate time and at an adequate level...Only when water is controlled in such a way, it becomes possible, though gradually, to emancipate agricultural production from the vagaries of nature and to place its entire process under human control' (Ishikawa, 1967:73).

Three successive roles for irrigation were identified in the technological transition from a less to a more productive 'stage' of agricultural production. Firstly, it stabilises harvest fluctuations arising from deficient or untimely rainfall. Secondly, it allows a second crop to

be introduced. Thirdly, it makes possible increased applications of fertiliser and the use of improved varieties and techniques. Ishikawa noted further that 'when the second and the third roles are to come into play, it seems that the quality of the existing irrigation facilities must often be improved' (op cit.:90-92).

Ishikawa defined irrigation as the 'leading input' on the basis that 'irrigation acts as an intermediary for making possible a shift in crop cultivation from one input-output combination to another with a higher productivity'. The 'productivity-increasing effect' of fertiliser, higher yielding varieties and improved techniques could, he argued, only be significant once improvements in irrigation had created the necessary conditions (op cit.:92). In a subsequent stage, fertiliser, new varieties and improved techniques can combine to become the new 'leading input', but even after this, as productivity increases, the leading input 'alternates between these two categories'(op cit.:181).

Ishikawa presented empirical evidence to confirm this hypothesis in two steps: firstly establishing the existence of complementarity between irrigation and fertiliser use, and secondly comparing correlations between irrigation and crop yields with correlations between fertiliser use and crop yields (op cit.:185-214). The existence of a stronger correlation between irrigation and crop yields, at least until yields have increased significantly, was taken to indicate the primary importance of irrigation.

#### *b) The Boyce Modification of the Ishikawa Hypothesis*

Boyce has attempted to test the validity of the Ishikawa hypothesis in his analysis of inter-district variations in agricultural performance in West Bengal and Bangladesh (Boyce, 1987). He observes that in this region, irrigation has played the three roles identified by Ishikawa simultaneously, rather than successively. On the basis of an inter-district comparison of cropping patterns, he also identifies a 'modified' version of the second role, in which irrigation contributes not to the introduction of a second crop, but to a change in the composition of dry season crops (Boyce, 1987:199). But he confirms Ishikawa's essential point: that nothing like the full yield increase potential inherent in HYVs and increased fertiliser applications can be secured in the absence of water control.

However Boyce argues that, 'given strong complementarity (and incomplete irrigation development)' Ishikawa's correlations are on the one hand not 'sufficient' to establish which is the 'leading input', since multicollinearity obscures the individual roles of the variables. On the other hand, they are not 'necessary' either because there are 'a priori reasons for viewing irrigation as taking precedence over the complementary inputs, fertilizer and HYVs' (op cit.:186).

According to Boyce, 'a cultivator with irrigation can obtain HYVs and fertilisers fairly easily, but the reverse is not true'. Irrigation requires fixed investment in water storage facilities, distribution channels, and for pumping equipment, whereas fertilisers and HYVs can be purchased in the current period of production, without prior investment. In addition, irrigation frequently involves indivisibilities necessitating joint use of the fixed asset by a number of producers, whereas fertilisers and HYVs are 'almost perfectly divisible'(Boyce 1987:186-187).

### *c) Economies of Scale, the Role of Consolidation, and Water Markets*

The 'indivisibility' identified by Boyce effectively creates economies of scale for irrigation. Furthermore, since the correct timing and quantity of irrigation takes on a decisive role in determining final yields when high yielding varieties and chemical fertilisers are used, the introduction of these biochemical inputs sets up immediate pressures towards the mechanisation of irrigation. In fact, an understanding of this process has been the key to debunking the 'myth' of the scale-neutrality of the biochemical part of the new technology 'package'. Byres (1981:411) argues that biochemical and mechanical innovations are inextricably interlinked, noting that 'a considerable stimulus has been given to private, power-driven tubewell irrigation - where of course there is an adequate endowment with ground water. Tubewell irrigation gives to the cultivator who can afford it far greater control over the supply of water than does canal irrigation. The spread of tubewell irrigation long precedes the advent of the "new technology". There can be no doubt, however, that the new seeds (along with fertilisers)...have provided an especially potent impetus to that spread.'

Economies of scale are particularly striking in the case of private tubewells, and pumpsets used with open wells, the main sources of irrigation in Nalanda District. The 1976 National

Commission on Agriculture noted that 'installation of a pump is economical only if the area to be irrigated is not too small' and cites a minimum area of 1 hectare (Government of India, 1976a:19). Dhawan (1977:A102) points out that this 'threshold farm size' will vary regionally according to factors like the degree of fragmentation and the level of interest rates. For shallow tubewells, he suggests that the figure rises steadily from North-west to North-east India, from 1.4 acres in Punjab and Haryana to 19.4 acres in West Bengal.

As this implies, the effectiveness with which measures for land consolidation are implemented also has a powerful impact on irrigation: according to the National Commission on Agriculture, 'in village after village in Uttar Pradesh, Haryana and Punjab, tubewells multiplied tenfold after consolidation'. (Government of India, 1976b:204-205)

The question of economies of scale may be partially resolved by the hiring out of irrigation facilities to other cultivators by those who own or control them, or the provision of irrigation water in return for payment. However, as we will see, in a highly differentiated agrarian economy, the 'water market' like other markets, may be shaped by monopoly control over resources, especially in the context of increased and time-specific demand for tightly controlled irrigation.

#### *d) Timing and Quantity and the Importance of Power Supply*

As we have noted, it is not simply quantity but timing and quality of irrigation which are of vital importance in securing a substantial increase in yields through the use of biochemical inputs. In tubewell and pumpset irrigated areas, this means that adequate power supply becomes a key factor. The cultivators' dependence on the infrastructure provided by the state is thus significantly increased.

This in itself suggests that the trajectory mapped out by Ishikawa, with successive phases of improvements in the quality of irrigation alternating with the introduction of improved farming techniques (Ishikawa 1967:121) may not be a smooth one. Improvements in the quality of irrigation may be rapidly reversed in a situation where the availability of electricity deteriorates sharply or wholesale 'de-electrification' of previously electrified areas occurs.

Diesel operated pumpsets are frequently used with private tubewells and open borings in the absence of adequate electricity. However this substantially increases the costs of irrigation. The National Commission on Agriculture noted as early as 1976 that 'nearly a third of private tubewells are diesel operated notwithstanding the fact that electric pumps are cheaper both in capital and operating cost. This situation has arisen because of inadequate and unsatisfactory supply of power. The persisting shortage of power in most parts of the country, particularly in North India where groundwater resources are abundant, has hampered the rapid growth of electrically operated tubewells and farmers keen on having their own source of irrigation have turned to the more expensive diesel pumpsets....'(Government of India 1976a:21).

#### *e) Mechanisation*

As we have argued above, the introduction of biochemical inputs - high yielding varieties and fertilisers - and the resulting importance of the correct timing and quantity of irrigation gives a direct impetus to the mechanisation of irrigation.

There is a further, indirect effect of the use of these inputs which encourages the mechanisation of other tasks such as ploughing, threshing and harvesting. Increases in cropping intensity and yields have meant increased demand for labour and have intensified seasonal peaks in this demand. Dasgupta refers to the 'bottlenecks' created because harvesting must be completed quickly in order to leave time for preparing the land for the following crop, and 'land preparation itself should be completed in a shorter time' (Dasgupta, 1977.:51). This itself has been an incentive for employers to introduce agricultural machinery, in particular tractors and threshers, in areas which have witnessed the development of capitalism in agriculture (see for example Frankel 1971; Bardhan, 1977b; Dasgupta, 1977).

While mechanical threshers clearly contribute to the release of the time constraints implicit in the use of the new technology (Byres, 1981:412), in the case of tractors there has been considerable debate concerning their overall effectiveness in this regard<sup>1</sup>. However, as has

---

<sup>1</sup> For example, Agarwal concludes that for HYV wheat cultivation, 'the "timeliness" advantage of a tractor may be slight, when the crop prior to wheat is one which can be harvested and threshed sufficiently in advance, and the land can be freed for timely wheat ploughing and sowing even on bullock plots' (Agarwal, 1978:221).

been pointed out, the decision to adopt tractors for particular operations, like other production decisions, is partly dependent on the nature of class relations. Where labourers are able to organise to demand higher wages in response to the increased demand for labour, for example, labour-displacing mechanisation may be particularly attractive to employers. Thus, 'the analysis cannot be abstracted from considerations of class relationships and class action' (Byres, 1981:413).

The impact of different types of mechanisation on overall labour use, and on the composition of demand for labour - the proportions of family labour, casual wage labour and permanent wage labour used - is discussed in Chapter 6, 'Agricultural Labour in the Fieldwork Area'.

Of particular concern to us in this chapter, however, is the question of economies of scale as it relates to mechanisation. For tractors, on which by far the largest volume of discussion has taken place, there are significant biases towards large holdings. On the one hand, their capital cost is high, so that 'only the largest size farms utilise them at efficient unit costs' (Ellis, 1993: 238). On the other, very small plots actually make it difficult for 'large, four wheel tractors to operate effectively' (Binswanger and Donovan, 1987).

The potential for tractorisation is thus inextricably linked to the process of concentration of land into larger holdings. As we will see in the following chapter 'Land Ownership and Access to Land in the Fieldwork Area', a reverse process of dispersion of landholdings has been underway in Bihar. Equally important is the consolidation of such holdings, where they are fragmented, into large contiguous plots. This is discussed further below.

A distinct but closely related problem which applies to all forms of mechanisation is the question of resource constraints. Poorer peasants face not only a shortage of capital but may be effectively denied access to institutional credit for the purchase of agricultural machinery. Access to mechanical inputs is thus inextricably related to the class of the cultivator, which is partially - though not wholly - determined by size of landholding.

A situation in which small and marginal holdings were proliferating without a corresponding increase in larger holdings would therefore be expected to present a serious barrier to the spread of mechanisation, and in the long term, to the process of expanded

reproduction in agriculture<sup>2</sup>. But there are further issues relating to the role of mechanisation in the context of relations of dependence between different classes of cultivators. These are explored in detail below.

In the following section we will consider the aggregate changes which have taken place in cropping intensity and cropping patterns, input use, and yields in Chandkura both in the period when irrigation was introduced on a large scale, and subsequently. We will then look at Chandkura's experience of technological change in the context of the aspects of the problem briefly referred to above, all of which relate to the nature of agrarian transition which may be occurring: economies of scale, differential access to irrigation and other inputs, both biological and mechanical, and increased dependence of cultivators on the infrastructure.

## 2. AN OVERVIEW OF TECHNOLOGICAL CHANGE IN THE STUDY AREA

### *a) The Spread of Tubewell Irrigation*

When explaining how agriculture has changed, older inhabitants of Chandkura and other villages in Hilsa still frequently cite the drought of 1965-1966 as the most significant turning point. Until then, agriculture was essentially rainfed. As crops failed repeatedly, cultivators in Hilsa began to adopt the new varieties of wheat being promoted as part of the Green Revolution package. This set up immediate pressures towards the mechanisation of irrigation and private tubewells began to spread rapidly among larger landowners in the latter half of the 1960s.

Nalanda district was formed in 1972 from the subdivision of Biharsharif in the south of the old Patna district. By 1977, the new district as a whole was proving a 'notable exception' to the comparatively low levels of private tubewell irrigation in the eastern Gangetic plains (Dhawan 1977:A103). By the early 1980s the ANSISS/ILO study confirmed that 'tubewells have been adopted in a big way by the Kurmis, most of them situated in...Nalanda District. There is no canal in Nalanda District. In fact Nalanda is one of the few districts where the so-called "Green Revolution" has succeeded significantly' (Prasad,

<sup>2</sup> As Patnaik (1971) notes, this process is manifested in the growth of outlay on both constant and variable capital with respect to a given land area, and, over time, a tendency towards a higher than average organic composition of capital, leading to higher productivity of land and labour.



Rodgers et al.,1988:537). According to the 1981 District Census, 62.4 per cent of cultivated area in Hilsa block as a whole was irrigated. In Chandkura itself, 'more than 50 per cent' of net sown area was irrigated at least once, and 99 per cent of irrigation was from private tubewells. (Prasad, Rodgers et al., 1988)

As Table 3 shows, by 1995-96, the percentage of Chandkura's cultivated area irrigated at least once had increased to approximately 73 per cent, close to the block average of 71.5 per

**Table 3: Some indicators of technological change in Chandkura between 1981/83 and 1995/96**

	1981/83	1995/96
Area irrigated once or more as percentage of net sown area	62	73
Area under wheat as percentage of net sown area	18	36
Yield (kgs per hectare):wheat	1,186	2,209
Yield (kgs per hectare):rice	1,977	2,723
Kilograms of fertiliser applied per hectare gross cropped area	82	185
Number of tractors owned in the village (including power tillers)	3	8

*Sources*

*1981/83 data: ANSISS/ILO study; 1995/96 data: Fieldwork*

*Note: The figure for area irrigated in 1981/83 refers to 1981 Census data for Hilsa Block as a whole as data for the village is not available*

cent for Hilsa as a whole recorded in the 1991 District Census. This appears to mirror, albeit in an exaggerated form, State-wide trends in the extension of irrigation: area irrigated as a percentage of net cropped area in Bihar rose from 28.8 per cent in 1971-72 to 38.2 per cent in 1981-82 and further to 43.5 per cent in 1991-92 (Table 4).

**Table 4: Extent of irrigation and use of fertiliser in Bihar, 1970s and 1980s**

	1971-72	1981-82	1991-92
Area irrigated as percentage of net cropped area	28.8	38.2	43.5
	1970-72	1980-82	1988-90
Fertiliser use per hectare gross cropped area(kgs)	10	20	57

*Sources*

*Irrigation: CMIE, 1995; Fertilisers: Sharma, 1996*

*b) The Power Crisis and the Spread of Diesel Pumpsets*

However, the 1980s also saw a qualitative change in the technology used for irrigation. By 1981-82, the extension of irrigation through tubewells in Chandkura had more or less come to a standstill. According to the ANSISS/ILO study, the total area improved by private tubewell irrigation in the five years preceding the study period had been only 3 per cent of the total cultivated area. In fact the spread of tubewell irrigation coincided with the advent of electricity in the early 1970s and as the study noted, by the early 1980s, the electricity supply was already sporadic. By 1983/84 it was cut off completely. And from the late 1970s onwards, there was a switch to diesel powered pumpsets as a result of the absence of electricity. In 1995-96, excluding a very marginal amount of river irrigated land, diesel pumpsets used with open borings were the sole method of irrigation in use in the village. This pattern of a shift from electric to diesel powered irrigation in the late 1970s or early 1980s is replicated throughout Hilsa. Only in one village in my survey was electricity still sporadically supplied, and in this case it was not usually available at the times of year it was needed for irrigation.

The power crisis in Bihar has clearly deepened during the last two decades. Mozoomdar (1990:28) points out that inadequate investment in power in Bihar (excluding the industrial and coalfield regions) has led to slow growth in electricity consumption. In 1965-66, per capita electricity consumption in Central Bihar was approximately half the figure for the country as a whole; by 1984-85 it was little more than a quarter of the all-India figure

(Table 5). According to Sharma, 'on a conservative basis, the State was deficient in power in relation to total requirement to the extent of at least 40 per cent in 1993-94. Most parts of the rural area of the State go without power for days together. Overwhelming majority of State and private tubewells are idle for lack of electricity. The farmers have largely changed over to diesel pumps which are costly in terms of maintenance and operating charges. The acute power crisis has affected not only the level of agricultural production but also a whole range of rural activities - processing of grains, storage, production in small rural industries etc.' (Sharma 1996:16).

**Table 5: Per Capita Electricity Consumption (kwh), Central Bihar and India, 1965-1985**

	1965-66	1977-78	1984-85
Central Bihar	30.73	41.23	44.09
India	61.33	120.73	154

Source: Mozoomdar, 1990

*c) Cropping Patterns: The Boyce Effect*

Irrigation in Nalanda was mechanised from the outset; its experience has something in common with that described by Boyce (op cit.) for West Bengal and Bangladesh in that the effects of stabilising harvest fluctuations, changing crop composition and allowing increased use of fertiliser and improved varieties were simultaneous rather than successive.

In Chandkura, the rabi crop changed significantly, both in composition and area sown, with the area under wheat increasing from negligible levels in the mid-1960s to 18 per cent of net sown area by 1981-82, partially at the expense of unirrigated crops like khesari, chana (gram) and masoor. High Yielding Varieties of rice requiring substantial applications of fertilisers were also introduced. Another significant development was the increased cultivation of onions from 1975 onwards. These require intensive application of irrigation

and other capital inputs as well as labour, and by 1981 'continual power failures' were already affecting yields. The main crops cultivated in the village were 'bhadai and aghani paddy, wheat, maize (rabi, garma and bhadai) khesari, potato, onion, gram and masoor' (Prasad, Rodgers et al, 1988:87). Yields of rice had also increased substantially: average yields in the village in 1981-82 were 1,977 kg per hectare, almost double the district average in 1970-71 (Table 3).

In terms of cropping patterns, there have been a number of further changes during the last fifteen years. Wheat cultivation has expanded further to approximately 36 per cent of net sown area at the expense of other rabi crops, notably khesari, and is now the major rabi crop, although almost all landholders continue to cultivate a small amount of khesari, chana and masoor. Onion cultivation has also increased significantly across landholding sizes: most cultivators only devote a small proportion of their land to onion growing, (which occupies less than 8 per cent of net sown area in total) but these take up a large proportion of total capital investment, with irrigation, fertiliser and labour costs per acre highest. But these cropping patterns, as we discuss later, vary considerably across landholding sizes.

However there is now only one paddy crop in the village - the aghani(kharif) crop. The cultivation of bhadai paddy and maize, which were mainly rainfed, stopped in the early 1980s as a result of a climatic shift: whereas previously the pre-monsoon rains came in June, they now don't begin until the second week of July. And the cumulative effect of the use of tubewells and pumpsets has been that in the weeks preceding the rains, the water table goes down far lower than it used to.

Yields of wheat have increased steadily and in 1995-96, average yields were 2,209 kg per hectare, almost double their 1981-82 levels of 1,186 kg per hectare. Rice yields have also increased, but less dramatically, to an average of 2,723 kg per hectare (Table 3).

#### *d) Fertiliser Consumption*

Bihar's state-wide consumption of chemical fertilisers increased by 494,000 tonnes between 1971-72 and 1987-88. This increase was the fifth highest state-wise, after U.P. Punjab, AP and Maharashtra. (CMIE 1989). Whereas the spread of irrigation occurred mainly in the 1970s, the bulk of this increase in fertiliser consumption took place in the

1980s, with fertiliser use per hectare gross cropped area increasing from 10kg in 1970-72 to 20kg in 1980-82 and then to 57kg in 1988-90 (Table 4).

The use of fertiliser in Nalanda district was already well above the state average at 31.1 kg per hectare gross cropped area in 1979-80. But by 1987-88 there had been a dramatic increase to 133 kg per hectare gross cropped area (CMIE 1993).

Calculations based on the ANSISS/ILO study data for 1981-82 give a figure of approximately 82 kg per hectare gross cropped area in Chandkura. At the time of my study in 1995-96, it was more than double this level, at 185kg per hectare gross cropped area (Table 3).

Fertiliser costs have increased significantly since 1990-91. Wholesale fertiliser prices went up by nearly 50 per cent between 1990 and 1992 alone after remaining virtually unchanged throughout the 1980s (Government of India 1992). This was mirrored in the prices paid by cultivators in Bihar which are shown in Table 6.

In terms of actual costs to the cultivator, cost of cultivation studies for Bihar show that fertiliser costs adjusted against the farm harvest price index remained almost constant between 1972-72 and 1983-84 (Government of India 1991, 1996b; Jha, 1997). By 1995-96 however, I found that cultivators in Hilsa were paying approximately Rs 10 per kg nutrients (NPK), as compared to the rates of between Rs 5 and Rs 6 which prevailed during the entire period from 1980-81 to 1988-89 (Table 6). In real terms, the post-1991 increase meant that in Hilsa, a maund (40kg) of rice was now the equivalent of only one 50kg sack of urea where previously it had been worth two sacks<sup>3</sup>. Prices of fertiliser on the black market, on which small and marginal cultivators without connections with the administration are the most dependent, are substantially higher.

---

<sup>3</sup> It has also been observed that at an India-wide level, the policy of retaining part of the subsidy on nitrogenous fertilisers but removing them altogether on phosphatic and potassic fertilisers has created imbalances in the composition of fertiliser use, reducing their effectiveness (Bhaduri and Nayyar, 1996:108).

**Table 6: Fertiliser Prices in Bihar, 1980-1994**

Year	Retail price of fertiliser in Rs/Kg NPK (current prices)
1980	5.98
1981	5.98
1982	5.57
1983	5.57
1984	5.57
1985	5.98
1986	5.98
1987	5.98
1988	5.98
1989	5.98
1990	8.63
1991	8.39
1992	8.39
1993	8.64
1994	8.64

*Source: data compiled by the Indian Council of Agricultural Research*

At a statewide level, Sharma notes that 'in the post reforms period fertilizer consumption shows a marginal declining trend. The fertilizer consumption which was nearly six lakh tonnes in 1991-92 fell to 5.95 lakh tonnes in 1992-93 and further to 5.85 lakh tonnes in 1993-94. While the decline during 1992-93 can be partly attributed to drought conditions in that year, the role of fertilizer price hike cannot be discounted. It is worth noting that fertilizer consumption further declined in 1993-94 despite normal weather conditions' (Sharma:1996:14).

In the absence of time series data, it is not possible to confirm whether fertilizer use declined in Chandkura during the 1990s. Levels in 1995/96 - at 185kg per hectare gross cropped area - were considerably higher than the district-wide levels of 133 kg per hectare recorded in 1987-88. Discussions with a cross section of cultivators in Chandkura and other villages in Hilsa suggested that rather than reducing fertilizer use, farmers have increased expenditure in order to maintain the input package they have adopted. For larger cultivators, this has meant a fall in surpluses accumulated, while for small and marginal cultivators (whose adoption of biological inputs has accounted for a substantial proportion

of the increase in fertiliser use since the early 1980s), it has reinforced indebtedness and dependency, a phenomenon which is discussed later in this chapter.

#### *e) Fragmentation and Consolidation*

As we have noted, the consolidation of land held in numerous scattered plots into contiguous holdings plays an important role in facilitating the technological changes associated with a transition to capitalism in agriculture. A number of observers have emphasised the impact of consolidation in those parts of the country where it has been carried out most effectively - notably Punjab, Haryana and Western U.P. (see for example Government of India, 1976a and b, Agarwal, 1971, Byres, 1988).

The extent of fragmentation of landholdings in Chandkura is striking. The average number of plots per operated holding in 1995-96 was extremely high at 6.6, compared to an all-Bihar figure of 2.8 and an all-India figure of 2.7 acres in 1991-92 (Government of India, 1996: A19) The average size of plots was highest among those operating 5 acres and above, but even this group operate plots of an average size of only 1.3 acres. In addition plots are frequently irregular in shape. There may be a number of reasons for this phenomenon. In particular, population density - and the dependence of the population on agriculture - is high, while the quality of the land is variable. This means that inheritance usually involves not only division of holdings but fragmentation into smaller and smaller plots to ensure that each heir receives a comparable share of lands of different quality and type. At the same time, tenancy in this area involves the leasing out by the larger landowners of small plots to tenants of whom the majority are small landowners themselves, and tiny plots are also leased out as partial payment to attached labourers, leading to further fragmentation of operated holdings.

Land consolidation has been a stated goal of agricultural policy at both the all-India and the state-level since before Independence, and an Act for compulsory land consolidation had been passed in Bihar in 1956. However the National Commission on Agriculture noted in 1976 that twenty years later only 3 per cent of the total cultivable area of the State was reported to have been consolidated. (Government of India, 1976b). There have been no state-sponsored attempts at land consolidation in Hilsa development block. In fact, Bihar's Land Consolidation Department has now been formally abolished (Jha 1997: 108).

Jannuzi argues that such policies were in any case modelled on conditions in Punjab and inappropriate to Eastern India where 'to have diverse holdings was favoured by many, in circumstances where the quality of land was not homogeneous, as a way of ensuring, for example, that it would be possible to plant different crops in different seasons...This was a rational means by which cultivators could seek to maximise their economic security.'(Jannuzi 1996:12).

But the persistence of this pattern is clearly an obstacle to the emergence of capitalist farming, in which rich peasants seek to maximise profits rather than security. As Byres (1988:184) notes, 'For rich peasants, who may be proto-capitalists, fragmentation is likely to constitute a significant barrier to accumulation. Development of the productive forces faces a powerful constraint: whether that development takes a purely bio-chemical or a mechanised form (that is, on the one hand, for example, new seeds, the application of non-organic fertilisers, new forms of non-mechanised irrigation; on the other, tractors, tube-wells, etc.) Fragmentation poses especially difficult problems for mechanisation.'

And under the conditions prevailing today, cultivators of different sizes in Chandkura and elsewhere in Hilsa consider having one's land in one place a definite advantage - for example, Rajaram Mahto, a Kurmi rich peasant of Chandkura who was particularly proud of his skills as a farmer told me that while he was not the largest landowner in Chandkura, he was the only one to have so much land in one place - all his twelve acres were in one plot - and that this was something he had achieved in his lifetime through judicious buying and selling of land. Other cultivators in the village also commented on this as something both remarkable and desirable.

In fact, there are a few instances of groups of landowners elsewhere in Hilsa - big and middle peasants - attempting consolidation themselves - but these were reported to have failed because of the uneven quality of land and the economic inequalities between those exchanging land. Overall it seems that without state intervention, awareness among landholders of the disadvantages associated with fragmentation has not in itself been a powerful enough force to overcome the barriers to consolidation and the impulses to further sub-division of holdings. But if the state itself to a large extent reflects the nature and interests of the dominant classes within the region, this lack of intervention by the state



also reflects the fact that a strong rich peasantry with capitalist tendencies, capable of acting as a 'class-for-itself' and pushing through policies which would facilitate its own development, has failed to emerge in Bihar, despite the initial indicators noted in the early 1980s.<sup>4</sup>

### 3. CLASS AND TECHNOLOGICAL CHANGE

#### *a) Irrigation*

As we have noted, there has been a substantial extension of irrigated area in Chandkura since the early 1980s. In 1995-96, 83.3 per cent of those households cultivating any land in the village used irrigation facilities. By this time, excluding a very marginal amount of river irrigated land, diesel pumpsets used with open borings had completely superseded tubewells and were the sole method of irrigation in use in the village. 48 per cent of those irrigating the land they operated owned their own pumpsets, while an equal proportion hired pumpsets in from other cultivators, and the remainder borrowed them.

Diesel pumpsets are the most widely distributed of mechanical inputs, with four of the 64 sets in Chandkura being owned by households who hire out casual labour and also own small amounts of land. Despite this however, the classwise distribution of pumpset owners is a skewed one. There were none among attached labourers (all attached labourers were categorised as cultivating households for this purpose, since their contracts include a small plot of land to cultivate). 21 per cent of casual labourers who also cultivate owned pumpsets, compared to 41 per cent of poor middle peasants, 62 per cent of middle peasants, 75 per cent of big peasants and all self-cultivating 'landlord' households.

As Table 7 shows, diesel pumpsets are also unevenly distributed among landholding size groups. 29 per cent of those cultivating less than 2.5 acres, and 33.8 per cent of those cultivating less than 5 acres, own diesel pumpsets. By contrast all households cultivating five acres or more own their own pumpsets.

---

<sup>4</sup> The existence of such a class was vital to the effective implementation on consolidation in Punjab, Haryana and western U.P. For example Byres (1988) has analysed the role of Charan Singh as an "organic" intellectual of the rich and middle peasantry' who as such was instrumental in bringing about a number of key reforms, including land consolidation, in Uttar Pradesh.

This implies that different classes in the village have substantially differential access to irrigation. On the one hand, financial constraints prevented casual labour and poor middle peasant households from investing in pumpsets. On the other hand, with a strong correlation between class and size of operated landholdings, economies of scale in many cases made it unviable for smaller cultivators to purchase their own pumpsets, while even those with relatively larger holdings found that their pumpsets were not being fully utilised.

Significantly, the acquisition of pumpsets in Chandkura, which began in the mid-70s, had tapered off by the mid-1980s: 75 per cent had been bought in or before 1985, and none after 1992.

The problem of small cultivators' lack of access to irrigation as well as that of economies of scale appears to have been partially resolved by those who own pumpsets hiring them out to those who do not. The fact that in Chandkura diesel pumpsets are used not with tubewells but with fairly densely scattered open borings allows them to be moved from plot to plot. But this is a resolution which involves the extraction of a surplus from the smaller cultivators by the larger cultivators.

This extension of irrigation through hiring out to small and marginal holdings is in fact the major factor accounting for the further increase since 1981-82 in cultivated area irrigated at least once, to approximately 73 per cent in 1995-96. Those hiring in pumpsets are overwhelmingly small and marginal cultivators: they cultivate an average of 1.35 acres, (as compared to an average of 3.89 acres cultivated by pumpset owners), and 74 per cent cultivate less than 2.5 acres.

With owners charging Rs 10-20 per hour excluding diesel, the irrigation 'market' in Chandkura involves a significant transfer of surpluses produced by small and marginal cultivators to pumpset owners. Shah and Ballabh (1997:A186) calculate that the average full cost of one hour's pumping with a 5hp diesel set in 1995-96 (including diesel and lubricant cost, repair and maintenance, wear and tear and interest on capital) varied between Rs 14.82 and Rs 16.82. Excluding the cost of diesel, which in Chandkura is purchased separately by the 'buyer', this comes to approximately Rs7.00. Thus pumpset

**Table 7 : Distribution of cultivating households in Chandkura by diesel pumpset use and landholding size group (acres)**

Land Cultivated	Pumpset not used	Pumpset owned	Pumpset hired in	Pumpset lent by employer	Pumpset borrowed	TOTAL
less than 0.5 acres	24(51.1)	1(2.1)	16(34)	5(10.6)	1(2.1)	47(100)
0.5-0.99 acres	2(6.9)	10(34.5)	17(58.6)	0	0	29(100)
1-2.49 acres	0	20(60.6)	13(39.4)	0	0	33(100)
2.5-4.99 acres	0	16(50)	16(50)	0	0	32(100)
5 acres and above	0	17(100)	0	0	0	17(100)
All landholding sizes	26(16.5)	64(40.5)	62(39.2)	5(3.2)	1(0.63)	158(100)

Source: Fieldwork

Note: Figures in brackets indicate percentage of landholding size group by category of diesel pumpset use

owners are charging rates of between 1.4 and 2.9 times the full cost of pumping; even though, as Shah and Ballabh point out, where most owners invest in pumpsets primarily to meet their own irrigation needs, any price higher than the incremental pumping cost should be regarded as profitable.

Table 8 shows approximate annual costs of cultivation for a typical household cultivating 2.5 acres in Chandkura in 1995-96. It can be observed that charges for hire of agricultural machinery (diesel pumpset and threshers) represent more than 40 per cent of total input costs (excluding wage labour) for such households, and more than three times the meagre surplus which they are left with.

As Table 8 indicates, such households purchase biochemical inputs (chemical fertiliser and pesticides) and hire in mechanical inputs, but operate at the margin of subsistence. Rental charges for diesel pumpsets along with other input costs make it impossible for small and marginal cultivators to accumulate any significant surpluses as a result of increases in yields.

**Table 8: Annual costs of cultivation in 1995/96 for a typical household cultivating 2.5 acres (approx.1 hectare) in Chandkura (1995/96 prices)**

1	Irrigation: diesel pumpset hire diesel	Rs900 Rs350
2	Fertiliser	Rs1,650
3	Pesticide	Rs50
4	Thresher hire: rice wheat	Rs300 Rs250
5	Total input costs excluding hired labour	Rs3,500
6	Hired Labour costs	Rs2,000
7	Total input costs including hired labour	Rs5,500
8	Value of gross output	Rs20,400
9	Net crop income(if all land owned)	Rs14,900
10	Subsistence income	Rs 14,500
11	Surplus of net crop income over subsistence level	Rs400

Source: Fieldwork

Note:

Row 6: There is considerable variation in hired labour costs between households. This partly depends on the number of male and female household members engaging in cultivation. The figure given here is calculated on the basis of two male and two female household members cultivating which was the average for this landsize group. The value of labour and other inputs as well as output also depends on the technology used: the figures for gross output and labour costs cited here refer to a household using a hired diesel pumpset and threshers.

Row 9: The value of net crop income has been calculated by subtracting total input costs (i.e actual outgoings) from gross output. This figure would be much lower were imputed costs (e.g. of owned land and family labour) taken into account as in the Ministry of Agriculture's Cost of Cultivation Studies (Government of India, various years).

Row 10: The level of subsistence income for 1995-96 is based on that calculated by Haque (1996) for 1990-91, adjusted for inflation (see Parikh[ed.], 1997) in the intervening years.

Other classes of cultivators in Chandkura and elsewhere in Hilsa also identify the increased costs of irrigation as one of the principal factors currently preventing them from accumulating agricultural surpluses on any significant scale. In the mid-1970s it was observed that the per unit cost of irrigation with a diesel tubewell was approximately twice that of irrigation with an electric tubewell, while the figures for mobile diesel pumpsets were even higher (Dhawan, 1977: A98). Today this differential has increased further, with operating costs of diesel pumpsets now almost four times as high as that of electric tubewells. Frequent shortages of diesel also force pumpset users to buy diesel on the black market, pushing costs up even further.

However, the disappearance of electricity itself cannot account for the slowing down of any process of capitalist development which may have been occurring. Rich peasants in other regions which have experienced similar problems have not responded in the same way. In a study of the 'farmers' movement' in U.P., Patnaik and Hasan note that western U.P, the centre of 'growth of capitalist production', 'lagged surprisingly in the number of electrified villages...with only 30 per cent of villages having access to electricity, close to the state average. Evidently, machinery is to a large extent powered by other fuel sources.' (Patnaik and Hasan, 1995:285). In fact, along with remunerative prices, a reliable power supply and the waiving of electricity bills were key demands of the 'farmers' movement' in U.P (op cit.:290-292). This political expression, primarily by rich peasants, of their demands as capitalist farmers, which can be observed in different forms in Punjab, U.P. and Haryana can be contrasted with the absence of any such movement in Bihar and underlines the difference in the extent to which capitalist farmers have developed as a class. The fact that rich peasants in central Bihar have now reverted to non-productive forms of accumulation suggests that the relatively more favourable price and infrastructural conditions of the 1970s may have played a key role in generating short-term development, which, however, the underlying structure of the agrarian economy and society could not sustain.

If electrification in the early 1970s was one of the factors which led to the development of surplus accumulating, investment oriented rich peasants in Hilsa, de-electrification and the switch to diesel pumpsets has been a key factor in the emergence of a class of poor peasants whose adoption of capital intensive technology ties them into both wider input and

produce markets and highly localised credit markets. This phenomenon is discussed further below.

*b) High Yielding Varieties and Fertilisers*

The situation in Chandkura underlines Rao's observation that biochemical inputs, while they may be technically scale-neutral, are 'not resource-neutral' (Rao 1975:44). As Boyce argues, fertilisers and High Yielding Varieties (HYVs) are, unlike irrigation, 'divisible', But Boyce's further argument that access to irrigation is resource-(or class-) determined (Boyce 1987) appears to apply equally if not more so to fertilisers and HYVs in Chandkura.

A study of Nalanda district carried out in the early 1980s noted that 'in paddy, almost all the old varieties have been replaced by new ones' (Kumar:1986:264). More recent data suggests that only high yield varieties of wheat were cultivated in Bihar by the early 1990s (Sharma, 1998).

As one would expect, therefore, few if any cultivators in Chandkura grow the indigenous varieties of paddy and wheat which were prevalent before the introduction of the first HYVs in the late 1960s. However, since the late 1960s, new 'improved' varieties have continued to be introduced at regular intervals, and supplies of these reach the Hilsa Block offices from time to time. But high prices, exacerbated by Block-level corruption, place barriers to the adoption of these new higher yielding seeds by small and marginal cultivators.

In 1981-82, 24.6 per cent of cultivating households in Chandkura asserted that the HYV seeds they obtained were 'inadequate'(Prasad, Rodgers et al. 1988: 574). In 1995-96, this figure had increased to nearly 75 per cent. In fact in Chandkura and all the other villages surveyed, cultivators identified the lack of availability and high prices of fertiliser, seeds and diesel as a major problem. They complained that seeds and chemical fertilisers were sold by the 'block' (Block Development Officer's office) to wholesalers, who charged them black market rates and often adulterated them. Even when seeds were available from the 'block', they were often considered too expensive for smaller cultivators at Rs8/kg for wheat seed (the prevailing price of wheat is Rs4/kg).

As a result, less than 25 per cent of small and marginal cultivators cultivate more recently introduced varieties. The differences in yield as well as quality between 'old' and 'new' high yield varieties are marked. For example, the yield of 'Lal Bahadur' wheat (i.e Lal Bahadur Shastri, one of the early HYVs) grown by most small and marginal cultivators was only a quarter of that of the 'Upiya' (U.P. 302) variety which some richer cultivators had acquired from the Block and begun cultivating during the last three years. The yield of the more prevalent HYV rice Mansoori was only 60 per cent of that of higher yielding varieties cultivated in the village, such as 'Bauna' rice.

However chemical fertilisers were considered a necessity by all cultivators and were almost universally used in rice as well as some rabi crops and vegetables. The lowest dose of chemical fertiliser applied to rice crops observed in the village was still more than 70kg per hectare. This was despite a sharp increase in prices in the 1990s and problems of availability which often compelled cultivators, especially smaller cultivators, to pay black market rates. In fact, as in the case of irrigation, the increase in fertiliser use in Chandkura since the early 1980s is linked to its adoption by smaller cultivators. My study does not reveal any significant positive or negative correlation between landholding size and fertiliser use.

This pattern of heavy use of chemical fertilisers with recycled seed which is prevalent among small and marginal cultivators might be expected to lead to diminishing returns to capital invested. I carried out a small sample of 14 rice cultivators in Chandkura, which does show a higher correlation between the use of 'new' high yield variety seeds and yields than between fertiliser use and yields. But our data does not enable us to confirm this hypothesis. What is clear is that, in a situation of almost universal adoption of biochemical inputs, the difference in yields between the HYVs used by poorer cultivators, and those to which richer cultivators have access reinforces a pattern of inter-class disparities in the net cost of cultivation.

### *c) Mechanisation*

The ANSISS/ILO study found significantly higher levels of investment in 'modern agricultural capital goods' among the dominant landowners in Chandkura when compared

to other groups across Central and North Bihar. Excluding irrigation, this referred to threshers, power tillers and tractors. According to Census data on tractor ownership, in 1971 there were no tractors owned in Chandkura itself and only five in Hilsa block as a whole, while in 1981 there were three tractors in the village and twenty in the block (District Census Handbook, Patna 1971, Nalanda, 1981). Altogether in 1995-96, there were eighteen threshers, three power tillers and five tractors owned in Chandkura. Nearly all of these had been bought in the late 1970s or early 1980s.

However, two points should be noted in this context. Firstly, in comparison to areas which have already witnessed agrarian transformation on the lines predicted for Chandkura in 1981-82, the incidence of use of these machines was and has remained low. For example, Agarwal (1983:36) cites Cost of Cultivation Studies carried out in Punjab in 1971-72, which found that 41.24 per cent of cultivators of HYV wheat used tractors or a combination of bullock ploughs and tractors for ploughing. For threshing, 71.71 per cent used mechanical threshers. In Chandkura in 1995-96, only 15.2 per cent of cultivators of HYV wheat used tractors or a combination of bullock ploughs and tractors for ploughing, while 29.27 per cent used mechanical threshers (Table 9). Both sets of data refer to both owned and hired implements.<sup>5</sup>

**Table 9: Percentage of HYV wheat cultivating households using tractors and mechanical threshers - Punjab 1971-72 and Chandkura 1995-96**

	Punjab 1971-72	Chandkura 1995-96
Percentage of households using tractors	41.24	15.2
Percentage of households using threshers	71.71	29.27

*Sources*

*Punjab: Agarwal, 1983; Chandkura: my fieldwork*

---

<sup>5</sup> Landholding size and distribution is clearly a key issue here - while Chandkura, and the district as a whole, has a relatively high ratio of tractors to operated area, the actual incidence of access to tractors for cultivators is determined by both the relatively small average size of holdings and the uneven distribution of resource endowments among cultivators, and can thus be better assessed by looking at the number of households using them.



Secondly, while tractors are by far the most expensive of the items categorised as 'modern agricultural capital goods', their presence should not necessarily be seen as indicative of changes in the process of agricultural production. Significantly, the only tractor bought in the last ten years had been purchased (along with a trailer) by one of the biggest landowners in the village exclusively for the purpose of hiring out for construction and transport work in the surrounding villages. The use of tractors primarily for non-agricultural purposes by landowners owning 10 acres and above is now a common phenomenon in Hilsa, and in fact throughout Central Bihar.

During the decade from the early 1970s to the early 1980s, it was these landowners who had access to a large proportion of the institutional credit available for the purchase of agricultural machinery. Policies relating to such credit (as well as to agricultural prices) are themselves determined by class action - in this case by political assertion by rich peasant, 'proto-capitalist' farmers in certain regions of India (Byres 1981:416). But as we have suggested, rich peasant-based development Central Bihar never reached the point where capitalist farmers became a genuine 'class for itself' capable of such action to further its interests as capitalists. Essentially they were passive beneficiaries of such national level policies. They frequently took loans for one or more tractors. In the same period, construction of houses in villages, district towns and in Patna emerged as a major avenue for investment of the surpluses being generated by the spurt in productivity in agriculture. Thus it was possible to realise substantial returns to an investment in a tractor by hiring it out for transporting building materials. In addition, the poor condition of most roads and the inadequacy of public transport in the region means that tractors can also be profitably hired out for transporting produce from villages to local markets, as well as for carrying passengers. Drivers are employed by the owners - in Hilsa, they are usually from other villages, and belong to the same Kurmi caste as the owners. (This is discussed in more detail in Chapter 6, 'Agricultural Labour in the Fieldwork Area').

On the other hand, tractors are not completely absent from agriculture in Chandkura. They are hired out by their owners to other cultivators in this and neighbouring villages for ploughing. The use of tractors - by 15 per cent of cultivating households in 1995-96 - was spread across landholding sizes and surprisingly, if the biggest size group cultivating 10 acres or more (and including all the tractor owners) is excluded, the use of tractors is highest in the size group 0.51 - 0.99 acres (Table 10). The reason for this is that it is those

cultivators who cannot afford to keep bullocks and do not own ploughs who resort to hiring in tractors for ploughing, at a rate of Rs 300 per acre during peak seasons, despite the fact that the size and shape of their fields makes them difficult to plough effectively using a tractor. With the increased use of HYVs, the period within which ploughing must take place has become shorter. As a result ploughs and bullocks are not available for hire in this period. In some cases larger landowners continued to use ploughs even when owning tractors.

Cultivators point out that power tillers, which are smaller, are in fact more suited to conditions in Chandkura.<sup>6</sup> But relatively few were available for hire. Although market prices of power tillers (at Rs 80,000 in 1995) are only a fraction of those of four-wheel tractors (Rs 215,000 in 1995), and running costs are not significantly higher, they are hired out at higher rates of Rs 400 per acre.

All this suggests that given the pattern of small landholdings and the extent of fragmentation, the role which tractors can play in the transformation of Chandkura's agriculture is limited. They are clearly not displacing wage labour on any significant scale (small cultivators do their own ploughing). Rather their owners - the large landowners who were given loans to buy them in the 1970s and early 1980s - are now using them to extract surpluses from marginal and small cultivators by renting them out.

#### 4. 'RENTAL MARKETS' FOR TECHNOLOGY

Neo-classical literature on the mechanisation of agriculture has assigned a significant role to rental markets in overcoming the constraints to the mechanisation of smaller farms. (Binswanger, 1984; Binswanger and Donovan, 1988). For these markets to emerge, it is suggested, 'the technically optimal farm size for machine ownership must exceed the sizes of numerous small farms' (Binswanger, 1984:12). However, 'within small regions rental markets for time-bound and synchronic operations are harder to establish because of sharp conflicts about timing among potential users'(op cit.:14).

---

<sup>6</sup> According to Binswanger and Donovan(1987:17) 'power tillers (two-wheel or garden tractors) have their greatest cost advantage in the wetland paddy cultivation of smallholders. The small plots make it difficult for large four-wheel tractors to operate effectively, and the tillage implement of the power tiller, the rotary cultivator, is ideal for puddling, the preparation of a fine seedbed out of a soil drenched in water.'

**Table 10 : Distribution of cultivating households in Chandkura by tractor use and landholding size group (acres), 1995/96**

Landholding size group	Tractor neither used in cultivation nor owned	Tractor owned	Tractor hired in	TOTAL
less than 0.5 acres	43(91.5)	0	4(8.5)	47(100)
0.5-0.99 acres	23(79.3)	0	6(20.7)	29(100)
1-2.49 acres	29(87.9)	0	4(12.1)	33(100)
2.5-4.99 acres	30(93.7)	0	2(6.3)	32(100)
5-9.99 acres	9(81.8)	0	2(18.2)	11(100)
10 acres and above	0	5(83.3)	1(16.7)	6 (100)
All landholding sizes	134(84.8)	5(3.2)	19(12)	158(100)

*Source: Fieldwork*

*Note: Figures in brackets indicate percentage of landholding size group by category of tractor use*

The reality which this statement appears designed to gloss over is that it is precisely for such time-bound operations - such as seed-bed preparation and irrigation in HYV cultivation - that small cultivators are most dependent on renting in machinery, and where, in consequence, machine owners can extract high monopoly rents. And consistent with the neo-classical approach, these writers do not take account of the way the operation of rental markets is shaped by regionally specific patterns of unequal distribution of resources, and underlying this, the differential relations to the means of production of 'sellers' and 'buyers' of technology. In practice, evidence suggests, rental markets may be most likely to be 'established' not under conditions of perfect competition, but where there is a potential for exploitation through the appropriation of surpluses produced by the technology 'buyers' by the 'sellers.'

Other observers of agrarian change however have focussed on this exploitative aspect of rental markets for the means of production in agriculture. Particularly relevant in this context is the work of the so-called Agrarian Marxists carried out in the Soviet Union during the 'NEP' phase of the 1920s. Their research was carried out in a period where land had already been redistributed and could no longer be bought or sold. The leading

figure of this school, L.N. Kritsman argued that, despite this, 'a process of expropriation of the agricultural surplus was taking place between peasant farms in a systematic way' (Cox, 1984:57) based on ownership of scarce working animals and farm stock which could be hired out by those with 'excess' capacity to 'exploit weaker farms and...accumulate capital' (op cit.:12-13).

An interesting aspect of the situation described by Kritsman was that the peasant hiring out working animals and stock actually worked himself on the land of the peasant hiring them in, so that 'the hidden capitalist appeared in the guise of a worker' (op cit.:13); the peasant who owned the means of production, and performed the manual labour necessary to operate it, actually received the greater share of the crop sown and harvested by the owner of the land.

Kritsman's work is also of relevance to any study of a relatively homogeneous peasantry in the process of differentiation. His focus is upon relations between peasant households; he found that the majority of peasant households were engaging in transactions of the kind described - either exploiting others or being exploited - thus calling into question the existence of a category of self-sufficient 'middle peasants'. According to Cox (1984), the key to Kritsman's ideas is the concept of class relations which in themselves only imply tendencies towards class formation: on any one farm, one could find elements of exploiting others' labour alongside elements of being exploited by others.

While the question of peasant class differentiation has of course been an important focus for observers of South Asian agrarian change, there has been relatively little discussion of the specificities of rental markets for technology in the region. Some consideration has however been given to the question of 'water markets' i.e. the hiring out of equipment for irrigation purposes. For example Boyce (1987:242) observes that the spread of private shallow tubewells in Bangladesh 'has been accompanied by the emergence of a market for irrigation water, with a variety of payment systems including fixed cash charges on a per-acre basis and payment in shares of the crop, ranging from 22 to 33 per cent...The monopoly positions of tubewell owners and the uncertainties of water demand and supply, however, place limits upon the market's scope for resolving the indivisibility problem.' Surplus appropriation may also occur indirectly through the operation of interlinked markets - thus a recent study of diesel pumpset use in North Bihar found that water sale

was enmeshed in a complex of power relations between buyers and sellers, and was seen among other things as 'an opportunity for leverage over another family in order to secure more land or labour at periods of peak demand' (Wood, 1994:83).

The wider literature on agrarian markets in South Asia as well as my own data suggests that Kritsman's approach is a useful one in so far as it focusses upon the question of exploitation in relations of exchange between peasant households. However, the existence of such exploitation based on monopoly rents is clearly not enough to indicate a transition to capitalism. It may equally imply the contrary. It is significant in this context that Kritsman specifies the need to identify farms who possess not only 'adequate' but 'excess' means of production in relation to land, and who are therefore in a position to hire out animals and stock, because the term 'excess' becomes a particularly ambiguous one in the context of changing technology.

On the one hand, economies of scale may mean that machinery only becomes viable if it is hired out for part of the time by its owner. On the other hand - and this appears to be the case with some tractor owners in our survey - owners may not actually be making full use of the machinery on their own land at all, and its main importance may be as a source of rent. The question thus arises as to whether the appropriation of surpluses through monopoly rents can be said to indicate nascent capitalist development in agriculture if the 'exploiter' is not oriented towards the investment of such surpluses in agricultural production. Further, as Wood's findings (op cit.) confirm, benefits to 'sellers' of technology may accrue largely from the interlocking of markets which is facilitated by the resilience of pre-capitalist relationships.

Against this background of differing approaches to the issue of rental markets for technology, we will briefly examine a recent study of the operation of water markets in Muzaffarpur District of North Bihar (Shah and Ballabh, 1997). Significant similarities with our fieldwork area as well as its uncritical acceptance of the neo-classical paradigm make this study worth discussing in some detail.

As in Hilsa block, irrigation in the six villages surveyed by Shah and Ballabh was based on a system of diesel engine-operated pumps and borewells. The proportion of operated land irrigated too was comparable to that in my study area at 75.8 per cent (op cit.:A187). And,

as in Chandkura, land was irrigated by almost exactly equal numbers of pump owners on the one hand, and 'water buyers' on the other, but with pump owners concentrated among larger landholders.

The authors set out to test the value-laden hypothesis that 'in regions with abundant and well-recharged aquifers, groundwater markets can transform a stagnant traditional agriculture into a modern, booming economy with powerful beneficial productivity and equity impacts'. And with an enthusiasm which echoes the optimism expressed about Central Bihar in the early 1980s, they conclude that 'pump irrigation markets have emerged as a robust and dominant irrigation institution serving as virtually the sole powerhouse energising north Bihar's new found agrarian dynamism' (op cit.:A183).

The evidence presented to support this is that water markets in all six villages had acquired a high level of both 'breadth' and 'depth', although the 'depth' varied considerably between villages. Here 'breadth' refers to extension to a large proportion of cultivators and cultivated land; 'depth' means buyers making 'intensive use of water' through adopting 'green revolution technologies' and cropping intensities and patterns 'consistent with high quality irrigation' (op cit.:A185).

The authors did however find 'inefficient' monopoly rents being charged by the water buyers. Observing that most pumpset owners in the six villages invested in pumpsets 'not...for selling water but for their own irrigation needs', they argue that 'they should be willing to provide pump irrigation service at any price higher than their variable cost of fuel and some component of wear and tear cost which is significant for diesel pumps'. In reality, as in Chandkura, the price charged was much higher - over 1.25 to 1.8 times the level of the average full cost and 2.5 to 3 times the incremental pumping cost (op cit.:A186).

The impact of this is analysed in terms of two effects, which are treated separately: a 'pure distributional' effect in which pumpset owners can claim a significant proportion of the surplus produced by water buyers, and a 'pure productivity' effect in which buyers reduce their use of irrigation facilities leading to reduced lower levels of output and income than would be the case in a 'competitive' water market. There are several problems with this approach. Firstly, the separation of the two conceptually is itself problematic, assuming as

it does that distribution has no impact upon production. Clearly the appropriation of a large proportion of the surplus by the water owners - who in this case own an average of twice as much land as non-owners and are mainly 'high caste and affluent farmers, especially bhumihaar and yadava communities' -has important implications for production patterns in the medium and long term, which can only be assessed by looking at the patterns of reinvestment of these surpluses.

Secondly, the 'productivity effect' of monopoly pricing is argued to be negligible on the basis that 'if anything, water buyers have higher cropping intensities, grow more of their land with crops considered good, and in general achieve higher crop yields per acre'. This finding leads the authors to comment almost euphorically that 'the pump irrigation markets in north Bihar have got perfected and refined to a stage where it might be difficult to improve upon their impacts to any significant respect!' (op cit.:A188). However, as an extensive body of literature on farm size and productivity confirms, (e.g. Sen, 1962; Sen, 1975; Bharadwaj, 1974b; Roy, 1981) higher cropping intensities and yields have long prevailed among small and marginal cultivators of the kind who make up the bulk of 'water buyers' in the study. In fact, the introduction of 'new' technology is likely to counteract this 'inverse relationship' between farm size and output per acre considerably. What this relationship reflects is not 'dynamism' but a desperate attempt to survive, usually through the intensive exploitation of family labour. Further, as we argue below, for these cultivators, the more extensive cultivation of crops 'considered good' (i.e. high value cash crops) often reflects a 'compulsive involvement' in the market, which has only been reinforced by their dependence on inputs like irrigation supplied at high monopoly prices by larger landowners.

In the next section, we look in more detail at the implications of technological change for small cultivators in Chandkura and elsewhere in Hilsa.

## 5. SMALL PEASANTS AND TECHNOLOGICAL CHANGE

### *a) Subsistence production using the new technology*

As we have seen, much of the spread of the 'new' technology which took place in the 1980s and early 1990s is accounted for by its adoption by those cultivating 2.5 acres or less.

Today, a significant proportion of small and marginal cultivators in Chandkura are essentially subsistence peasants operating at a high technological level. The use of chemical fertilisers and pesticides, diesel pumpsets and threshers (usually hired in) and tractors (invariably hired in) is observed on landholdings where almost the entire product is consumed by the household. This is made possible because a large proportion of small and marginal cultivator households either hire out agricultural labour or have a non-agricultural source of income. Thus for example Brijnandan Prasad, who both owns and leases in marginal holdings of less than an acre, sells his produce only in order to meet the costs of next year's lease. He pays for fertiliser and other inputs as well as non-crop consumer staples from income earned as a cart driver. Janadhari Paswan, an agricultural labourer who leases in less than half an acre sells only onions, which are invested in next year's lease; the rest of the crops are entirely consumed by the household, though they are often insufficient to meet subsistence needs and foodgrains also have to be purchased.

#### *b) The role of fixed rent tenancy*

This also raises questions relating to the nature of tenancy in the area, which will be examined in the following chapter. 22 per cent of small and marginal cultivators (those cultivating less than 2.5 acres) lease in all or part of the land they operate. Increased adoption of new technology among this group has led to a rapid increase in the level of fixed rents, which are established through bidding for one year contracts at the beginning of the agricultural year. At the same time, there is no direct incentive for landowners to provide any of the inputs, which are entirely provided by the tenant. Tenants point out that they can rarely lease in the same land for more than a year at a stretch and that this prevents them from making any improvements to the land. Cropping patterns and the use of inputs also varies from year to year depending on the quality of land leased in. With notable exceptions, these tenants are leasing in to produce for household subsistence needs - however the scale of rent payments further compels them to adopt technology which will ensure a marketable surplus to meet the costs of the following year's lease.

#### *c) Credit, marketed surplus and cropping patterns*

Another significant feature of small-scale cultivation in Chandkura is the role of traditional credit: loans are frequently taken from larger landowners in the village to cover costs of



fertilisers and other inputs. These loans are not distinguished from consumption loans, and rates of interest are high, ranging from four to ten percent per month (see Chapter 7 for a detailed discussion of credit relations). Small and marginal farmers are usually compelled to sell their produce immediately after the harvest when prices are lowest in order to pay off these debts and meet production costs. This suggests that a substantial part of the marketed surplus in Chandkura is in fact a 'distress surplus' marketed under duress. This has been contrasted with the genuine 'commercial surplus' marketed by profit-oriented producers: whereas a rise in price generates a growth in the latter, the 'distress surplus' will decline as prices rise, since the demands in question can be met by a smaller volume of sales (Narain, 1988:79).

These compulsions are also reflected in variations in cropping patterns according to landholding size. These are mainly observed during the rabi season. As landholding size declines, the proportion of cultivated land allocated to higher value crops grown for sale such as wheat and onions increases. Small and marginal cultivators grow less khesari, gram and masoor and are more dependent on the market for these consumer staples. Interestingly, only small cultivators operating less than 2 acres were found growing green vegetables for sale in the village, although several larger cultivators operating 5 acres or more grew vegetables for household consumption and thus did not have to depend on the market.

#### *d) Non-viability of small and marginal holdings*

A recent study of the 'sustainability of smallholder agriculture' (Haque, 1996) which collected farm-level data from villages in selected districts of Andhra Pradesh, Haryana, Rajasthan and Bihar in 1990-91 includes data from two villages in Patna district, where conditions are comparable to those in Hilsa block (which adjoins the Patna-Nalanda border)<sup>7</sup>. In Simra village, marginal cultivators (operating holdings averaging 0.32 hectares) and small cultivators (operating holdings averaging 1.21 hectares) cultivated mainly rice in kharif and wheat in rabi. In Niyamatchak, the 'relatively less developed' village of the two, they cultivated rice in kharif and linseed, gram, and other pulses in rabi.

---

<sup>7</sup> A cluster analysis carried out as part of the ANSISS/ILO study (Prasad, Rodgers et al., 1988) used population growth and density, urbanisation, tenancy, cropping intensity, use of high-yielding varieties of paddy and tubewell irrigation as variables to categorise Bihar districts. Patna, Nalanda and Beguserai districts formed one cluster (op cit.:45).

The author offers two definitions of 'viability' of a farm: 1) where any crop or farm activity shows net positive returns; 2) where the farm generates sufficient income not only for meeting the consumption needs of an average household, but also for saving and investment in future development (Haque, 1996:73).

The study concludes that 'marginal farms could no where ...generate sufficient income from crop farming alone to stay above poverty line. Marginal farms were found to be non-viable according to both criterion-1 and criterion-2' (op cit.:74). In all the four villages of Bihar studied, the net crop income of both marginal as well as small farms was below the subsistence level calculated at Rs 11,000 p.a.(op cit.:57). It is further noted that 'marginal and small farmers depended mainly on other sources of income for their subsistence'(op cit.:132). However in the case of marginal farmers, even when this income was taken into account, the households were operating below the subsistence level in most of the villages, including those in Patna District.

In the following section, we will look at two studies which have attempted to reassess the impact of the 'new technology' and have questioned - with very different results - the conclusions about its impact which were drawn in the initial stages after its introduction. We will consider whether either of these have any relevance for the region under discussion here.

## **6. The 'Income Diffusion' hypothesis**

In a recent study of Uttar Pradesh, Sharma and Poleman (1994) set out to demonstrate that, contrary to the generally accepted view that the 'Green Revolution' technology has led to polarisation and growing inequality, 'small farmers exhibited a remarkable tendency to catch up with the big farmers', and income disparities have actually been reduced (Sharma and Poleman, 1994:19). The authors identify 'three major mechanisms of income diffusion' in operation in Meerut District in western U.P.: off-farm diversification, dairying, and the cultivation of labour-intensive, high-value crops (op cit.:21). Of these three phenomena, there is little evidence of the first two in Hilsa Block. However, as we have seen, there has been some increase in the cultivation of onions, a labour-intensive, high-value crop. Can this be regarded as a potential mechanism of income diffusion? Let us

first compare conditions in Jamalpur village in Meerut, selected by Sharma and Poleman to demonstrate this effect, with those in Chandkura and other villages in Hilsa Block.

Firstly, while 'the economic diversification in evidence in the other villages (in the study) is not so apparent in Jamalpur' (op cit.:212), 'off-farm income' still contributes nearly one fifth of total income of marginal households (defined as those operating less than 1 hectare). This employment is not of the casual and seasonal type available in Hilsa, (see Chapter 6, 'Agricultural Labour in the Fieldwork Area') but includes permanent employment in industrial units in a nearby urban centre, Hapur. A source of regular monthly income allows marginal cultivators to purchase more of their food requirements from the market, freeing land for the cultivation of high value potatoes and vegetables for the market.

Secondly, although the average size of the marginal landholdings in Jamalpur is less than 0.5 hectare, effective land consolidation measures in the region mean that fragmentation of already insubstantial holdings into scattered tiny plots is less of a problem than in Hilsa.

Thirdly, power is generally available in Jamalpur, and irrigation is by electric tubewell. Costs of irrigation thus differ substantially from those in Hilsa, with slightly higher installation costs but much lower running costs in Jamalpur. This may be a key issue affecting the spread of onions, which require intensive watering. Landlords providing irrigation to tenants is widespread in Jamalpur but rare in Hilsa.

This suggests that several infrastructural factors may have created a more favourable environment for the cultivation of high-value crops by marginal cultivators in Jamalpur than that which exists in Hilsa today. But a more fundamental question relates to the extent of accumulation and the nature of market involvement among these cultivators.

Bharadwaj has linked the nature of exchange and market involvement with the rural household's position within the relations of production. Of marginal cultivators, she writes that 'Not having enough circulating capital to produce even their subsistence, they have to rely on credit... this element of compulsive involvement of the poorest farmers is reflected in their cropping pattern, their land and labour utilisation as well as the higher degree of monetisation of inputs and outputs'. (Bharadwaj 1974a: A12)

This situation is investigated further in Bharadwaj's study based on Farm Management Surveys of the 1950s, which is worth quoting at some length:

'The "very small" cultivators possess very little land relative to the available family labour and depend on hiring out labour to supplement their income from land. The landless who lease-in a tiny piece of land in search of some secure income fall into this category as well. Very often they possess no bullocks and have to hire their services for payment or in exchange for labour...Also, if they have debt liabilities, the output or a part of it may have to be disposed of soon after harvest for debt repayments. Quite often, they are compelled to raise consumption loans or even loans to provide circulating capital on onerous terms of repayment - the own rate of interest on such loans turns out to be very high. The rates of hire, whether of bullock labour or equipment, work out, on an average, higher for the very small farmers....The explanation for the higher rate for both (bullock and human labour) could be that during peak seasons when the very small farmers hire in these services, the rates are higher than at other times. With regard to labour, another reason could be the somewhat specialised nature of the operations for which labour may have to be hired. Furthermore, there could be diseconomies of buying inputs in smaller quantities. ...We note that the dependence on cash expenditure is very high in their case. It declines for the holdings in the next highest size classes and picks up again on the large holdings. The higher index of monetisation of the large holdings is qualitatively a different phenomenon from that on the very small ones. While in the former case it reflects a high degree of commercialisation of production, in the latter it is more a reflection of the distress conditions under which production is carried out and market involvement assumes a compulsive character.' (Bharadwaj, 1974b:62)

This description summarises many aspects of the conditions of small and marginal cultivators in Hilsa forty years later, which we have referred to above. The question which arises is whether the increased use of biochemical and mechanical inputs by these cultivators has actually changed this basic pattern, or whether, as I would argue, it has reinforced it. The adoption of these inputs is consistent with subsistence farmers' strategy of maximising 'not the net returns but the gross yield' (Bharadwaj 1974:62), even though it may tie them more inextricably into 'compulsive' market involvement. If anything, it is increased income from wage employment which has alleviated this dependence slightly. But as we will see, changes in agricultural wages have resulted from specific struggles

while the non-agricultural employment available is not organically linked to sustained agricultural development, as in the small industrial units of western U.P.

Bharadwaj's analysis also allows us to examine the question of the cultivation of labour intensive high-value crops by marginal cultivators both in Hilsa and in Sharma and Poleman's study from a different angle. She points out that 'given their resource base, (small farmers) are severely constrained by the need to raise cash resources even in order to keep the cycle of production going. This may explain why farmers in this group are seen to allocate a higher proportion of their area to more lucrative (i.e. yielding higher gross revenue per acre) although risky, cash crops, especially if the crops...require a high labour input per acre and do not require any specific investments in equipment etc. Also it is quite often possible to get credit more easily for cash crop production on the condition of repayment in kind. Land can be more easily leased in and circulating capital or a part of it borrowed from the landlord on a contract to raise a cash crop on the farm' (Bharadwaj 1974:64).

This also raises the question of sharecropping tenancy. In Jamalpur, 'The cultivation of high-value crops is largely restricted to the big and medium landholders' but 'several marginal landholders have devised strategies to overcome the constraints of land, capital and assured irrigation and now produce the crops themselves.'(Sharma and Poleman 1994:211). The most significant of these strategies turns out to be entering into sharecropping contracts with medium or large landholders in which the landlord provides the irrigation, and other inputs (excluding labour) are shared. Two points should be noted here.

Firstly, this kind of sharecropping, which has emerged in areas where the impact of the 'new' technology has been most pronounced, has been analysed by other writers as a form of labour exploitation by landowners rather than, as Sharma and Poleman suggest, a source of accumulation for tenants. Srivastava describes the evolution of the sharecropping system in Chaukra, another village in Western U.P., into one with a high degree of control by the landlord over the production process. The landlord bears a high proportion of the costs and receives a large share of output. These arrangements are again mainly made for labour-intensive crops, and are confined to the kharif season when non-agricultural employment is low. Net daily returns to sharecroppers are sometimes well

below daily wages. The tenant is 'virtually a piece-rated labourer and landlords can 'sidestep the problem of downwardly rigid money wages'. (Srivastava 1989:381-382).

Secondly, in this context, it is significant that there is a very low incidence of sharecropping in Hilsa, despite the fact that the conditions for this form of labour exploitation appear to exist. In fact sharecropping has actually declined with landlords in Hilsa preferring the security of fixed rents paid at the beginning of the contract to investing in the production of high-value labour intensive crops through sharecropping contracts. As we will see, landowners in Hilsa have not been able to counter wage demands by introducing 'new' forms of labour exploitation via tenancy. The relationship between the nature of tenancy and labour relations is explored further in Chapter 6 below.

## **7. The 'Arrested Green Revolution' hypothesis**

The second hypothesis emerges out of a brief but significant discussion of a village in Ludhiana district, the heart of the 'Green Revolution' in Punjab. The author had carried out a detailed study of the village in 1970 (Mamdani, 1972); on his return five years later he found that 'long heralded as the vanguard of a capitalist agrarian order, these peasants appear to be changing course in mid-stream. Parasitic, unproductive capital once again threatens to dominate and become a fetter on agricultural production in Manupur' (Special Correspondent, 1975:944).

According to Mamdani, as the market price of fertilisers and oil used in tubewells increased, the 'least prosperous of the rich peasantry' was compelled to seek loans to meet rising production costs. As a result, the 'upper section' of the rich peasants, who had money-surpluses in mid-season, began to 'branch off' into moneylending. As institutional credit via the IADP dried up, interest rates on private long-term loans rose rapidly. These loans, whose duration was usually two years, were 'taken to purchase land, fertilisers or machinery'. Mamdani cites one such rich peasant-turned-moneylender as explaining that an acre of land cost Rs 20,000, and the gross yearly product on it would be Rs4-5,000. But by loaning out Rs 20,000 he could make Rs 4,000 even at a relatively low rate of interest, and with minimum effort. As a result, moneylending was 'a growing tendency in the village'. Mamdani concludes that 'should this tendency continue to operate, and there seems at the present no reason to believe it will not, the same class structure that existed in

the forties will be reproduced at a slightly higher technical level of production'. (op cit.:945)

There are clearly several flaws in this analysis. Firstly, for demand for credit to remain at such high levels, one section of the peasantry must continue to require loans not only to cover fertiliser and irrigation costs but for expanding their operations through productive investments in land and machinery, implying a continuing dynamism within agriculture. However, if such investments are assumed to be profit-maximising, they could not continue if, as is suggested, profits from the land purchased would not be sufficient to pay off the loan.

By contrast, in Hilsa, as we have noted, production loans to poorer peasants from richer ones are generally to meet the costs of inputs like fertilisers, pesticides and diesel and are treated in the same way as consumption loans. These loans are smaller and shorter-term, although interest rates are substantially higher than those in Mamdani's study. In this case, even if the marginal product of one particular input, such as fertiliser, is lower than the interest rate, it is part of a package, which, as we have seen small cultivators are essentially compelled to adopt. With many of the creditors hiring out family labour as agricultural labourers, creditors may also benefit from interlocking markets and thus, unlike those in Mamdani's model, rich peasants do not have to be assumed to be maximising profits in the credit market alone.

More importantly, with hindsight it appears that the 'tendency' identified by Mamdani was not powerful enough to become a dominant 'trend' under the given conditions which were relatively favourable to the emergence of capitalism. The dominant form of accumulation in Punjab remained a productive one, facilitated by the acquisition of land - through leasing in as well as purchase - and machinery. Thus both land concentration and the organic composition of capital continued to increase<sup>8</sup>.

---

<sup>8</sup> See for example Sucha Singh Gill (1988) who notes that between 1970-71 and 1980-81, the area under individual operational holdings of 10 hectares and above increased by 87.8 per cent, and that under holdings of 4-10 hectares increased by 45.9 per cent, while the area under marginal holdings of less than a hectare fell by 32 per cent. He confirms that 'a section of peasantry, having greater command over land and resources, has been transformed into capitalist farmers, further pointing out that this section 'own capital assets such as tractors, threshers, pumpsets etc' out of proportion to the share of land they control (Gill, S.S., 1988:2167) Interestingly however, a recent study suggests out that 'informal credit markets' have survived under these conditions, with 'commission agents' dealing solely in crops as collateral emerging as a major source of credit (Gill, A., 1996).

In Central Bihar however, the situation is very different. As we have suggested, the combination of several related factors - the failure of land reforms, extreme inequality in the distribution of resources, the proliferation of small and marginal farmers, a class of poor peasants dependent on richer peasants for inputs and credit, and the virtual collapse of the state infrastructure, has reinforced the channeling of surpluses into unproductive avenues. Moneylending is today only one of a range of such avenues of accumulation for the richer peasants who were identified as emerging capitalist farmers in the early 1980s.

Uniquely favourable conditions in the 1970s clearly did generate capitalist tendencies among this group - our hypothesis is that what was a powerful 'trend' in Punjab, was, to use Lenin's term, simply a 'moment' in Central Bihar. However to test this further we need to look at patterns of land distribution in Bihar during the last 25 years.



## CHAPTER 5: CHANGING PATTERNS OF LANDOWNERSHIP AND ACCESS TO LAND IN THE FIELDWORK AREA

### **Introduction**

More than 80 per cent of those defined as main workers<sup>1</sup> are engaged in agriculture in Bihar, a state whose population density is, at 497 persons per square kilometre, almost twice the all-India average. Population density is much higher in the North and Central Bihar plains - Nalanda district, where my study was located, has 846 persons per square kilometre according to the 1991 Census. Combined with a 23.5 per cent growth in population between 1981 and 1991, these figures (see Table 11) are enough to confirm that the distribution and use of land is a key question for Bihar's future. However, my thesis also aims to test a specific hypothesis to which changes in land distribution have a particular relevance: to what extent has the nascent peasant-based capitalism observed in parts of Central Bihar in the early 1980s come to a standstill in the intervening decade and a half?

This chapter looks briefly at how Marxists have analysed land concentration in the context of the development of capitalism in agriculture, and at debates relating to size of holdings, scale of operations and changes in land distribution over time in the Indian context (these have also been touched upon earlier, in Chapter 1). It goes on to examine changes in quantitative land distribution patterns, in the inequality of land distribution, and in the extent and nature of tenancy, both at a macro level and in the fieldwork area.

**Table 11: Population density, population growth and dependence on land**

	Nalanda	Bihar	India
Population Density (persons per sq. km) 1991	846	497	267
Population growth (percent) 1981-91	22.05	23.49	23.5
Percentage of main workers engaged in agriculture, 1991	83.32	80.62	74.9

*Source: Census of India, 1991*

<sup>1</sup> Main workers are defined as those who have worked for at least six months or 183 days during the reference period of one year. This seems to have led to substantial underestimation of the worker-population ratio, and in particular of numbers of agricultural labourers (see Chapter 6 for a discussion of the reasons for this). The extent of dependence on agriculture is thus likely to be even higher than these figures suggest.

## **1. Capitalist development and the concentration of landholdings : the Marxist approach**

Integral to Marxist analysis of the development of capitalism is the concentration of the means of production in the hands of the capitalists, a process which simultaneously leads to the emergence of a class of 'free' workers - free 'in the double sense that they neither form part of the means of production themselves, as would be the case with slaves, serfs etc., nor do they own the means of production, as would be the case with self-employed peasant proprietors.' (Marx, 1976:874).

This implies that the concentration of landholdings in the hands of the dominant class (whether this class is a newly emerging one, or a pre-capitalist dominant class transforming itself) is a key aspect of the development of any form of capitalism in the agricultural sector.

In 'The Development of Capitalism in Russia', Lenin identified the emergence of a 'peasant bourgeoisie', who 'concentrate in their hands the bulk of the purchased and the rented land'(Lenin, 1956:53). His study of the Russian peasantry written in 1896-99 revealed 'the presence of all those contradictions which are inherent in every commodity economy and every order of capitalism: competition, the struggle for economic independence, the grabbing of land (purchasable and rentable), the concentration of production in the hands of a minority, the forcing of the majority into the ranks of the proletariat, their exploitation by a minority through the medium of merchant's capital and the hiring of farm labourers'(op cit.:172). On the process of peasant class differentiation, he wrote 'the emergence of property inequality is the starting-point of the whole process, but the process is not at all confined to property "differentiation." The old peasantry..is being completely dissolved, it is ceasing to exist, it is being ousted by absolutely new types of rural inhabitants - types that are the basis of a society in which commodity economy and capitalist production prevail. These types are the rural bourgeoisie (chiefly petty bourgeoisie) and the rural proletariat - a class of commodity producers in agriculture and a class of agricultural wage-workers.'(op cit.:174)

As Lenin himself emphasised, a large number of factors affect the extent and speed of this polarisation in any given case, and in fact determine the specific form or 'path' which

agrarian transition is to take. These include the nature of the pre-capitalist social formation; the rapidity with which changes in the productive forces are occurring and the means by which they are spread; the scarcity or otherwise of land in relation to population; the extent and direction of state intervention (and by implication, the relationship of the state with classes which may have contesting interests); and the relationship between agrarian transition and capitalist industrialisation.

Clearly however, if Bihar in the 1980s witnessed the continued development of the nascent 'peasant capitalism' identified at the beginning of that decade, one would expect to see substantial changes in the pattern of control over land, reflecting increasing concentration of this control in the hands of the potential capitalists. This we will test in the present chapter.

## **2. Landholding size, scale and class in India**

As the discussion above suggests, the processes of concentration of land and of class formation have been regarded as closely interlinked in Marxist analyses of agrarian change. But at any given point, the relationship between landholding size and class is often not a straightforward one.

Kritsman's work on the Soviet Union in the post-land redistribution phase, when land could not be bought or sold, underlined the importance of inequalities in productive assets other than land in the process of peasant class differentiation (Cox, 1984: Kritsman's work has been discussed above in Chapter 4 'Agriculture, Technology and Class in the Fieldwork Area'). But Utsa Patnaik's was the first systematic critique in the Indian context of the assumption that landholding size could be used as a proxy for class in the context of the development of capitalism in agriculture (Patnaik, 1971, 1972, 1987). Patnaik argued that 'only in a stagnant agriculture with uniform techniques can the size of holding be taken as a proxy for scale of operation: as capital intensification by particular groups of cultivators takes place, the identification of scale with size becomes more and more unsatisfactory. Clearly, a small holding which is intensively cultivated with high levels of inputs, output and labour productivity, may well represent a larger, more capitalist scale of operation than a large, extensively cultivated low productivity holding; and this is true even when gross sown rather than net sown areas are considered' (Patnaik, 1971: A128).

She suggested that given this, 'much better indicators of scale of operation than size, are (a) the value of capital stock, and (b) the annual value of output' (op cit.:A128) and further argued that, notwithstanding 'some conceptual and empirical problems', it was not 'rate of profit per acre' but 'rate of profit on capital advanced' which could indicate the relative profitability of different farms and of agriculture vis-a-vis alternative avenues of investment such as industry, moneylending and trade, and thus whether any given farmer was acting as a profit-maximising capitalist (op cit.:A129)<sup>2</sup>.

In the context of Bihar, the findings of the ANSISS/ILO study carried out in 1981-83 also lent support to Patnaik's approach to size and scale. Using a class categorisation which 'does not depend directly on land area owned or cultivated, but only on the way the household utilises labour and land' (Prasad, Rodgers et al., 1988:74) and has much in common with Patnaik's labour exploitation criteria, the authors found 'middle' and 'big' peasants in the sample to be considerably (although not randomly) scattered across landholding sizes.

Recent observers who have confirmed the relevance of Patnaik's critique include Parthasarathy who suggests that, at an all-India level, two decades on from the early indications of capitalist development and the introduction of 'green revolution' technology, 'land as a measure of the share of large farms is inadequate in the context of growing capital intensification of farms'(Parthasarathy, 1991:A70).

However, while bearing these conceptual points and empirical examples in mind, I would argue that landholding size remains a significant indicator of class position in the context of Central Bihar.

In Patnaik's own study of peasant class differentiation based on a survey of landholdings of below 15 acres in Haryana, she notes that 'for some variables, such as the possession of modern powered equipment, the area under high-yielding varieties and under high-value crops, a 'peakedness' is observed in an intermediate acreage class (5-10 acres). This cannot be explained in terms of farm size, but becomes explicable only in terms of the fact that the majority of middle and rich peasant holdings happen to fall in that particular acreage

---

<sup>2</sup> As described in Chapter 1, Patnaik later elaborated a method of class categorisation based on the labour exploitation criterion which did not depend at all on landholding size (Patnaik 1987).

range.'(Patnaik, 1987:205). While Patnaik, whose main purpose here is to establish the importance of other criteria than land, does not explore this coincidence further, it does give us a clue to a way that landholding patterns might be incorporated into an analysis of class in a transitional agrarian economy, while going beyond a simplistic equation of size with scale or class.

Firstly, ownership or other forms of control over land as the means of production was clearly one of the key determinants of class position in the various social formations which pre-dated the development of capitalism in agriculture in India. As Patnaik has pointed out, under conditions of relatively 'uniform techniques', size is indeed closely related to scale of operations; further, a household's access to land crucially affects the extent to which its members can exploit others or are themselves exploited (whether via the direct exploitation of labour power, rent, or debt).

This relationship does not disappear in the early stages of capitalist development; in Central Bihar (as I argue) capitalist development has not been completely absent, but it has certainly not followed a linear path and thus the persistence and perpetuation of pre-capitalist relations and patterns - including the relationship between class and landholding size - can be expected to be especially marked. As Prasad, Rodgers et al. put it, 'land is the most important of all assets. It is not only the most important source of economic power in the village economy, but confers tremendous social and political benefits. True for India as a whole, for the Bihar countryside it is even more true'(Prasad, Rodgers et al.,1988:457)

Secondly, it follows from this that landholding size can be expected to have remained closely related to caste, which can be regarded, to use Kosambi's phrase, as 'class at a primitive level of production (Kosambi 1970:50). And it may well relate to class not only in the survival of pre-capitalist correlations, but in the process of the formation of new, potentially capitalist classes. This is because, as Kosambi's definition implies, different castes have historically had not only differing access to land and other productive resources, but radically different approaches to production. For example 'intermediate' castes such as Bihar's Kurmis, Koeris and Yadavs were essentially self-cultivating peasant groups as distinct from the 'upper' castes (e.g. Brahmans, Bhumihars and Rajputs) who extracted surpluses from the labour of tenants through leasing (or sub-leasing) out land,

and/or through usury, and refrained from participating in manual labour. The former may thus for a whole complex of both economic and cultural reasons, be more oriented towards productive investment in agriculture, and specifically the adoption of new technology, when favourable conditions arise.

In this context, it is worth briefly reminding ourselves of the findings of the ANSISS/ILO 1981-83 study of Bihar. For the survey as a whole, average land cultivated per household rose steadily with agrarian class; the only exception being that 'landlords' (defined as all households leasing out any land) cultivated marginally less on average than 'big peasants'. Caste was also closely correlated with landholding size (see Table 12).

The study identified one group in particular as having the potential to 'lead' a transition to capitalism in Bihar's agricultural sector. This group, concentrated in Central Bihar's Patna and Nalanda districts, were intermediate caste - predominantly Kurmi - peasants employing a combination of wage and family (including female) labour, and using tubewell irrigation.

**Table 12: Mean land cultivated per household by class and caste in the ANSISS/ILO study of twelve villages in Bihar, 1981-82**

Class	Mean land cultivated per household(acres)	Caste	Mean land cultivated per household(acres)
Agricultural Labour, not tied	0.75	Scheduled Caste	0.66
Agricultural Labour, tied	0.88	Lower Backward	1.09
Poor middle peasant	1.25	Other Upper Backward	1.97
Middle peasant	2.61	Koeri	n.a.
Big peasant	4.53	Yadav	2.99
Landlord	4.3	Kurmi	3.69
Non-agricultural	0.05	Bhumihar and Rajput	4.37
All households	1.92	Brahmin and Kayasth	3.9
		Muslims	1.43
		All households	1.92

Source: Prasad, Rodgers et al., 1988

In summary, the study found that this group of households were at the forefront in the installation of tubewells which were the major source of assured irrigation, and in the adoption of High Yield Varieties and the use of fertilisers. While this group cultivated anything between 0.5 and 10 acres, and overall it was found that 'the extent of innovation which was witnessed in the area of biological technology has yet to unfold in the realm of

mechanisation'(Prasad, Rodgers et al, 1988:549), the larger landholders among the group also had the highest value of machinery, productive assets, and capital investment in agriculture, and obtained more and larger 'modern' (institutional) loans than any other group. Kurmi peasants were characterised by relatively high values of marketed output per acre, and these values were substantially higher for larger landholdings.

In fact, in an interesting parallel with Patnaik's data on Haryana referred to above, the authors found that 'the value of modern capital goods, an important indicator of accumulation, is the highest among the Kurmis...and in the land size category of 5 to 10 acres (op cit.:546).

Thus while larger landholdings clearly cannot be equated with a more capitalist mode of operation, the likelihood of a relationship between the two variables, with more capitalist oriented farmers concentrated in a particular landholding size-group, (in this case an intermediate one), needs to be taken into account.

The above discussion refers to cross-sectional observations comparing landholdings of different sizes, but it also obviously has implications for the question of changes over time in land distribution between holdings, and its relationship with peasant class differentiation. Utsa Patnaik's approach is consistent with the process of concentration of land in the hands of capitalist farmers over time posited by Lenin. But the extent to which this has actually been occurring in the Indian context has also been a subject of debate.

For example, in the article cited earlier, Parthasarathy goes on to observe that '...recorded data at the all-India level does not suggest that advances in technology are associated with growing centralisation and consolidation of land in large farms' (Parthasarathy, 1991:A70).

A specific example is provided by da Corta and Venateshwarlu in a study of Andhra Pradesh. They report that 'with the introduction of the new technologies in the early 1970s, the more entrepreneurial landowners...were more interested in developing existing land than in acquiring additional land, by converting dry land near wells to wet land with machine powered pumping sets and by intensifying their use of chemical fertilizers and pesticides. Indeed, while some land was resumed for tenants for cultivation by hired-in

labour, much more was sold to tenants, especially in the remote hamlets, in order to finance this land development'(da Corta and Venkateshwarlu, 1997:15).

Several points arise here. Firstly, it goes without saying that in India capitalist development in agriculture has remained extremely regionally uneven (see for example Bharadwaj, 1982; Banerjee and Ghosh, 1988; Srivastava, 1989b). The absence of evidence of concentration in all-India level data cannot be taken to imply that such concentration is not occurring in areas (often confined to particular districts of particular states) where technological change is most dramatic. As we will see, the wide variety of processes at work (even within a single area) have meant that a number of all-India level indicators suggest that a process of dispersion rather than concentration of land is taking place. At the same time, certain phenomena associated with capitalist development such as leasing in by larger landholders have been powerful enough to make their mark even on the all-India level data, and are clearly in evidence in the dramatic growth of inequality in the distribution of operated land in certain states.

Secondly, if capitalist tendencies are developing among cultivators currently concentrated in an intermediate landholding size group, the initial phase of accumulation of land by this group will not necessarily manifest itself as overall land concentration. Srivastava for example argues that 'in regions where feasible opportunities exist...and where the dominant landholders are not production-oriented, the intermediate groups of cultivating peasantry may show greater dynamism' (Srivastava 1989b:23). He further notes that for the period 1972-1982, 'several states...show an unambiguous decline in inequality in asset ownership...these results are again consistent with the hypothesis of relatively more dynamic investment performance by lower/intermediate groups'(op cit.:24)<sup>3</sup>.

Thirdly, there are questions relating to the operation of markets in land (both lease and sale). In a fully developed capitalist market, concentration of land is inevitable in the context of development of the productive forces, because introduction of new technology sharply increases differences in productivity between different holdings. This is clearly the

---

<sup>3</sup> While, as the above discussion suggests, other valuable assets such as agricultural machinery may be distributed differently from land, land remains the 'most important' component in total assets for landowning households (Patnaik, 1987:91). The ANSISS/ILO study found that the value of land as a percentage of total value of assets ranged from 36 to 75 per cent across the twelve Bihar villages surveyed (Prasad, Rodgers et al., 1988:488).



effect of da Corta and Venkateshwarlu's 'entrepreneurial farmers' converting 'dry land' to 'wet land' in Andhra Pradesh. While in the relatively short term, they may achieve this by investing the proceeds of land sales in machinery, the net effect in the long-term will be to push down the rate of profit on those holdings which do not have access to irrigation. If a capitalist market in land has developed, this will result in the gradual concentration of land in the hands of the technologically more advanced farmers, whether through purchase, or leasing-in<sup>4</sup>. The fact that, in reality, many areas have seen the persistence of small-scale holdings operating at a low technological level alongside capital-intensive large scale farming simply serves to underline the incomplete and distorted forms in which capitalist development has occurred in India.

It is also worth noting that in da Corta and Venkateshwarlu's example, land does appear to be changing hands on a significant scale. As we will see, in contrast to this, the ANSISS/ILO study revealed the almost complete absence of a land market in Bihar. The persistence of this pattern would clearly have significant implications for the future of capitalist development.

### **3. Changes in land distribution patterns in Bihar: is land concentration occurring?**

In empirical terms, concentration of landholdings in the hands of the largest landholders may be observed as:

- an increase in the average size of the landholdings in the largest size-group;
- an increase in the average size of all landholdings;
- a decline in both the numbers and the area operated in the 'middle' groups of landholders;
- in the longer run, an absolute decline in the number of small and marginal holdings; in the short run, an increase in these numbers at the expense of the middle groups.

---

<sup>4</sup> Boyce gives an interesting example of the effect on land distribution in Bangladesh once irrigation facilities had been acquired by a minority of cultivators: 'if a plot of land lies in the command area of an irrigation source owned or controlled by someone else, its implicit price is higher for the 'waterlord' than for the actual owner of the land, if the former can ensure that the land is irrigated while the latter cannot. The water market imperfection translates into a land market imperfection, creating a tendency for land sales...In the meantime, however, the desire to wrest control of additional land within the potential command area would give the dominant individuals an incentive to withhold water from the owners of such plots' (Boyce, 1987:243-244)(As Boyce's study also underlines, while thorough-going capitalist development in agriculture implies the emergence of a market in land, the existence of such a market is not a sufficient condition for capitalist development).

Given the fact that leasing in may be as important a mechanism of land concentration as purchase of land, operated land should be considered in each case.

However, it should be noted that there may be specific forms of capitalist development occurring which actually militate against these trends, particularly in the short run. Of particular relevance to this study is the possibility that capitalist tendencies may be manifested among the intermediate rather than the largest landholding size classes, leading to an accumulation of land held by this group.

Further, capitalist tendencies may be compatible with a persistence, or even in some cases a short-term increase, in sharecropping tenancy in which investment-oriented larger landholders lease out to small, marginal or landless households while maintaining tight control over the production process (Byres 1981:431; Srivastava 1989a), resulting in dispersion rather than concentration of operated land.

Again, land ceilings, especially where they are effectively implemented, may mean that the decline of the largest landholders counteracts the effect of concentration of land distribution in the hands of capitalist farmers.

Conversely, some of these effects may equally be the result of processes not associated with capitalist development or even overall concentration. An increase in landlessness and in marginal holdings may signify 'pauperisation' but not necessarily 'proletarianisation' in the sense of the emergence of a 'doubly free' class as described above (Patnaik, 1971). A dramatic example of this was the large scale eviction of small tenants witnessed in Bihar during the six years following the introduction of the Zamindari Abolition Bill in 1947. Evictions took place from no less than one million acres in the state, and affected seven million people (Sengupta, 1982:25). The evicted tenants were transformed not into agricultural labourers but into unprotected bataidars (sharecroppers), a class which 'emerged almost overnight after Independence' (op cit.:25).

Again, division of holdings through inheritance, which is also prevalent in Bihar, may mean that medium sized holdings are being transformed into small and marginal ones without any concentration occurring.

In this section we use state-level data to attempt to establish which, if any, of the processes referred to above have been at work in Bihar in the 1970s and 1980s. Comparisons with trends observable at an all-India level, as well as with those of other selected states, are used to highlight the specificities of Bihar's experience.

An important source of data on changing patterns of land distribution at the all-India and state levels has been the National Sample Survey Organisation (NSSO). In particular, NSS rounds eight (1954-55), seventeen (1960-61), twenty-six (1970-71), thirty-seven (1981-82) and forty-eight (1991-92) have contained detailed landholding surveys. The following section looks primarily at data from the 26th, 37th and 48th rounds.

The estimates generated by these rounds are generally comparable in terms of definitions. However it should be noted that whereas in the 26th and 48th rounds, estimates were obtained directly from the data collected for the entire agricultural year, in the 37th round (1981-82) estimates were generated on the basis of data collected for the major crop season of the reference agricultural year. This means that in enumerating 'operational holdings', no account was taken of holdings which had carried out agricultural production only during the minor crop season (Government of India, 1996:15).

*a. Changes in land distribution by size groups: the growth of marginal holdings and the absence of concentration in Bihar*

At an all-India level, the period 1970-71 to 1991-92 has seen a substantial increase in the share of smaller holdings - in terms of both numbers of households and area operated - at the expense of larger holdings. Bihar began this period with a much greater concentration of both holdings and area in the smallest size-groups. Subsequently this pattern has been reinforced by a shift of both holdings and operated area into the very smallest size group, at the expense of all other size groups. These processes and their implications are examined in more detail below.

Total operated area in the rural sector has remained largely unchanged during the seventies and eighties. But the average size of a holding at an all-India level has declined by 20 per cent from 1.67 ha in 1981-82, to 1.34 ha in 1991-92. In Bihar, it has declined by 25 per cent from 1 ha in 1982 to 0.75 ha in 1991-92.

In terms of absolute numbers, at an all-India level, the number of marginal holdings has multiplied threefold from 19.8m in 1960-61 to 58.7m in 1991-92. Small holdings have increased in numbers, but only moderately since 1971-72. Large and medium holdings have declined steadily. Semi-medium holdings of 2.01 to 4.00 hectares remained stable at 10 million from 1960-61 to 1981-82 but are now increasing. Changes in the absolute numbers of holdings have followed a similar pattern in Bihar, with the exception that the State has not witnessed any increase in the number of semi-medium holdings in the 1980s.

Table 13 gives changes in percentage of holdings and percentage of area in each size group at an All-India level, and for five contiguous states in the Indo-Gangetic plain - Punjab, Haryana, U.P., Bihar and West Bengal - which have experienced very different patterns of economic development.

As Table 13 shows, at an all-India level, the percentages of large, medium and semi-medium holdings as a proportion of total operational holdings have been declining steadily since 1970-71, with the steepest decline in large holdings (3 per cent to 1.3 per cent). The percentage of small holdings has been falling since 1970-71, while the percentage in the marginal category has increased from 46 per cent in 1970-71 to 63 per cent in 1991-92.

In Bihar, changes in the distribution of operational holdings by size-class between 1970-71 and 1991-92 have followed a similar pattern, although holdings are much more concentrated in the smaller size groups than at an all-India level in all the survey years. However, the increases in percentages of operational holdings in the marginal category are much less than have occurred in Punjab and Harayana, the states which have witnessed the most far-reaching development of capitalism in agriculture.

In terms of area operated, at an all-India level the share of marginal holdings has increased from 9.2 per cent in 1970-71 to 15.6per cent in 1991-92. The shares of small holdings and semi-medium holdings have also grown but more slowly. There is a significant decline in the share of large holdings from 23 per cent in 1970-71 to 15.2 per cent in 1991-92.

**Table 13: Percentages of holdings and of area operated by size-groups of operated holdings, selected States, 1970-92**

State	Year	Marginal below 1.01ha		Small 1.01 to 2.00 ha		Semi-Medium 2.01 to 4.00 ha		Medium 4.01 to 10.00 ha		Large Above 10.00 ha	
		Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area	Holdings	Area
Bihar	1970-71	58.86	18.14	23.32	26.22	12.85	28.92	4.52	21.01	0.45	5.71
	1981-82	68.7	22.41	17.61	25.85	9.9	27.08	3.38	18.79	0.41	5.87
	1991-92	76.76	29.01	13.68	25.14	6.86	23.69	2.48	18.24	0.22	3.92
Punjab	1970-71	11.71	1.46	19.06	7.09	32.7	24.28	30.51	45.05	6.02	22.12
	1981-82	59.02	3.91	10.39	8.9	13.96	21.76	14.15	45.85	2.48	19.58
	1991-92	63.22	6.2	11.42	10.74	13.85	26.72	9.82	40.55	1.69	15.79
Haryana	1970-71	17.48	2.53	17.54	6.54	28.3	19.86	31.06	49.24	5.62	21.83
	1981-82	42.22	3.74	12.74	7.28	22.88	25.56	18.81	45.57	3.35	17.85
	1991-92	50.73	5.32	13.5	8.81	20.32	25.54	11.49	29.38	3.96	30.95
U.P.	1970-71	49.78	15.64	26.92	25.3	16.45	29.76	6.2	23.33	0.65	5.97
	1981-82	59.6	18.09	21.58	23.76	12.88	28.04	5.4	23.62	0.54	6.49
	1991-92	68.01	24.96	18.52	26.31	9.85	26.3	3.33	18.18	0.29	4.25
W.Bengal	1970-71	61.21	24.8	22.8	28.92	12.94	31.06	2.98	14.58	0.07	0.64
	1981-82	74.34	29.27	15.83	28.77	8.07	28.25	1.67	11.39	0.09	2.32
	1991-92	80.69	39.98	13.43	30.69	5	22.06	0.88	7.27	0	0
All-India	1970-71	45.77	9.21	22.38	14.8	17.60	22.52	11.11	30.49	3.08	22.98
	1981-82	56	11.5	19.32	16.59	14.23	23.55	8.58	30.15	1.89	18.21
	1991-92	62.79	15.6	17.79	17.79	11.99	24.13	6.1	6.1	1.33	15.2

Source: National Sample Survey, Rounds 26, 37 and 48

In Bihar, however the share of small and semi-medium holdings too has fallen in the 1970s and 1980s, suggesting that the dispersion of land occurring at an all-India level is particularly intense there. It is the only one of the five states chosen for comparison in which only the share of marginal holdings has risen (see Table 13).

It is important to note that holdings classified as 'semi-medium' in NSS data (i.e. those of 2.01 to 4.00 hectares or approximately 5-10 acres) include the majority of the 'rich peasant' section of cultivators in Central Bihar. As far as state-level data can be used as an indicator, therefore, concentration of land has not occurred in the hands of this group, (nor in the hands of the 'small' group of 2.5 - 5 acres), in the 1970s or the 1980s. If, as we have argued above, a crucial step towards capitalist development for this group would be the acquisition of control over greater areas of land, this is clearly extremely significant.

Average size of operational holding in each size group is another indicator which will be affected differently by different patterns of capitalist development. For example, while concentration among the largest landholdings would lead to an increase in the average size of holding in this category, concentration among an intermediate group might lead to a decline in the average for the larger holdings, or a decline in the average in both large and intermediate categories, as intermediate holdings moved from a lower to a higher size category.

In fact, as Table 14 shows, the average size of operational holding in each size group has changed little at the all-India level between 1982-82 and 1991-92. It appears that changes in the pattern of land concentration in the 1980s have not been of sufficient magnitude to be reflected in average holding sizes in most of the states being compared. It should be noted that demographic pressures may counteract the impact of concentration in this context (see section 2 below). In Haryana, however, there have been significant increases in the average size of holdings in the medium and large size groups in the 1980s. In Bihar by contrast, average sizes have shown very little change, declining marginally in the, small, semi-medium and large categories.

In summary, the NSS data on distribution provides no evidence that capitalist concentration of land is underway in Bihar. Bihar is undergoing a process of dispersion of land in which marginal holdings of less than 2.5 acres are proliferating and the share in

operated area of all size-groups except that of marginal holdings is falling. As we have noted, the development of 'peasant capitalism' may be indicated by the concentration of land in the intermediate rather than the largest size-groups. But NSS data shows that the area controlled by these groups too is declining. Nor has there been any significant change in the average size of holding in each size group which might indicate that a process of concentration is occurring.

**Table 14: Average size of operational holding in each size group (hectares), selected states and all-India, 1981-82 and 1991-92**

State	Year	Marginal (below 1.01)	Small (1.01 to 2.00)	Semi-Medium (2.01 to 4.00)	Medium (4.01 to 10.00)	Large (Above 10.00)
Bihar	1981-82	0.33	1.46	2.73	5.55	14.33
	1991-92	0.31	1.39	2.79	5.56	13.48
Haryana	1981-82	0.22	1.43		6.06	13.31
	1991-92	0.26	1.43	2.76	10.49	17.16
Punjab	1981-82	0.12	1.56	2.82	5.88	14.35
	1991-92	0.15	1.37	2.82	6.01	13.62
U.Pradesh	1981-82	0.39	1.41	2.79	5.61	14.28
	1991-92	0.37	1.43	2.68	5.49	14.83
W.Bengal	1981-82	0.31	1.4	2.7	5.26	17.98
	1991-92	0.3	1.37	2.64	4.87	n.a.
All-India	1981-82	0.34	1.43	2.76	5.88	16.09
	1991-92	0.33	1.41	2.7	5.79	15.31

Source: Calculated from National Sample Survey data, Rounds 37 and 48

#### *b. Inequality and the Gini coefficient of concentration : stagnation in Bihar*

Given a marked decline in the share of operated area held by the 'medium' and 'large' size groups at the all-India level, Parthasarathy argues that 'the shift from feudal to capitalist farming has been taking place simultaneously with a reduction in the share of large farms, defined in terms of physical extent of land.' He goes on to suggest that 'a better measure, in the context of growing demographic pressures resulting in a decline in the size of land of all groups of farmers including the large, is to judge the share of decile groups of households over time' (Parthasarathy, 1991:A70). Changes in these shares and in the Gini coefficient of concentration<sup>5</sup> are discussed below.

<sup>5</sup> The Gini coefficient of concentration is a measure of inequality of a given distribution, and is defined as  $1 - [\sum (p_j - p_{j-1})(q_j + q_{j-1})]/10^4$  where:  
 $p_j$  = the cumulative percentage of number of holdings in the  $j^{\text{th}}$  size class of holdings, and  
 $q_j$  = the cumulative percentage of area in the  $j^{\text{th}}$  size class of holdings.

Overall, the changes in the pattern of inequality in operated landholdings between 1970-71 and 1991-92 indicated by the NSS data confirm that Bihar began the period with a particularly unequal distribution. This reflects Bihar's legacy of a 'semi-feudal' landholding structure characterised by sharp disparities, and the persistence in some regions of a small number of very large landholdings (often in reality operated as multiple unrecorded marginal tenancies).

The 1970s saw some increase in the share of land operated by the top 10 per cent of holdings, which may be consistent with the potentially capitalist development witnessed during this decade in some areas of the state. The 1980s however have seen relatively small changes in the share of area operated by percentile groups of holdings, with the share operated by the top 10 per cent falling slightly, and an increase in the share operated by the middle 30 per cent, confirming the picture of relative stagnation after 1981-82.

The limited extent and the direction of changes observed in Bihar between 1970-71 and 1991-92 can be contrasted with the sharp increases in concentration observed in areas experiencing capitalist development, for example Punjab in the 1970s, Haryana in both decades, and U.P. in the 1980s.

Inequality in the distribution of operated area has increased at an all-India level - the share of the bottom 60 per cent of households has progressively declined since 1970-71, while that of the top 10 per cent and top 5 per cent have both grown. The share of the middle 30 per cent has increased steadily.

In Bihar the share of the bottom 60 per cent has similarly declined in both periods. But the share of the top 10 per cent which increased substantially in the 1970s, has actually declined somewhat in the 1980s, while the share of the middle 30 per cent has declined in the 1970s and then risen in the 1980s. (Table 15)

A comparison of five states in the Indo-Gangetic plain shows that in the 1980s, the share of the top 10 per cent has increased in Punjab, Haryana and U.P. whereas it has declined in Bihar and West Bengal. The share of the middle 30 per cent has declined in Punjab, Haryana and U.P. (in U.P. this fall has been a sharp one of 16 per cent), and increased in West Bengal and Bihar (Table 15).



The Gini coefficient of concentration has increased in the 1980s for operational holdings at an all-India level. But there has been little variation in the concentration ratio of ownership of land in this period, (in some states including Haryana it actually decreased) suggesting that leasing in by larger landowners from smaller ones was largely responsible for land concentration in this period. By contrast, Gini coefficients of inequality changed similarly for owned and operated land in Bihar in the 1980s, confirming that leasing-in by larger landowners, associated with capitalist development elsewhere in the country, had not emerged on any significant scale in Bihar (Table 16).

**Table 15: Percentage shares of total area operated by percentile groups of holdings**

State	Year	Bottom 60 %	Middle 30 %	Top 10 %
Bihar	1970-71	18.5	43.46	38.04
	1981-82	16.12	35.56	48.32
	1991-92	13.06	40.26	46.67
Haryana	1970-71	26.6	44.63	28.77
	1981-82	16	45.3	38.7
	1991-92	11.36	39.14	49.5
Punjab	1970-71	29.62	42.38	28
	1981-82	4.74	46.68	48.58
	1991-92	4.65	43.67	51.68
Uttar Pradesh	1970-71	19.22	45.78	35
	1981-82	18.5	51.49	30.01
	1991-92	19.3	35.57	45.3
West Bengal	1970-71	24.31	53.9	29.6
	1981-82	14.9	37.9	47.2
	1991-92	14.2	38.2	47.6
All-India	1970-71	18.62	46.9	34.48
	1981-82	14.9	37.9	47.2
	1991-92	14.2	38.2	47.6

Source: Calculated from National Sample Survey data, Rounds 26, 37 and 48

As Table 17 shows, among the five Indo-Gangetic states chosen for comparison, in 1970-71, Bihar had the highest value for the Gini coefficient of operational holdings, well above the all-India figure. It decreased slightly from 1970-71 to 1982, and increased slightly in the 1980s. But the range of these changes has been small in comparison to

several other states, notably Punjab in the 1970s and Haryana in both decades. Both of these states now have considerably higher Gini coefficients than Bihar.

**Table 16: Gini coefficient of owned and operated holdings in major states, 1981-82 and 1991-92**

State	Owned Holdings		Operated Holdings	
	1982	1992	1981-82	1991-92
Andhra Pradesh	0.74	0.72	0.599	0.576
Assam	0.56	0.57	0.519	0.494
Bihar	0.68	0.70	0.606	0.637
Gujarat	0.69	0.71	0.558	0.604
Haryana	0.70	0.68	0.598	0.675
Karnataka	0.68	0.66	0.581	0.609
Kerala	0.68	0.69	0.649	0.636
Madhya Pradesh	0.65	0.65	0.535	0.558
Maharashtra	0.70	0.71	0.571	0.598
Orissa	0.61	0.66	0.526	0.514
Punjab	0.77	0.77	0.702	0.730
Rajasthan	0.62	0.65	0.604	0.613
Tamil Nadu	0.76	0.75	0.640	0.646
Uttar Pradesh	0.60	0.63	0.565	0.572
West Bengal	0.63	0.68	0.597	0.585
India	0.71	0.71	0.629	0.641

Source: National Sample Survey, Rounds 37 and 48

**Table 17: Gini Coefficient of Operational Holdings for Selected States, 1970-71 to 1991-92**

State	1970-71	1981-82	1991-92
Bihar	0.617	0.606	0.637
Haryana	0.464	0.598	0.675
Punjab	0.418	0.702	0.730
Uttar Pradesh	0.495	0.565	0.572
West Bengal	0.490	0.597	0.585
India	0.586	0.629	0.641

Calculated from National Sample Survey data, Rounds 26, 37 and 48

*c. Tenancy: the absence of capitalist tenancy and an overall decline in tenancy in Bihar*

The National Sample Survey data on tenancy suggests, firstly, a sharp fall in the relative extent of reported tenancy in Bihar, in terms of both operated area and holdings, among all size-groups. Secondly, the marked all-India trend towards leasing-in of land by large holdings which has been associated with the growth of capitalist farming (Parthasarathy 1991) appears to be completely absent in Bihar. Nor has there been an increase in leasing in by the intermediate groups among whom the potential for capitalist development was identified in the 1970s. Thirdly, while leasing-in has remained concentrated among smaller holdings, there has apparently been a significant shift away from sharecropping towards fixed rent terms. There is thus no evidence to suggest that the type of 'capitalist' sharecropping discussed earlier in this chapter is developing in Bihar.

At an all-India level, the number of tenant holdings remained more or less stable from 1970-71 to 1981-82 around 5.5m, but has increased sharply to 12m during the last decade. The total leased in operated area showed a downward trend from 1970-71 to 1981-82, but showed an upturn after 1981-82 (Government of India 1996:28).

The overall percentage of tenant holdings declined steadily between 1970-71 and 1991-92. The percentage of tenant holdings in marginal, small and semi-medium size-classes moved in the same direction. But while the percentage in medium and large size-classes declined until 1981-82, from 1982 onwards the percentage increased sharply in the large holdings,

**Table 18: Percentage of tenant holdings by size-class of holdings, all-India and Bihar, 1981-82 and 1991-92**

size-class	INDIA				BIHAR	
	1960-61	1970-71	1981-82	1991-92	1981-82	1991-92
marginal	24.1	27.0	14.4	9.6	17.66	7.14
small	25.1	27.8	17.9	14.9	30.89	10.67
semi-medium	23.6	24.8	15.9	12.2	17.20	7.05
medium	20.5	20.0	14.5	13.1	11.78	1.44
large	19.5	15.9	11.5	16.7	6.61	-
all categories	23.5	25.7	15.2	11.0	19.73	7.46

Source: National Sample Survey, Rounds 17, 26, 37 and 48

confirming a trend towards leasing-in by big landholders. In Bihar however, recorded tenancy fell sharply in the 1980s in all size categories, with no leasing-in by large holdings recorded (Table 18).

**Table 19: Percentage of area leased in by size-class of holdings, all-India and Bihar, 1981-82 and 1991-92**

size-class	INDIA				BIHAR	
	1960-61	1970-71	1981-82	1991-92	81-82	91-92
marginal	16.6	18.9	9.7	8.7	13.62	6.18
small	14.0	14.6	8.5	8.5	15.79	5.47
semi-medium	11.7	11.7	7.3	7.4	7.90	2.86
medium	9.6	8.7	6.6	6.9	5.31	0.34
large	8.3	5.9	5.3	11.4	0.11	-
all categories	10.7	10.6	7.2	8.3	10.27	3.91

*Source: National Sample Survey, Rounds 17, 26, 37 and 48*

As Table 19 shows, the area under tenancy has also risen in higher size-classes at an all-India level. Till 1982 there was a steady decline in the percentage of tenanted area in all the size classes. After 1982, the decline continues only in the marginal category and the percentage for large holdings doubles. 'The inverse relationship which had prevailed between the size of holding and percentage of leased-in area for two decades since 1960-61 seems to have disappeared, with the large holdings reporting the highest proportion of leased-in operated area in 1991-92' (Government of India 1996:28-29). Again, in Bihar the percentage of area under tenancy fell sharply in the 1980s in all the size groups, while this 'inverse relationship' persisted.

Overall, in the 1980s, the percentage of operated area leased in increased at an all-India level and in all major states, except West Bengal, Orissa and Bihar. The increase in Haryana has been particularly sharp. Bihar recorded a marked fall in percentage of operated area recorded under tenancy from 10.3 per cent to 3.9 per cent. Meanwhile, the overall percentage of tenant holdings declined in all states except Andhra Pradesh and Madhya Pradesh (Table 20).

**Table 20: Percentage of tenant holdings and operated area leased in for major states,****1981-82 and 1991-92**

State	percentage of tenant holdings		percentage share of leased in area	
	1981-82	1991-92	1981-82	1991-92
Andhra Pradesh	13.8	14.1	6.2	9.6
Assam	12.9	10.1	6.4	8.9
Bihar	19.7	5.6	10.3	3.9
Gujarat	4.8	3.7	2.0	3.3
Haryana	25.9	17.1	18.2	33.7
Karnataka	10.7	8.0	6.0	7.4
Kerala	6.7	5.2	2.6	2.9
Madhya Pradesh	8.0	9.0	3.6	6.3
Maharashtra	10.6	6.9	5.2	5.5
Orissa	18.2	16.9	9.9	9.5
Punjab	21.3	15.9	16.1	18.8
Rajasthan	7.1	6.5	4.3	5.2
Tamil Nadu	24.7	15.3	10.9	10.9
Uttar Pradesh	20.5	15.5	10.2	10.5
West Bengal	23.1	14.4	12.3	10.4
India	15.2	11.0	7.2	8.3

Source: National Sample Survey, Rounds 37 and 48

**Table 21: Percentage distribution of area leased in by terms of lease, all-India and****Bihar**

terms of lease	INDIA			BIHAR	
	1970-71	1981-82	1991-92	1981-82	1991-92
fixed money	15.4	10.9	19.0	6.5	9.5
fixed produce	11.6	6.3	14.5	3.6	12.8
share of produce	47.9	41.9	34.4	73.3	43.5
others	25.1	40.9	32.1	16.6	34.2
all terms	100.0	100.0	100.0	100.0	100.0

Source: National Sample Survey, Rounds 26, 37 and 48

Note: 'Others' includes 'service contract', i.e. land leased out to labourers in lieu of payment.

The share of 'fixed rent' terms in leased-in area and in tenancies declined substantially from 1970-71 to 1981-82. But since 1981-82, both of these have risen. In Bihar, sharecropping remained the most prevalent form of tenancy, but there was a significant shift to fixed terms away from sharecropping in the 1980s. (Table 21)

The possible reasons for the trends indicated in the State-level data are explored further below in the light of the findings of my field study and other micro-level investigations.

#### **4. The problems of disaggregated data in Bihar**

The extent of regional unevenness within Bihar as a state makes it particularly important to consider disaggregated data. Bihar is conventionally described as consisting of three distinct regions: 'North Bihar', the plains north of the River Ganga; 'Central Bihar', the plains south of the Ganga (also sometimes called South Bihar); and the 'Chhotanagpur' plateau. Land in these three regions has historically been very differently distributed. Some of Bihar's biggest feudal landowners have succeeded in retaining their empires in the fertile but flood-prone districts of North Bihar - for example in the early 1980s, in Purnea district alone there were 41 exceptionally big landlords each owning more than 1,000 acres (Mitra and Vijayendra, 1982:98); Central Bihar whose soil is potentially highly productive but requires intensive application of labour has been characterised by a high proportion of landlessness, acute inequality, but few extremely large holdings; the mineral-rich forested Chhotanagpur region with a substantial adivasi or 'tribal' population has had lower levels of complete landlessness and larger holdings on average.

Further, these regions themselves are economically heterogeneous, a fact that is underlined by the cluster analysis carried out as part of the ANSISS/ILO study (Prasad, Rodgers et al. 1988). The analysis which was restricted to 'north' and 'central' Bihar districts (i.e. the Bihar plains) used population growth and density, urbanisation, tenancy, cropping intensity, use of HYV paddy and tubewell irrigation as variables to categorise districts, and concluded that 'these clusters did not correspond to the traditional North Bihar-South Bihar division...the more advanced-more backward axis was West to East rather than South to North' (op cit.:46)

However, as a number of scholars have noted, district-wise analyses based on official sources are severely hampered by what has been referred to as 'rampant adhocism in the reporting and collection of data' in Bihar (Jha, 1997:122). According to Ghosh (1992:187)'the paucity of information on Bihar's economy is largely due to the fact that the state-level agency to look after collection and publication of social and economic data is rather weak, both in terms of resources and manpower'.

But the problem of unreliability of data is particularly acute in the case of land ownership and operation, where, as has been amply documented, records are consistently falsified from the village level upwards. For example, a report from Central Bihar's Jehanabad district in the Hindustan Times (September 30 1988) revealed that 'the latest land-revenue survey prepared by the district administration is bogus...the revenue records suggest that only 0.72 per cent households among the total number of cultivators in this district hold land in excess of 15 acres'. This survey was prepared ostensibly 'so that those categories which have land in excess of the ceiling can be identified and targetted for forcing the implementation of the Minimum Wages Act. Thus the total number of such families in this category arrived at is a mere 968 families out of a total of 1,33,268 cultivator families.' One of the glaring problems with the survey was the use of out-of-date records compiled in 1965 when the settlement survey had last been conducted: 'in a specific case where the revenue data shows that Mr Sukhdeo Singh of Rampur Vaina of Baidrabad panchayat of Arwal holds 507 acres and Rambhajan and Rajendra Singh of the same village hold 700 and 140 acres each, it was found that these people have ceased to exist 20 years ago and land was divided even earlier to such an extent that not even 15 acres exist with any member of the family in the village. The last settlement records available for the village were framed in 1957.'(Matthew and Hemant, 1988).

Essentially, the very unreliability of the official data on landholdings in Bihar is symptomatic of the continuing importance of control over land as a source of rural power, and the intensity of conflicts over it. It reflects firstly a deep-rooted unwillingness among landowners to reveal the actual extent of their holdings to any representative of the state apparatuses, and secondly an inherent tendency of these representatives themselves to collude with dominant landholders in misrepresenting the situation to the latter's advantage. In practical terms, it means that researchers working on Bihar are largely dependent on data collected by academic and other non-official sources for secondary data at the disaggregated level. The following sections make use of such sources and are based primarily on my own fieldwork.

## **5. Changing patters of landholdings in Chandkura**

50 per cent of households in Chandkura are completely landless, and a further 21 per cent own less than one acre. At the other end of the spectrum, eight households own and

operate more than ten acres (Table 22). Despite the absence of any landholdings greater than 25 acres in the village, this leads to a very skewed distribution of both land owned and land operated (Table 23).

Given both average sizes and the pattern of distribution of landholdings, I have used 'small' to refer to holdings of 1.01 to 2.5 acres, and 'marginal' to refer to holdings of one acre or less when referring to data on Chandkura.

While reliable village-level data on land distribution is not available for the earlier period, a comparison of the distribution of households by class in 1981-82 and 1995-96 suggests that the tendency in Chandkura has been towards dispersion rather than concentration of both owned and operated land. This confirms the impression I gained both from interviews carried out in the village in 1995-96, and specifically, data on changes in the land and lease markets in the village, inheritance, and other mechanisms of land transfer which I collected.

**Table 22: Distribution of households in Chandkura by size categories of owned and operated landholdings, 1995-96**

<b>Landsize category (acres)</b>	<b>percentage of households (owning)</b>	<b>percentage of households (cultivating)</b>
None	50.4	32.5
0.01-0.49	9.4	20.5
0.5-0.99	12	12
1-2.49	15.4	14.5
2.5-4.99	6	13.7
5-9.99	3.5	4.3
10 and above	3.5	2.6

*Source: Fieldwork*

**Table 23: Percentage of area owned and operated by percentile groups of households in Chandkura, 1995-96**

	<b>Bottom 60% of households</b>	<b>Middle 30% of households</b>	<b>Top 10% of households</b>
<b>Owned land</b>	1.8%	32.3%	65.9%
<b>Operated land</b>	7.7%	36%	56.3%

*Source: Fieldwork*



As Table 24 shows, average land cultivated per household in Chandkura has declined from 1.97 acres in 1981-82 to 1.47 acres in 1995-96. The total number of households in the village has increased from 196 in 1981-82 to 233 in 1995-96, while total population has increased from 1,354 to 1,794. Households partially or fully dependent on agriculture have increased in number from 183 to 214. There has also been a significant increase in the number of non-agricultural households (defined as those engaged neither in cultivation nor in agricultural labour) from four (2.1 per cent) to nineteen (8 per cent) in 1995-96.

In 1981-82, 17.1 per cent of households cultivated no land (this excludes those permanent agricultural labourers who were given tiny plots to cultivate as part of their contract with their employers). When those 'non-agricultural' households who did not participate in either cultivation or agricultural wage labour are excluded, the figure is 15.3 per cent. In 1995-96, the percentage of households with no access to land in Chandkura had nearly doubled to 32.5 per cent. Excluding non-agricultural households, the figure is 26.9 per cent. In terms of absolute numbers, households cultivating no land had more than doubled: there were 34 such households in the village in 1981-82, as compared to 76 in 1995-96.

At the same time, there was a substantial increase in the number of small and marginal cultivators (defined as those cultivating one hectare [2.5 acres] or less - 'marginal' holdings according to the NSS categories). Table 24 shows the changes in class composition of the village and in average area cultivated per household by classes between 1981-82 and 1995-96.

Permanent labourer households, who have declined sharply in numbers between 1981-82 and 1995-96, also cultivate less land, reflecting a fall in the size of plots provided by employers as part of the annual labour contract. Casual labourer households have grown in numbers, but as their percentage share in total households has increased only marginally.

Average land cultivated by them has increased slightly, which may reflect the purchase of marginal plots during the reference period by a handful of casual labourer households, as described below.

**Table 24: Number of households and mean area cultivated per household by economic class in Chandkura, 1981-82 and 1995-96**

Economic Class	Number of households		Mean area per household (acres)	
	1981-82	1995-96	1981-82	1995-96
Permanent Labour	43(22.99)	30(12.88)	0.45	0.20
Casual Labour	62(33.15)	82(35.19)	0.15	0.33
Poor Middle Peasant	7(3.7)	45(19.31)	2.40	1.85
Middle Peasant	21(11.2)	35(15.02)	2.95	1.84
Rich Peasant	38(20.3)	18(7.72)	5.97	6.11
Landlord	12(6.4)	4(1.72)	3.09	3.83
Non-Agricultural	4(2.1)	19(8.15)	0.00	0.00
Total	187(100)	233(100)	1.97	1.47

Source: Fieldwork

Note: Figures in brackets indicate percentage of total households in Chandkura

'Poor middle peasant' households - neither hiring in nor hiring out agricultural labour - have increased massively from seven households - only 3.6 per cent of total households - in 1981-2 when they cultivated an average of 2.4 acres, to 45 households - 19.3 per cent - in 1995-96, when average land cultivated by them was 1.8 acres (50 per cent of these households are primarily dependent on non-agricultural income).

'Middle peasant' households, who do hire in labour, have also increased, from 22 households (11.5 per cent) cultivating an average of 2.9 acres, to 35 households (15.02 per cent). In size terms, this group had now joined the ranks of small cultivators, cultivating an average of only 1.8 acres. (As in the earlier period, poor middle peasants and middle peasants cultivate similar amounts of land on average).

This seems to be at least partially accounted for by a dramatic decline in the percentage of 'rich peasant' households (defined by a combination of resource endowment and the

exclusion of female household members from cultivation) from 20.3 per cent to only 7.7 per cent of total households.

However, the point to be noted is that this has not led to a greater concentration of land in the hands of large-scale cultivators. The average area cultivated by rich peasant households has increased only very marginally, from 6.00 to 6.1 acres.

The number of landlord households (defined as any household leasing out land) has also fallen sharply, but the average amount of land retained by these households for self-cultivation has increased slightly (3.8 acres as against 3.1 acres in the earlier period). Both these changes are consistent with a reduction in the extent of leasing-out in the village.

Thus while between 1981-82 and 1995-96 there has been an increase both in landlessness (in terms of operated holdings) and in the proportion of marginal cultivators, this has not been accompanied by either a significant increase in the average size of holding of the largest landholders or an increase in the average size of all landholdings, which would suggest concentration. On the contrary, the average size of holding has fallen for all classes except casual labourers, whose holdings have remained tiny.

## **6. Absence of a land market in Chandkura**

Referring to land losses and gains during the five years preceding the survey in 1981-2, the ANSISS/ILO report noted that, for the study villages as a whole, 'Not much can be inferred from the data as to which of the land size groups is gaining or losing relative to the others. If anything, the smallest landsize category, up to 1 acre seems to be faring relatively better. But the understatement of gain is probably disproportionately concentrated in the larger landholding size groups. Therefore, it would not be reasonable to infer that land transactions are greatly changing the pattern of land distribution' (Prasad, Rodgers et al. 1988:464-465). In Chandkura, the study found that households on average experienced a net loss of 7.5 per cent of previously owned land<sup>6</sup>.

---

<sup>6</sup> The authors of the study note that 'over the survey as a whole, this significant deficit in land gained should be regarded as due to understatement. Given the sensitivity of land issues in Bihar, it is not surprising that gains of land should be less readily reported than losses. Some of the difference may be due to recall lapses stronger for gains than for losses' (Prasad, Rodgers et al.:463-464).

This absence of any large-scale 'land transactions' seems to have persisted during the 1980s and early 1990s. My survey found that only 20 per cent of households reported any change in the amount of land they owned during the past 15 years. Significantly, 11 per cent of all households referred to the division of land through inheritance or the separation of joint families into more than one household, and 6.3 per cent, more than half of these, had joined the ranks of marginal owners owning 1 acre or less as a result. Of the fourteen households (6 per cent) who reported having purchased land, ten had done so using earnings from government service outside the village. Amounts of land bought were also very small, averaging 0.58 acres.

The question of the 'persistence' of marginal ownership holdings has been addressed in a debate concerning a study of four villages in Noakhali district in Bangladesh carried out in 1979-80 (Bhaduri, Rahman and Arn, 1986). The authors of the study found that in terms of ownership, the smallest landowning groups (owning 0.6 acres or less) were characterised by a higher percentage of 'stable' households, defined as having a ratio of currently owned to inherited land of between 0.9 and 1.1. This evidence, they argue, contradicts the 'widely held view' that Bangladesh is undergoing 'a strong process of polarisation between those with increasing ownership of land and those who become landless with nothing but their labour power to sell' (op cit.:83). They suggest that the small owners who have been able to 'stabilise' their holdings have done so through access to 'outside' income from agricultural wage labour, leasing in land, and non-agricultural activities.

In conclusion, Bhaduri et al. argue that this is made possible by the very process of polarisation in landownership: 'polarisation through net land transfer simultaneously activates the market for agricultural labour as well as the market for leasing in land. This in turn creates supplementary income opportunities for these smaller landowning households, helping a significant number of them to stabilise their landholding...and thus persist over time despite the overall tendency towards polarisation. It is in this sense that the process of polarisation sets up its own contradiction'(op cit.:87).

There are clearly several methodological problems in the study, notably the authors' definition of 'stability' which fails to take into account differences in the time elapsed since land was 'inherited' from the previous head of household (see Khan, 1987; Feldman and McCarthy, 1987); and the fact that they present no evidence that 'stable' households have greater access to 'outside' income than 'unstable' ones.

But there are also a number of conceptual problems with this approach which are more significant. Firstly, the authors' characterisation of marginal holdings as 'small-owner farms' is misleading. As we have seen, small-scale subsistence cultivation is sustained through 'compulsive involvement' in credit, input and produce markets, acute exploitation of family labour and underconsumption. As one critic points out, in this context, 'it is only too evident that the ownership content of their landed 'properties' is already more or less eliminated while what remains is little more than the shell of the real ownership'(Pandian, 1987:535). Further, such 'juridical ownership' often persists precisely because of the limited and shrinking extent of other 'survival options' which means that 'small peasants caught in a debt trap do not sell their land in the first instance, but mortgage it' (op cit.:536).

Secondly, there is the related question of changes in production relations which are inseparable from a process of 'polarisation' of landholdings. As Feldman and McCarthy argue, the growth of wage labour and tenancy 'involves distinct relations of dominance and control'. This calls into doubt the extent to which 'small farmers' persist as a distinct class when households owning marginal holdings are primarily dependent on selling their labour power. In fact, 'the category of owner-producer also suggests forms of class identification different from that of wage labourers. Very small landholdings may indicate subsistence production but are unlikely to indicate the persistence of small farms if primary productive activity is off-farm' (Feldman and McCarthy, 1987:546). This is particularly relevant to the situation in Hilsa, where caste and class definitions both contribute to distinct and discrete 'mazdoor' (labourer) and 'kisan' (peasant) identities (see Chapter 6, 'Agricultural Labourers in the Fieldwork Area'), but 'mazdoors' may also be marginal landholders.

Thirdly 'polarisation' of landholdings in which land is transferred from smaller to larger holdings will not automatically, as Bhaduri et al suggest, expand demand for labour or for tenants, thus introducing the possibility of 'stabilisation' of holdings. The impact depends

on a wide variety of factors, including the extent and nature of technological change occurring and the strategies of accumulation adopted by those gaining land. What is more certain is that with more and more households left with marginal ownership holdings, labour supply is likely to increase in absolute terms over time. As Bhaduri et al. themselves note, in their study, 'whereas nearly 60 per cent of the households have less than 0.6 acres of landownership and almost certainly need additional income, only 26 per cent of all households are able to have any form of wage employment in agriculture' (Bhaduri et al., 1986:86). Their model of 'persistence' of smallholdings then becomes dependent on the relatively external factor of the availability of non-agricultural sources of income for small owners, intensifying the problems of categorising them as 'small farmers'.

However, the change in landownership patterns observed in Chandkura between 1981-82 and 1995-96 suggests neither 'polarisation', nor 'stability' of small ownership holdings. On the one hand there is little evidence that land is being transferred from smaller to larger holdings. Interestingly, in the few cases where land has been purchased, this has in general not represented the reinvestment of surpluses accumulated in agriculture, but the investment of savings from salaried jobs outside agriculture. Several of these cases were of dalit agricultural labourer households, who had one member in a government job. For these previously landless households, purchasing a small plot of land was a way of lessening dependence on hiring out wage labour and moving into the ranks of marginal cultivators.

On the other, the data suggests that small owners are experiencing a slow but relentless shrinking of their holdings through a process of inheritance and subdivision of holdings. The period has not seen a significant increase in demand for wage labour, while the extent of tenancy has declined (see below). However, it is also worth noting in this context that in the case of Kurmis, who make up a quarter of marginal owners, agricultural wage labour, far from being a long-term strategy for sustaining ownership as suggested by Bhaduri et al., is entered into only as a last resort by those who have lost their land entirely. This section are also less likely to engage in the non-agricultural occupations available than other groups in the village (14 per cent of Kurmi marginal owners as compared to 48 per cent of all marginal owners had non-agricultural income). With input costs rising, they appear to be undergoing a process of gradual pauperisation.

## 7. Tenancy in Chandkura

As we have noted, changes in the extent and nature of tenancy can be important indicators of a transition to capitalism in agriculture. On the one hand, leasing in by capitalist or proto-capitalist farmers may be an effective mechanism for concentration of operated land. On the other, especially in the initial stages of capitalist development, existing forms of tenancy may be adapted to the needs of potentially capitalist landowners, increasing their direct control over the production process and the labour of the tenants. State-level changes in tenancy patterns have been discussed earlier in this chapter. Here we look at the changes which have taken place in the fieldwork area.

In Chandkura, 19 per cent of households lease in land, with the vast majority of tenants owning less than 1 acre, and leasing in small amounts of land averaging 1.2 acres from the biggest landowners in their own and neighbouring villages. Nearly all these landowners retain most of their land for self-cultivation. There are no instances of leasing in by rich peasants, or by those owning more than 5 acres. Except for one household sharecropping 1 acre belonging to a Brahman family living in another village, all leases are today on a fixed rent basis.

The proportion of households leasing out land to tenants declined from 6.4 per cent of households in 1981-82, to 1.7 per cent in 1995-96. In terms of numbers, there were twelve such households in 1981-82, while at the time of my survey, there were ten. All these own eight acres or more. The fall in reported tenancy in Chandkura is consistent with the Bihar-wide decline recorded in the NSS data cited above. However, given the fact that some landowners lease out to tenants living in other nearby villages, there is some scope for under-reporting by landlords. As I suggest below, motives for under-reporting may have become stronger during the reference period.

What seems incontrovertible is that the proportion of share tenancies in total tenancies has declined dramatically in the 1980s. The Bihar-level data has been noted above. The 1981 Census data for Hilsa block recorded 32.8 per cent of all tenant households as 'paying rent as a share of produce'. (Census of India 1981). Corresponding data from the 1991 Census is not currently available. However, my survey of twelve villages in Hilsa in 1995-96 found that fixed rent tenancy was reported to be the only form of tenancy currently in operation

in ten of these villages. Respondents explained that landowners had begun refusing to give land on share leases in the early 1980s, often in the wake of wage struggles. The prevalent arrangement had been for input costs to be shared 50/50 (excluding plough and bullocks and labour, which were provided by the tenant). Output was also shared 50/50. Thus sharecropping, while it remained a mechanism for extraction of surplus by the landowner from the tenant's labour, was seen by dalit labouring households with few resources as a means of access to small amounts of land.

When this group began to assert itself as a class, the larger landowning peasants of the area appear to have acted in a concerted way to withdraw this access (see Chapter 5, 'Agricultural Labour in the Fieldwork Area') They also clearly believed that the increased confidence of the dalit poor threatened their own ability to enforce the terms of the sharecropping contract in their own favour, implying a rise in the 'supervision costs' of this form of leasing out. A common remark was 'if we give our land out on a share lease, when it's time to divide the crop how can we be sure we are getting our share, the mazdoors don't listen to what we say any more...'

The fact that this shift was closely related to changes in labour relations and the labour market is also underlined by the fact that landowners in several villages in Hilsa felt that if they gave small portions of their land out on share lease to agricultural labour households, there would no longer be a sufficient supply of labourers to work on the land they cultivated using wage labour. They thus preferred the security of fixed rents paid in cash at the beginning of the contract; high and rising levels of rent also ensured that the majority of agricultural labour households would be excluded from tenancy. In Chandkura in 1995-96, only 12 out of 112 agricultural labour households (11 per cent) leased in land.

A rather different (and apparently reverse) response to wage struggles has been observed in other parts of Central Bihar. In villages in Sahar and Sandesh blocks of Bhojpur district, a 'storm centre' of these struggles in the 1990s, where I conducted a number of group and individual interviews in 1993-94 and 1995, many of the mainly Bhumihar large landowners reacted to wage demands by switching over from cultivation using wage labour to leasing out on a sharecropping basis to middle peasant households of the Yadav caste. However the point to be noted is that, as in Hilsa, the access to resources of the dalit labouring households declined rather than increased as a result. In fact in Bhojpur, the strategy of



leasing out was adopted in order to bring in an intermediate class (and caste) which could act as a buffer between the upper caste big landowners and the dalit agricultural labourers; this strategy is not open to the dominant landowners of Hilsa, whose holdings are generally smaller and who themselves belong to intermediate castes.

At the same time as these processes have occurred, other factors have militated in favour of fixed rent or 'patta' tenancies. Firstly, as yields continued to rise during the 1980s, rents could be increased substantially: in monetary terms they have tripled since the late 1970s. (As we have seen, this was one of the factors compelling small tenant cultivators to adopt the new technology). As elsewhere in Central Bihar, in Hilsa a 'bidding system' is prevalent in which each year the plot or set of plots is offered to whichever potential tenant can offer the highest rent. As a study in neighbouring Gaya district noted, the bidding system itself can also be used to increase rents: as bidding does not take place openly, landowners can claim that rival bidders are offering more to push up the bid (Pandey, 1980:51).

Secondly, the prevalent form of rent payment has been cash (in Chandkura 65 per cent of tenants paid rent in cash and 35 per cent in kind; cash rents were also predominant in all the other villages surveyed in Hilsa). This payment has to be made in full at the beginning of the one year contract. As fertiliser, diesel and other input costs have increased with produce prices failing to keep pace, rental payments are a valuable source of cash at the time it is most needed by the landlords of Hilsa, who continue to operate the major portion of their land themselves.

The bidding system also leads to regular switching of tenants: in Chandkura in 1995-96, only 17 per cent of tenants had leased in their current plot for more than one year, although the majority had been leasing in land for five years or more. This continual change may be one reason for a possible increase in under-reporting of these tenancies (which are generally never recorded in official land records) by the National Sample Survey Organisation between 1981-82 and 1991-92. My discussions with larger landowners in Hilsa and elsewhere in Central Bihar suggest that despite the continuing - and well-documented - failure of the state to implement land reforms legislation (see for example, Jannuzi, 1974; Sengupta 1982; Land Reforms Unit, 1990; Das, 1992), the struggles of the rural poor around wages and land as well as (since 1990) the 'social justice' rhetoric of the Laloo Yadav government have increased fears among landlords of

tenants claiming - and being able to enforce - occupancy rights. In interviews conducted in early 1995, landlords in Nalanda, Patna, Jehanabad and Bhojpur districts of Central Bihar referred to rumours of impending new tenancy legislation. Thus both frequent evictions and switching of tenants as well as actual under-reporting of land leased out may also be symptomatic of the changing climate of agrarian relations in the 1980s and 1990s.

Historically, sharecroppers in Bihar, who emerged 'almost overnight' with the mass eviction of tenants in the wake of Zamindari Abolition (Sengupta 1982:25) have been the most powerless of tenants<sup>7</sup>. Interlocking of share lease markets with labour and credit

---

<sup>7</sup> Considerable debate has taken place regarding sharecropping between neo-classical and Marxist economists. Neo-classical economists have considered share tenancy arrangements, and indeed the operation of markets in general, essentially in terms of their allocative efficiency. The starting point for neo-classical analyses of the implications of sharecropping is contained in Marshall (1920), where sharecropping is defined as an essentially 'inefficient' form of tenancy, because, 'when the cultivator has to give to his landlord half of the returns to each dose of capital and labour that he applies to the land, it will not be in his interest to apply any doses the total return to which is less than twice enough to reward him' (op cit.:644).

The challenge to this view from within the neo-classical framework itself has centred upon two main issues: 'risk' and 'transaction costs' (i.e. the costs of supervision of the labour process). According to Cheung, 'different contractual arrangements do not imply different efficiencies of resource use'(Cheung 1969:158): with private property in land, the landlord will inevitably adjust cost-sharing and crop-sharing arrangements in order to maximise profits. Share tenancy arrangements are chosen 'to attain the preferred distribution of risk subject to the constraint of transaction costs' (Cheung, 1969:159). When there are significant risks, sharecropping provides a method by which some of the risks are borne by the landlords, while at the same time reducing the costs to the landlord of direct involvement in the production process.

Among those who elaborated upon and extended this theory, Stiglitz (1974; 1986) contrasted sharecropping with wage labour, arguing that the former provides an incentive for more intensive application of inputs (greater 'effort') by the direct producers, and develops partly in response to 'the limited ability to monitor the actions of the tenant (or the high costs of doing so)' (Stiglitz, 1986). Hanumantha Rao (1971) argued that the efficiency of share-cropping is dependent on the production function of the crop in question : Marshall's objection that sharecropping left tenants free to restrict their inputs does not apply to crops where there is little scope for varying inputs. Hanumantha Rao distinguished between risk or 'uncertainty' and the scope for decision-making in the face of uncertainty, the 'entrepreneurial function'. Where both uncertainty and the scope for entrepreneurship are low, 'and where, therefore, the farm takes on the character of a managerial or supervisory unit, the landlord may find it profitable to lease out (on a share-rent basis)' (Hanumantha Rao 1971:580-81). Meanwhile Newbery (1977) admitted that 'labour market imperfections' in the shape of uncertain alternative earnings for tenants - were among the circumstances conducive to sharecropping arrangements.

However, while this debate took place on the assumption that the function of exchange is to 'clear' the market, and that markets as institutions continue to survive as long as they are allocatively efficient in their respective economic environments, Marxist writers were looking at exchange as a mechanism for giving one party an advantage *at the cost of another* (Bhaduri, 1986). As we discussed in Chapter 1, Indian political economists have looked in depth at the factors which determine the position from which a particular agrarian household interacts with land, labour, and credit markets, including resource endowment, the nature of labour use, and the extent of surplus produced.

From this perspective, 'sharecropping cannot be seen merely as a form of rent or of labour remuneration but as a *particular method of surplus appropriation*' (Pearce, 1983:53), an arrangement through which the landlord effectively gains access to the sharecropping tenant's labour. Analysis based on an assessment of

markets has been a marked feature of Central Bihar's agrarian economy (see for example Verma and Mishra, 1984; Prasad 1987; Prasad, Rodgers et al. 1988; Bharti, 1990). In this context, the relationship between individual sharecroppers and landlords has tended to be a long term one: for example, a study sponsored by the Ministry of Rural Development in 1989-90 found that in Bihar as a whole, 66per cent of sharecroppers surveyed had been leasing-in from the same landlord for more than ten years, and 58per cent for more than twenty years (Land Reforms Unit, 1990:38), although none had been recorded as occupancy tenants. At the same time, the proportion of tenants who had experienced eviction was highest in Bihar of the six states surveyed (Assam, Bihar, Haryana, Tamil Nadu, U.P. and West Bengal), and this high incidence was linked to 'instances of tenants asserting their rights' in Bihar (op cit.:33-4).

However, I would argue that the shift to fixed rent tenancy which has occurred in the 1980s has meant a qualitative change in the nature of evictions, which now occur as a matter of course on an annual basis. Under the 'patta' fixed rent system, insecurity of tenure is itself institutionalised.

But while a shift to fixed rent tenancy may well have increased under-reporting, it has also meant a real decline in even temporary access to land for poor households, who simply cannot afford the level of rent payments, particularly when, as in the case of cash payments, the entire year's rent has to be paid at the beginning of the lease. This was a view almost universally expressed by members of agricultural labourer households both in Chandkura and in other villages surveyed in Hilsa. In Chandkura, of those households who had previously leased in land but no longer did so, 70 per cent had stopped because of lack

---

differential access to the means of production, and on questions of power stemming directly or indirectly from this -a class-based analysis - allows us to explain the features of agrarian economies which are simply described by neo-classical economists when identifying the conditions 'conducive' to sharecropping arrangements. For instance, the 'uncertainty' identified by Hanumantha Rao (1971) is 'higher the narrower the resource base... when labour processes are characterised by uncertainty, the extent to which one class can extract surplus labour from another increases'(Pearce, 1983:58).

Similarly, 'transaction' or supervision costs vary inversely with the extent of dependence of the tenant or labourer. Substantial inequality in the distribution of the productive forces combined with the absence of alternative sources of employment gives one class extensive economic power over another. This is what generates the insecurity and 'poverty' of the tenant described in Marshall's original thesis as the only conditions under which sharecropping could be profitable, ensuring a greater intensity of effort on the part of the labourer/tenant, who needs to maintain the landlord's favour.

of capital. As we have seen, the proportion of households not cultivating any land has increased significantly between 1981-82 and 1995-96.

This would suggest that the decline in sharecropping tenancy has not been fully countered by a rise in fixed rent tenancy, and the decrease in the extent of tenancy (in terms of both households leasing in land and area leased in) reported in aggregate level data at least partially reflects a genuine decline<sup>8</sup>.

In conclusion, changes in the pattern of tenancy, as reflected in both aggregate level data and micro-level field data appear to corroborate my hypothesis that larger landholders in Central Bihar have not pursued strategies of capital accumulation through productive investment in agriculture in the 1980s.

Firstly, leasing in by rich peasants, which has been a key means through which land has been concentrated in the hands of this group elsewhere in the country, has been completely absent. Secondly, the terms on which small plots of land are leased out by large landholders to landless and marginal cultivator households have changed significantly with a fall in the extent of sharecropping tenancy and an increase in fixed rent tenancy. In the fieldwork area, this change has been a response to assertion by agricultural labourers on the one hand, and increasing yields resulting from the adoption of new technology on the other. However, it is important to note that this change implies a decline rather than an increase in the involvement of the landlord in the production process - in terms of both bearing input costs and supervision. This can be contrasted with the situation observed in parts of Western U.P. for example, in which sharecropping tenancy was being adapted by capitalist farmers 'as a form of control over labour power, the appropriation of its produce, and a means for furthering accumulation' in which 'net daily returns to sharecroppers are

---

<sup>8</sup> Jha has observed a similar decline in tenancy in Purnea district in North Bihar, noting 'two important changes': 'landlords prefer to change a tenant, or the piece of land leased out to the particular tenant, or both, almost every season' and 'there has been a substantial decline in area under tenancy' (Jha 1997:180), although here tenancy had been, and remained, predominantly sharecropping. However, as well as agrarian movements and tenancy regulation, Jha cites an 'increasing tendency' for educated youths from households which were previously lessors to take up self-cultivation. He links this to both a decline in access to non-agricultural professional jobs as well as increased yields of major crops during the 1980s making self-cultivation more lucrative (op cit.: 181-182). This is very different from the changes observed in Hilsa in the 1980s and 1990s, when returns to self-cultivation were perceived to be falling. In fact some of the few examples of sharecropping tenancy were those of small cultivator households leasing out to others of the same caste when rising input costs led the younger men of the family to seek work outside. But this regional unevenness also strengthens the view that parts of North Bihar may be currently experiencing changes which were observed in an earlier period in Central Bihar.

sometimes well below daily wages'. These landlords lease out land for a single season, specify the cropping pattern, bear a high proportion of the costs and receive a large share of the output; the tenant is 'virtually a piece rated labourer' (Srivastava 1989a:381-382).

The growth of fixed rent tenancy observed in Hilsa, on the other hand, represents rental appropriation of a major part of the meagre surpluses which tenants who are essentially subsistence peasants can produce, without any investment in the production process, or in neo-classical terms, any sharing of 'risk'. High rental levels are possible because - and further ensure that - these tenants are compelled to operate at a high technological level (see Chapter 4, 'Agriculture, Technology and Class in the Fieldwork Area' for a discussion of this phenomenon). At the same time these rates effectively prohibit any accumulation by the tenants, and along with the bidding system which results in yearly switching of tenants, prevent them from making any long term improvements to the land.

#### **Conclusion: land, class and accumulation strategies**

In conclusion, my fieldwork suggests that concentration of cultivated land, either owned or operated, in the hands of large landowners has not been a significant phenomenon in the fieldwork area during the period from 1981-82 until 1995-96. While a decline in tenancy (involving leasing out by larger to smaller landowners) has reduced poor and landless households' access to land, it has not been sufficient to counter other trends away from the concentration of operated land. In fact, the reverse phenomenon, that of dispersion of land in increasing numbers of small and marginal holdings, appears to have occurred. In the light of other trends I have identified, a number of reasons for this can be posited.

Firstly, there is clearly increased demographic pressure on cultivable land. Both the number of households and the total population fully or partially dependent on cultivation have increased considerably during the reference period. Although the number of households not participating in agriculture at all has also grown, changes in employment patterns have not been sufficient to counteract this pressure, and in any case are clearly limited in scope (see Chapter 6, 'Agricultural Labour in the Fieldwork Area' for a discussion).

Inheritance patterns in which a man's land is divided equally among all his sons (women do not have any rights to their fathers' land) have been a major factor in increasing the numbers of small and marginal holdings without a corresponding increase in the share of land controlled by larger holdings. This has been accompanied by fragmentation of holdings which has important implications for production.

However, land scarcity and increasing demographic pressure characterised many other regions of India which have nevertheless witnessed land concentration in the hands of capitalist farmers. In fact the recognition that there was virtually no scope for further extension of cultivated area was one of the factors which led to the introduction of 'Green Revolution' policies in India in the mid-1960s. And as we have noted, the emergence of capitalist farmers in other regions has led to concerted action to ensure consolidation of holdings. Thus these factors in themselves would not be expected to act as a barrier to concentration in a situation where large-scale surplus producing landowners were oriented towards acquiring land through purchase and lease.

But the extent of land transfers through the market in the fieldwork area has continued to be marginal during the reference period. And the phenomenon of large landowners using the lease market to concentrate operated land in their hands is completely absent.

The possible reasons for this relate to the accumulation strategies of different sections of landowners. Firstly, there is that section of intermediate caste cultivators which were able to accumulate surpluses in agricultural production under the particularly favourable conditions prevailing in the 1970s. At the same time as conditions for agricultural investment became progressively less favourable during the 1980s, new avenues for investment of surpluses emerged for these rich peasants of the 'backward' castes. These were related to their strengthened links with, and at a block level, control over, the state apparatuses, and ranged from bribing block officials in order to corner the supply of subsidised inputs, which could then be resold to smaller cultivators at inflated rates, to bribing higher officials in order to acquire contracts for public works, to buying support to enter politics (itself a lucrative career).

Other avenues of investment included the private construction business (as we have noted, this is often the main reason for buying a tractor); private buses, and cinema halls. These

phenomena are discussed in more detail in Chapter 7, 'Patterns of Accumulation in the Fieldwork Area'.

Alongside these sources of accumulation, the 1980s saw the emergence of large-scale conspicuous consumption among the newly rich backward caste peasants. This had previously characterised the upper caste non-cultivating landed groups, and its rapid escalation among traditionally cultivating castes reflects the fact that despite the consolidation of 'new' agrarian classes, pre-existing patterns of surplus investment and consumption had not been swept away.

Large new two and three storey houses both in the villages and in Hilsa town, are, along with extravagant weddings, enormous dowries and in some cases a formidable array of licensed and unlicensed weapons, potent symbols of the upward mobility of a section of the rich peasants of the area. These are the major sources of expenditure for that group which has been able to consolidate the improvement in their class status afforded by technological change and increased yields by integrating themselves into the political and bureaucratic structures and networks which allow them to divert and appropriate a large portion of the Block's development resources. While buying land, which remains at the heart of definitions of power in the area, has also been an important marker of improved status in the past, intensified conflict with labourers - and potential tenants - in the 1980s has increased the perceived risks involved and substantially decreased its popularity.

If these factors - a decline in the profitability of investment in agricultural production; increased access to state structures opening up new avenues of accumulation; a growing culture of conspicuous consumption; and increasing class conflicts - all militated against land concentration by the richest section of the peasantry in Hilsa, processes at work among the vast majority of cultivators also had implications for land distribution.

For poor and middle peasants in Hilsa, as we have seen, these same conditions have effectively blocked any possibilities for accumulation or land acquisition. Having been compelled to adopt the new technology, they have been badly affected by increased input costs, and by the virtual collapse of the infrastructure (both of which have been exacerbated by the appropriation of resources by rich peasants described above). Faced

with chronic fragmentation of holdings through inheritance, they are becoming increasingly pauperised.

This in turn has intensified traditional relations of dependence of poor peasants on rich peasants (these are complex ones mediated by caste: see Chapter 6, 'Agricultural Labour in the Fieldwork Area' for a discussion). Even in villages where the latter are not engaged in the types of essentially non-productive accumulation described above, moneylending and renting out of machinery to poor peasants at high rates of return appears a better investment than either agricultural production or land itself, particularly when they can be used to cement caste and 'kisan' solidarity in periods of conflict with labourers.

Possibly the only group which has gained land is a small minority of previously landless agricultural labourer households who have acquired small plots for self-cultivation. This is significant in as far as it reduces the dependence of these dalit households on agricultural wage labour, and is regarded by them as representing an improvement in their social status (although this view is heavily contested by higher caste peasants). This has certain implications for 'mazdoor-kisan' class relations which have been referred to earlier. However, firstly, the source of savings for these land purchases is almost invariably non-agricultural (usually government) salaried employment, a source which has little likelihood of further expansion. And secondly, in economic terms these purchases have simply inducted more households into the ranks of the poor peasantry operating under the conditions described above.



## **CHAPTER 6: AGRICULTURAL LABOUR IN THE FIELDWORK AREA**

### **Introduction: Agricultural Labour in Bihar**

Historically the social formation which developed in the plains of Central Bihar, potentially fertile but lacking substantial river irrigation, and requiring intensive application of labour, has had a high population density and a high proportion of 'untouchable' landless agricultural labourers. This overlap between class and caste has remained, and it appears that the presence today of a class of agricultural labourers constituting 40 per cent or more of the population in these areas may have as much to do with continuity with pre-capitalist and even pre-colonial periods as with the changes which have occurred in the last three decades. It is the latter changes, however, which we will discuss in this chapter.

The 1991 Census recorded 37.21 per cent of all 'main workers' in Bihar as agricultural labourers. This was the highest proportion of agricultural labourers recorded in any major state with the exception of Andhra Pradesh (see Table 25).

**Table 25: Percentage Distribution of Main Workers by Occupation in Major States, 1991**

<b>Major States</b>	<b>Cultivators</b>	<b>Agricultural Labourers</b>	<b>Household Industry Workers</b>	<b>Other Workers</b>	<b>All Main Workers</b>
Andhra Pradesh	27.76	40.76	5.04	26.44	100
Assam	51.24	12.89	2.51	33.36	100
<b>Bihar</b>	<b>43.41</b>	<b>37.21</b>	<b>2.69</b>	<b>16.69</b>	100
Gujarat	33.46	22.98	2.18	41.38	100
Haryana	39.38	19.53	2.99	38.1	100
Karnataka	34.36	28.75	2.81	34.08	100
Kerala	12.38	25.66	3.92	58.04	100
Madhya Pradesh	51.87	23.5	3.08	21.55	100
Maharashtra	32.81	26.91	3.07	37.21	100
Orissa	44.21	28.85	3.47	23.47	100
Punjab	32.83	23.31	2.93	40.93	100
Rajasthan	59.18	10.13	2.84	27.85	100
Tamil Nadu	24.94	34.16	4.66	36.24	100
Uttar Pradesh	52.84	19.23	4.38	23.55	100
West Bengal	28.42	24.53	4.98	42.07	100
All India	38.75	26.15	3.63	31.47	100

*Source: Census of India, 1991*

However, the definition and application of the category of 'main worker' in the Decennial Censuses from 1971 onwards has been widely criticised. Main workers are defined as those who have worked for at least six months or 183 days during the reference period of one year. This seems to have led to substantial underestimation of the worker-population ratio, and is particularly problematic in the case of agricultural labourers. According to preliminary estimates generated by the 1987-88 Rural Labour Enquiry surveys, agricultural labourers get wage employment for far less than 180 days a year on average in most parts of the country (Jha, 1997: 18). Further, the Report of the National Commission on Rural Labour argues that 'those who do manual labour and sell their labour power, and those small and marginal farmers who may be supplementing even five per cent of their income by earning wages through selling their labour power should come under the category of rural labour' (cited in Jha, 1997:15). Using this definition, the estimated all-India total number of rural labourers in 1987-88 was approximately 156 million, almost 50 per cent higher than the Rural Labour Enquiry's estimate of 109.5 million for the same year.

Certain specific features of the social and economic situation in Bihar make it particularly likely that the 'main workers' approach leads to an underestimation of agricultural labourers in the state.

Firstly, a very small proportion of even those workers who are wholly dependent on agricultural wage labour get employment for more than 180 days per year (Prasad, Rodgers et al, 1988:155; see also Jha, 1997:18, for Purnea District; Bharti, 1991, for Gaya; this was also the case in my fieldwork area).

Secondly, Bihar has a particularly high proportion of small and marginal cultivators: 77 per cent of operational holdings were one hectare or less, and the average size of holding was 0.3 hectares for this group of holdings in 1991-92 (Government of India, 1996a). A significant number of these, though enumerated as cultivators in the Census, are dependent on wage labour as their main source of income. Thirdly, it has been suggested that 'given the status hierarchy in rural Bihar', many of these small and marginal cultivators 'while responding to official enquiries...prefer to get categorised as cultivators and not labourers' (Jha, 1997:115).

## *The Growth of Agricultural Labour*

A number of observers have pointed to a significant growth in the proportion of agricultural labour in Bihar, as in almost every State, from the early 1970s onwards (Vaidyanathan, 1986; Parthasarathy, 1991; Sharma, 1996). According to National Sample Survey data, at an all-Bihar level, the percentage of wage labour households in total rural households rose from 36.4 per cent in 1974-75 to 42.4 percent in 1987-88 (Unni, 1997:454). And given low levels of rural non-farm employment, it is estimated that agricultural labour households constitute about 93 per cent of all rural labour households (Sharma, 1996:8).

Possible reasons for this growth include firstly the sharp increase in the proportion of marginal operational holdings, which in Bihar, as we have seen in Chapter 5, has occurred at the expense of all other size-groups. Secondly, the growth in the proportion of households which are completely landless. The proportion of landless households in total rural households in the state has increased from 12.22 percent in 1964-65 to 34.8 percent in 1987-88 (NCRL 1991 cited in Jha, 1997:112).

However, the question arises of whether these changes indicate relative dynamism or stagnation (or a regionally and temporally uneven combination of the two): are Bihar's rural producers experiencing 'proletarianisation' or 'pauperisation'? This ambiguity has been highlighted by Parthasarathy in a State-wise comparison: 'if a faster pace of capitalist farming has contributed to the growth of wage labour in technologically leading States, demographic pressures and fast-declining land-man ratios have increased the proportions of wage labour in technologically lagging States' (Parthasarathy, 1991:A72). But it is also possible to identify a number of factors other than purely demographic ones which may contribute to an increase in agricultural wage labour, in the absence of a dynamic transition to capitalism or, as in the case we are considering, in the context of a 'stalled' transition. These factors essentially involve a decline in access to both land and non-agricultural income among the rural poor.

Tenancy, which, as we have seen, in Bihar overwhelmingly consists of leasing in by small and marginal cultivators, appears to have declined sharply. The percentage of holdings leasing in land has decreased from 19.7 per cent in 1981-82 to 7.5 per cent in 1991-92,

while the percentage of operated area leased in has declined from 10.3 per cent to 3.9 per cent according to National Sample Survey data (Government of India, 1996a; see Tables 18 and 19 in Chapter 5 above).

The reasons for this have been discussed in detail in Chapter 5, 'Land Ownership and Access to Land in the Fieldwork Area'. We saw that while the figures cited for the 1990s suggest under-recording of tenancy, recording of tenancy may be less effective in the 1990s precisely because of a growing tendency for tenants to be changed on a yearly basis. Despite the continuing failure of the state to implement land reforms legislation, the changing climate of agrarian relations in the 1980s has increased fears among landlords of tenants claiming - and being able to enforce - occupancy rights. This is one reason for regular switching of tenants - another is the introduction of a 'bidding' system for tenancies as the spread of new technology to small cultivators has enabled fixed rents to increase rapidly. At the same time, in some areas a genuine net decline in tenancy - and particularly share tenancy - may have occurred in response to organising by the rural poor. This phenomenon is discussed further in this chapter. In any case, the result has clearly been a decline in secure access to land among the poorest households, increasing their dependency on agricultural wage labour as a source of income.

As we have noted, other factors affecting the 'viability' of small and marginal holdings - apart from ongoing subdivision and fragmentation - are escalating costs of inputs, and lack of availability of these inputs - often as a result of their appropriation by locally powerful rich peasants. This increases the necessity for small cultivators to sell their labour power in order to survive.

In terms of non-agricultural income, changes in the structure of employment during the 1980s, which were intensified sharply after the introduction of the New Economic Policies in 1991, have meant that 'rural areas have borne the brunt of the workforce restructuring process, with agriculture in particular reverting to its traditional role as the residual sector for rural born workers who have not been able to find more productive non-farm jobs, either in rural areas, or in the cities' (Bhalla, 1997:222). As a result, 'real agricultural value added per agricultural worker dropped significantly, by over 8per cent, even if comparison is restricted to the years 1989-90 and 1992-93 when monsoon conditions were very similar' (Sen, 1996:2466).

Bhalla notes 'the tendency of the secondary sector in the rural workforce to stagnate or decline, in the years before the watershed of 1991. This reflects the collapse of employment in rural household industry. After 1991, not only the rural secondary sector, but all of non-agriculture, suffered a rout....The number of persons who settled for work in agriculture...is roughly four times the number who obtained work in the non-farm sectors from 1987-88 to 1993-94. This compares decidedly unfavourably with the numbers for the preceding quinquennium. From 1983 to 1987-88, roughly three times as many fresh jobs had been generated in non-agriculture as were generated within the farm sector.' (op cit.:219).

While Bihar has long been characterised by relative stagnation in its sector-wise employment structure, Sharma suggests that figures for the period 1981-1991 indicate 'retrogression in the employment structure of the State'. Employment in mining and quarrying, manufacturing, construction and transport all showed negative growth rates in this period, while agriculture and allied activities recorded a growth rate of 2.28 per cent, trade 1.83 per cent and services 5.94 per cent. 'It is also significant to note that the decline in the share of manufacturing is accompanied by a rise in the share of agricultural labour in the workforce' (Sharma, 1996:5-6) (see Table 1 in Chapter 2 above).

Further, with a large proportion of total interstate migrants in search of work originating in Bihar (42 per cent were from Bihar and U.P. in 1981, according to Jha [1997: 31]), the decline in secondary sector employment at an all-India level has inevitably hit the workers of these states particularly hard.

### *The 'Feminisation of Agricultural Labour' Hypothesis*

As Table 26 shows, Nalanda district has a high proportion of agricultural labourers among women 'main workers', as does Bihar as a whole. With a figure of nearly 58 per cent, Bihar is second only to Andhra Pradesh among major States according to the 1991 Census. Bihar also has the second highest proportion of agricultural labourers among main workers of both sexes, and the highest proportion among male main workers (Table 26). But, as in several other States there is a striking disparity between the proportion of agricultural labourers

among female main workers recorded (57.92 per cent) and that among male main workers (33.02 per cent)<sup>1</sup>.

This may be partly a result of problems in enumeration which themselves stem from gender inequalities. In particular, evidence suggests that women's participation in 'cultivation' (i.e. cultivating family land) is systematically under-reported. This is the case both for the Census and other official sources (Sharma, 1992) and is due to two major factors. Firstly, there is the actual underestimation of the amount of productive labour carried out by women - which is reinforced when this labour is not bringing in a wage. Secondly, there is unwillingness to acknowledge that women are participating in field labour where family status would be considered to be lowered by their doing so, as is the case among upper castes in Bihar (who in agriculture are concentrated in the 'cultivator' category). Thus more widespread under-reporting of women cultivators could lead to an overestimation of the proportion of agricultural labourers among female main workers.

However, it is unlikely that these enumeration problems alone could account for the extent of the gender disparity in participation in agricultural wage labour in Bihar. The Census figures underline the fact that for the vast majority of women from poor households in Bihar, agricultural wage labour is the only means of survival. Any discussion of the conditions of agricultural labourers in the State must therefore make women's experience a central focus.

But while in nearly all major States the increase in the proportion of agricultural labourers among women main workers has been higher than that among male main workers during the period 1961-1991, this has not been the case in Bihar (da Corta and Venkateshwarlu, 1997). Bihar is one of only two States (the other is Uttar Pradesh) which has not undergone what has been referred to as the 'feminisation' of agricultural wage labour in this period (op cit.). It is thus worth briefly examining some of the explanations put forward for the 'feminisation' of agricultural wage labour at an all-India level, and

---

<sup>1</sup> It should be noted that due to the very low percentage of women identified as 'main workers' in Bihar, this does not imply a high female-male ratio among agricultural labourers in the State. Less than one-third of agricultural labourers are women according to this method of enumeration. The problems with the 'main worker' category used in the Census of India have been referred to earlier in this chapter. The use of this category does not, for example, reflect the large scale employment of women labourers during paddy transplanting and harvesting each of which take place over a period of less than two months.

**Table 26: Percentage of Female, Male and Total Main Workers in Agricultural Occupations, Nalanda District, Major States and All-India, 1991**

	Percentage of all Female Main Workers			Percentage of all Male Main Workers			Percentage of all Main Workers		
	Agricultural Labourers	Cultivators	All Workers in Agriculture	Agricultural Labourers	Cultivators	All Workers in Agriculture	Agricultural Labourers	Cultivators	All Workers in Agriculture
Nalanda	64.27	27.54	91.81	37.22	43.42	80.64	43.71	39.61	83.32
Bihar	57.92	31.54	89.46	33.02	45.81	78.83	37.21	43.41	80.62
Andhra Pradesh	59.66	22.39	82.05	30.55	30.65	61.2	40.76	27.76	68.52
Assam	13.49	51.41	64.9	12.72	51.2	63.92	12.89	51.24	64.13
Gujarat	44.38	30.84	75.22	17.62	34.12	51.74	22.98	33.46	56.44
Haryana	24.81	47.28	72.09	18.89	38.44	57.33	19.53	39.38	58.91
Karnataka	49.06	26.01	75.07	20.32	37.82	58.14	28.75	34.36	63.11
Kerala	35.76	5.74	41.5	22.61	14.38	36.99	25.66	12.38	38.04
Madhya Pradesh	37.33	50.98	88.31	17.7	52.25	69.95	23.5	51.87	75.37
Maharashtra	43.59	38.87	82.46	18.75	29.85	48.6	26.91	32.81	59.72
Orissa	54.73	26.03	80.76	22.96	48.35	71.31	28.85	44.21	73.06
Punjab	21.9	17.71	49.61	23.41	33.89	57.3	23.31	32.83	56.14
Rajasthan	18.33	68.92	77.25	8.06	56.73	64.79	10.13	59.18	69.31
Tamil Nadu	52.02	21.33	73.35	25.98	26.59	52.57	34.16	24.94	59.1
Uttar Pradesh	35.13	46.38	81.51	16.86	53.81	70.67	19.23	52.84	72.07
West Bengal	37.5	16.53	54.03	22.64	30.16	52.8	24.53	28.42	52.95
All-India	43.56	34.55	78.11	20.9	40.01	60.91	26.15	38.75	64.9

Source: Census of India, 1991

Note: I have calculated the percentages in the category 'All Workers in Agriculture' by adding together the percentages in the categories 'Agricultural Labourers' and 'Cultivators'

comparing descriptions of this process in other regions of India with the conditions prevailing in the fieldwork area.

A number of observers have linked 'feminisation' to technological changes which have brought about higher participation of women in agricultural tasks as a whole, particularly in the 1980s (see da Corta and Venkateshwarlu, 1997, for a summary of this 'neo-liberal' literature) In response to this 'feminisation of agriculture' hypothesis, Banerjee argues that the increase in women's employment was confined to five states - Andhra Pradesh, Madhya Pradesh, Maharashtra, Tamil Nadu and U.P., where 'women have been the traditional mainstay of three crops - paddy, sugar cane and cotton. A further intensification of their cultivation over this period was probably the main factor behind the additional work days for women. So far, there are no signs of any change in the technologies of cultivating these crops, so, when cultivation is intensified, women get more work.'(Banerjee, 1997:435)

However, other writers have argued that the significant change is the increase in rural women's dependence on wage labour, and agricultural labour in particular. Unni suggests that a fall in the percentage of days in wage employment for rural households as a whole reflects a diversification of earning opportunities for these households, which is however not shared by women: 'among men, the percentage of wage employed days declined even in labour households without land, but among women, it increased in such households until 1983. Thus, while men in labour households were able to find other kinds of work, women remained mainly casual workers' (Unni,1997:460). Subsequently, even in areas where women had been employed in the rural secondary sector, they have been pushed out on a massive scale by the New Economic Policies associated with liberalisation from 1991 onwards (Bhalla 1997, Unni 1997).

Da Corta and Venkateshwarlu (1997) cite new non-agricultural employment opportunities for men as well as the acquisition of small plots of land by previously landless households resulting from state policies specific to Andhra Pradesh - in this context men withdraw from agricultural wage labour to cultivate their own plots while women continue to work on others' land.



Choudhry (1993) refers to downward rather than upward mobility in the context of rural Haryana, with poor peasant households increasingly sending women out for agricultural labour while men continue to cultivate their own holdings or seek alternative employment.

However my observations suggest that none of these situations are likely to emerge in my fieldwork area or elsewhere in Central Bihar in the immediate future. Firstly, as we will see later in this chapter, large-scale non-agricultural employment is increasingly concentrated in construction and related areas such as brick-kilns, where women are generally employed alongside men. My survey found similar levels of participation by both men and women in this activity. The emergence of employment opportunities which are heavily biased towards men is itself an indicator of a specific pattern of development (see for example Sharma and Poleman, 1994, for a description of the emergence of permanent employment in small-scale industrial units in small towns in Western Uttar Pradesh). Such development, as I have argued, has in Bihar been seriously constrained by the very nature of the state's institutional structures, and in the 1990s is further limited by the economic policies of the central government.

Secondly, in Central Bihar land redistribution by the state has been negligible; in the few cases where previously landless labourer households have been able to acquire small plots through savings or in some cases participation in collective struggles for land redistribution, both male and female members of such households have been compelled to continue to work as agricultural labourers - the only cases of withdrawal I came across were in fact of women.

Thirdly as we discuss in more detail in this chapter, the continuing dominance of essentially feudal notions about women and status in Central Bihar acts as more of a constraint on women performing agricultural labour than men. This is the case even for dalit households and is all the more applicable to poor peasants of non-dalit castes.

### *The Impact of Technological Change on Labour Use*

With a variety of factors intensifying the growth in numbers dependent on agricultural labour as a source of livelihood, the question of changes in the demand for agricultural labour becomes a vital one. Jha notes that according to the findings of the National

Commission on Rural Labour (1991), 'the expansion of gross cropped area has been the single most important determinant of labour absorption per hectare during the post-independence period'.(Jha, 1997:113). But between 1960-61 and 1984-85, net sown area declined by 2.4 per cent and gross cropped area showed 'only a marginal increase' with year-to-year fluctuations at an all-Bihar level (op cit.: 112). And between 1980-81 and 1993-94, both the net sown area and the gross cropped area have actually declined by approximately 13 per cent (ADRI,1997).

However since the intensity of cropping clearly has increased in certain parts of the state, including my fieldwork area, since the early 1960s, it is worth looking in more detail at the possible impact on agricultural employment of various technological changes of the type which have occurred in the fieldwork area since the early 1970s.

Literature on technological changes in agricultural production has tended to make a distinction between 'labour saving' and 'land augmenting' agricultural technology, and this has been assumed to broadly correspond to farm mechanization on the one hand, and biological innovation on the other (e.g. Ellis, 1993; Binswanger, 1984). However, in reality, as we have seen, the two kinds of changes are often inextricably linked. The overall impact on employment can thus only be assessed if these linkages are taken into account.

Further, as Agarwal has argued, in order to assess the employment effects of agricultural mechanisation, it is necessary to analyse both the disaggregate effects of specific techniques by operations and crops, as well as aggregative, farm level effects such as changes in cropping intensity (Agarwal, 1978).

For example Billings and Singh (1970) found that the actual labour time required for irrigation when pumpsets were substituted for persian wheels was reduced by three quarters (a comparable reduction could be expected to apply to substitution for the manual labour associated with the 'ahar-pyne' irrigation system prevalent in my fieldwork region till the late 1960s). But this estimate did not take account of the impact of mechanised irrigation on the level of cropping intensity. Agarwal's study of mechanisation in Punjab found that tubewell irrigation, through its effects of increasing both cropping intensities and yields (see 'Chapter 4, 'Agriculture Technology and Class in the Fieldwork Area'), generates a higher demand for labour, both in irrigation itself as well as in harvesting and

threshing.<sup>2</sup> In addition, seasonal peaks in labour demand are intensified and, once new seeds and chemical fertilisers are introduced, the tendency towards 'time-bound operations and tighter crop rotation' is reinforced considerably (Bardhan, 1977b:1102).

This in turn encourages the mechanisation of other tasks. Mechanical threshers reduce the demand for labour (Agarwal,1978:220, Byres, 1981:412-413). As far as tractors are concerned, attempts to evaluate the impact on employment of the introduction of tractors have been closely linked to the debate surrounding the impact of tractorisation on yields and cropping intensity (see Sen, 1975:154-164 and Byres, 1981: 411-420 for discussions of this debate).

While Hanumantha Rao (1975) argued that the technological displacement of labour is roughly compensated by the rise in employment mainly as a result of the increase in yield associated with tractor use, a more widely accepted view has been that the independent impact of tractorisation on yields has not been significant, with irrigation and the use of HYV seeds and fertilisers the main yield increasing factors (Vashishtha, 1972 cited in Sen, 1975:163; Agarwal, 1978:223; Ellis, 1993:237-8).

In terms of cropping intensity, on the basis of a number of micro-level studies Bardhan (1977a) concluded that despite its potential for easing the time constraints associated with the 'new technology', in the context of northwest India, tractorisation had little independent effect on cropping intensity.

But as Byres points out, it may often be the case that 'for a capitalist or-proto capitalist farmer, the full benefits of the use of biochemical inputs cannot be secured without the use of tractors (given a labour constraint, in terms of actual shortage of labour at the appropriate times or apprehension about 'labour trouble')'(Byres, 1981:414). As this implies, in practice one of the main incentives for introducing tractors was actually to reduce dependence on wage labour.<sup>3</sup>

---

<sup>2</sup> In rice cultivating areas, the demand for labour for paddy transplanting also increases.

<sup>3</sup> For instance Frankel (1971:147) quotes the Joint Director for the IADP in Palghat, Kerala in 1968-69 as saying that he 'could immediately dispose of an additional 1,000 (tractors)...the major source of attraction being not greater efficiency in farm operations but the opportunity to be rid of the labourers'.

This decline in demand for labour would be expected to increase as tractorisation spreads to a wider range of operations. But in Agarwal's survey, tractor use was found to reduce the demand for labour substantially even though, as in our study, it was confined to ploughing and to a lesser extent sowing. While the study did find some increase in cropping intensity associated directly with tractorisation, this was 'insufficient to neutralise the crop-specific labour displacement effect'. (Agarwal, 1978:224)

In summary then, a survey of the existing literature suggests that the impact on the total volume of demand for labour hours of the type of technological changes introduced in the fieldwork area since the late 1960s would be as follows. The introduction of mechanised tubewell irrigation would be expected, as a result of its effects on cropping intensity and yields - and in particular in this case the introduction of HYV seeds and fertilisers - to lead to a net increase in total labour hours required for cultivation. The subsequent introduction of mechanical threshers would lead to a substantial fall in labour demand, as would the introduction of tractors in ploughing and sowing.

But the magnitude of these changes would depend on the cropping pattern (not only is the impact of mechanisation on labour demand crop-specific, but cultivation of certain crops may well be more extensively mechanised than others, even on the same farm) and other conditions prevailing in the area under discussion<sup>4</sup>. These specificities of the fieldwork area are dealt with in the following sections.

We are concerned here not only with changes in the total volume of demand for labour time, but also with changes in both numbers of people employed and the forms of wage labour. An example of an early study of these changes that carried out by Ashok Rudra, on the basis of his survey of farms in Punjab operating more than 20 acres (Rudra, 1971). Rudra argued that given a certain number of male family workers, the introduction of a tubewell and pump 'reduces somewhat the demand for permanent servants but...increases the demand for casual labour'. The further addition of a tractor cancelled out this increased demand for casual labour, while creating a demand for permanent labour (op cit.:A94).

---

<sup>4</sup> Agarwal refers to soil conditions, the proportion of family labour to total labour used and the size of the plot as additional factors affecting labour demand measured in hours per hectare (Agarwal, 1978:220)

Bardhan similarly argues that as mechanisation progresses one would expect to see a rising proportion of wage labour to be permanent, citing 'several factors including the increased proportion of larger farms, their need to ensure ready availability of a certain basic amount of labour for the new intensive crop rotation with its time-bound peak operations, and the importance of the labourer's familiarity with the machines and the specific schedule of operations' (Bardhan, 1977c : 1113).

By contrast, Agarwal comes to a different conclusion in her study, in which tractorisation was confined to ploughing and to a lesser extent sowing, and harvesting remained manual. She suggests that 'tractors tend to displace mainly family labour time on small farms and permanent labour time on large ones...Threshers tend to displace mainly family and casual labour time on small farms and family and permanent labour time on large ones' (Agarwal, 1978:220) (see Table in Note 7).

However, while as we have suggested, existing studies of the impact of mechanisation on overall demand for labour hours per hectare in different parts of India can at least allow us to make broad predictions about its impact in the fieldwork area, the same cannot be said for studies of the composition of labour hours. The composition of labour demand - the proportions of family labour, casual wage labour and permanent wage labour hours used - is affected by the specific characteristics of the region under discussion far more even than the total demand for labour hours. In addition to the central question of cropping patterns, a number of interrelated factors could be expected to determine both the extent of different types of mechanisation, and subsequently their effects on labour composition in Central Bihar.

These include the extent and nature of permanent and casual labour prior to mechanisation; the attitude to manual labour (for women as well as men) among different cultivating groups; the initiatives taken by labourers themselves in relation to the forms and conditions of agricultural employment; and the responses of the employers to these initiatives. These aspects of the fieldwork area are explored below.

## **1. Agricultural Labourers in the Fieldwork Area**

### *a) Class, Caste and Gender*

Notwithstanding the criticisms referred to above, we are primarily dependent on the Decennial Censuses for district wise-data on employment patterns. According to this source, the proportion of agricultural labourers in Nalanda District increased marginally from 41.81 per cent of total main workers in 1981, to 43.7 per cent in 1991.

In terms of caste composition, in the late 1970s agricultural labourers were distributed as follows at an all-Bihar level: 0.3 per cent belonged to upper castes; 34.2 per cent to middle castes; 39.1 per cent to Scheduled Castes; 12.4 per cent to Scheduled Tribes; and 14 per cent were Muslims (Ghosh and Bose, 1978). 'Middle castes', however, include both traditionally cultivating castes - the Yadavs, Kurmis and Koeris (sometimes referred to as 'upper backward castes') and those traditionally engaged in 'jajmani' or service occupations who are accorded a lower caste status and are often today largely engaged in agricultural labour. These 'lower backward castes' include, for example, the Beldars of Central Bihar, who traditionally engaged in manual labour such as constructing irrigation works and today survive through performing various kinds of manual wage labour including agricultural labour. The terms 'mazdoor' and 'dalit' as they have been used in movements of the rural poor in Central Bihar encompass these groups as well as the official 'Scheduled' castes.

The ANSISS/ILO study of 1981-83 found that in Central Bihar districts, households participating in agricultural labour comprised 1.84 per cent of upper caste households, 26.35 per cent of 'upper backward castes', 84.74 per cent of other 'backward castes', and 92.74 per cent of scheduled castes (Prasad, 1989). Applying these ratios to Nalanda in 1991, when Scheduled Castes comprised 20.88 per cent of the rural population according to Census figures, gives us a rough estimate of 20 per cent of the rural population in the district as a whole belonging to scheduled caste agricultural labourer households. In terms of households, in a majority of the villages I surveyed in Hilsa block, including Chandkura, this proportion was much higher, at around 40 per cent or more (see Table 27).

The social distinction between those who perform wage labour on others' land and those who limit themselves to the cultivation of their own holdings is an extremely sharp one

throughout Central Bihar. For agricultural labourers in Hilsa furthermore, the correlation between class position and caste status is as we have seen very strong. The term 'mazdoor' or labourer connotes a position in both hierarchies - a 'mazdoor' is by definition low caste. The fact that labourers are defined, both by others and by themselves as a cohesive community in this sense has important implications for their ability to organise.

It is also significant that while paid labour performed by any household member on another's land denotes a 'mazdoor' household, it is the participation of women in such labour which is at the heart of the definition. As far as agriculture is concerned, only women of a low caste work 'outside'. (For women of the upper 'backward' castes - Kurmis, Koeris and Yadavs - there is no stigma attached to cultivating family holdings, but upper caste women are prohibited from doing any work in the fields). The pervasive - albeit contested - influence of feudal high caste norms in this respect is partly responsible for the withdrawal of women - particularly younger daughters-in-law - from paid agricultural labour by dalit labour households who acquire alternative sources of income and/or land. However an equally important factor which makes women's wage labour undesirable both to dalit women themselves and their families is the other side of upper caste morality - the sexual harassment and even rape of women labourers working in the fields which higher caste employers long considered their birth-right.

Altogether, it is clear that the complex notion of family 'izzat' - honour or dignity - is crucially affected by women participating in wage labour in Central Bihar. Bardhan observes that in rural India 'work is not merely a medium of generating earnings or production. It is a symbol of hierarchical position, a conveyor of the value system ordering the village society. A woman's work has a stronger significance for family status, and is thus much more closely regulated' (Bardhan, 1986:88). This attitude appears to be more entrenched in Central Bihar than several accounts suggest to be the case in most of South India and even some other parts of the North (Kapadia, 1992, 1996, da Corta and Venkateshwarlu, 1997, Chowdhry, 1993)<sup>5</sup>.

---

<sup>5</sup> Examples from South India include Kapadia's work on Tamil Nadu (1992, 1996) and da Corta and Venkateshwarlu (1997) who suggest that among labourers in Andhra Pradesh, 'men's own withdrawal from paid work is much more important to their status than their wives' withdrawal'. Meanwhile Chowdhry has observed that in Haryana, fragmentation of holdings among non-scheduled caste cultivators has meant that 'status considerations' have been 'superseded' and 'it is the male, by and large, who continues to operate his own holding, sending out the female for wage work, while he himself might explore the possibility of outside employment, particularly in the urban centres.' (Chowdhry, 1993: A-144).

**Table 27: Distribution of households in Chandkura by caste and economic class, 1995-96**

	'Dalits'		Intermediate Castes				Upper Castes	TOTAL
	SC	LBC	UBC Yadav	UBC Koeri	UBC Kurmi	UBC Other	Brahman & Rajput	
Agricultural Labour	94(40.3)	14(6.0)	3	0	1	0	0	112(48.1)
Poor Peasant	10	9	7	2	13	4	0	45(19.3)
Middle Peasant	0	2	2	4	26	0	1	35(15.0)
Rich Peasant	0	0	2	1	14	0	1	18(7.7)
Landlord	0	0	0	0	2	2	0	4(1.7)
Non-Agricultural	4	7	0	0	3	4	1	19(8.2)
TOTAL	108 (46.4)	32 (13.7)	14 (6.0)	7 (3.0)	59 (25.3)	10 (4.3)	3 (1.3)	233(100)

SC=Scheduled Caste; LBC = Lower Backward Caste; UBC=Upper Backward Caste

Source: Fieldwork

Note: Figures in brackets indicate percentage of total households in Chandkura

Key determinants of variations in the attitude to women's work seem to be twofold. Firstly, the extent - and durability - of pre-capitalist patriarchal relationships and the hegemony of upper caste ideology (for a discussion of this see Chakravarti, 1995). For example, in Central Bihar, the joint family, in which women are considered possessions of the family and repositories of its honour, prevails throughout the social spectrum and even among poor dalit households - 62 per cent of dalit agricultural labourer households in Chandkura in 1995-96 were joint households. This is in contrast, for example, to the situation described by Kapadia for Tamil Nadu where 'among the impoverished Pallars there were no joint families, only nuclear households'(Kapadia 1992:231).

Secondly the degree and nature of capitalist penetration and capitalist development. The latter may have a number of direct and indirect regionally specific effects on attitudes to women's paid labour in agriculture including classic polarisation and proletarianisation of poor peasants, the emergence of sources of non-agricultural employment for men, the collapse of the joint family or even (as the studies of South India cited above suggest) the collapse of the nuclear family with men withdrawing completely from family subsistence. For a variety of reasons, many of which are the subject of the present study, all these tendencies have been absent or weak in Central Bihar to date. The seclusion of women remains a key marker of status for the upper castes; and for lower castes, the chance to



withdraw women from wage labour is a step towards the 'izzat' - dignity or honour - which is denied them in the caste hierarchy.

However, despite the attitudes described above, in reality few labour households can actually afford to prevent women from working in periods of peak labour demand, given the overall acute scarcity of employment. In fact, with rice the major crop, it is women's paid labour which assures the employer of realising his surplus - women are solely responsible for the labour-intensive and time-bound tasks of weeding and transplanting, and play a major role in harvesting the crop. And this also means that women are at the forefront of agitations demanding higher wages, refusing to work en masse during the transplanting and harvesting seasons.

On the one hand, women as wage workers are playing a vital role in the actions which are at the core of the agricultural labourers' movement; on the other, an ideology in which family status depends largely on women's seclusion continues to have a powerful resonance. The implications of these contradictory tendencies are explored further later in this chapter, and in Chapter 7, 'Patterns of Accumulation in the Fieldwork Area'.

#### *b) Forms and Conditions of Agricultural Labour*

Agricultural wage labour in Chandkura and other villages in Hilsa takes two forms. Casual labourers are paid daily wages in kind, fixed in advance, except during harvesting when they are paid a predetermined fraction of what they harvest. Attached labourers are employed on one year oral contracts, but are also paid on a daily basis in kind. They receive a small plot (usually 10-12 katthas, approximately one third of an acre) to cultivate.

Male attached labourers are generally employed for non-mechanised ploughing, and in addition carry out maintenance work in the fields such as looking after the drainage system. They also take part in harvesting and in uprooting the paddy seedlings (a task carried out by men during the transplanting season, while women are replanting), and in operating mechanical threshers where these are used. Unpaid labour, such as cutting grass and bringing in animals, existed previously but is no longer widespread. Those who employ attached labourers in Chandkura do not give work to the women family members of male

attached labourers for most of the year. However during transplanting and harvesting, these women have to carry out the work on the employer's land before accepting employment anywhere else, even though wage rates are often lower. In fact this guaranteed supply of female labour during peak periods is a key advantage of attachment from the employer's point of view.

It is important to note that the position of attached labourers in Chandkura is somewhat different from that of those in upper-caste dominated areas who are often referred to as 'farm servants'. Under the latter system, both men and women carry out a variety of tasks both in the fields and in the compound. Employers in Chandkura are almost all of the Kurmi caste and almost universally the men engage in cultivation themselves: labourers, whether attached or casual, are employed only for specific tasks in the fields. This also means that even male attached labourers only receive a maximum total of six months work per year. And while attached labourers can (and in fact are usually compelled to) seek other employment when there is no work at all provided by their employer, unlike casual labourers they are not 'free' to do so in periods when there is some work to be done, but not enough to earn a daily wage. As we will see, this has been one of several reasons for labourers preferring casual labour in the context of changing patterns of non-agricultural employment.

While the employer generally provides the seeds and sometimes also the plough and bullocks for the cultivation of the attached labourer's plot, the labourers provide all other inputs, including fertilisers and diesel pumpsets which they hire from the employer at standard rates. This is in contrast to the situation observed in 1981-82 when it was found that electric powered tubewell irrigation was provided free by employers to attached labourers, and was seen as one of the mechanisms through which attachment was reinforced. (Prasad, Rodgers et al, 1988: 538)

### *c) The Changing Nature of Interlocked Relationships*

People who had been attached labourers in the past described the classic interlocking of loan and labour markets in which on entering a contract they were given a sum of money and made to put a thumb print on an 'agreement' according to which the 'loan' along with unspecified amounts of interest had to be paid back before they could leave the employer.

In 1995-96 however attached labourers were not automatically given loans by their employers. Approximately 31 per cent of attached labourers as compared to 15 per cent of casual labourers took loans from 'kisans' currently employing them. Several attached labourers stated that they took loans (usually between Rs100 and Rs300) only if they needed them for an emergency such as illness or a funeral. These loans were subject to the same interest rates (six per cent per month) as other loans given by 'kisans' to 'mazdoors', but did not require collateral. However until these loans were paid back (with interest) the labourers could not leave the employer. In some villages crops from the allotted land were seized by the landowner if the labourer defaulted on the loan at the end of the year. In Chandkura however the most significant factor preventing labourers from defaulting on loans was the fact that if they did so they would not be able to get further credit in emergencies from any of the 'kisans' in the village<sup>6</sup>.

In fact there appears to have been a shift from highly personalised interlocked relationships between individual households to a more generalised relation of dependence of agricultural labourers on a small group of potential creditors and employers. But the element of control by one class over another in this relationship remains strong. The large landowners of the village are the primary source of credit as well as employment for all the agricultural labourers of the village, whether casual or attached. Credit available to them from other sources, generally moneylenders and gold merchants in Hilsa town, is on substantially less favourable terms. However, interest is always charged in such 'kisan-mazdoor' transactions. In contrast, smaller cultivators of the Kurmi caste can often get loans interest-free from larger ones. As we will see, these relationships become particularly significant in periods when class contradictions intensify.

#### *d) Changes in Labour Demand and Composition of Agricultural Labour*

While we do not have information on the precise extent of attached labour in Chandkura in the late 1960s, it is evident that the 1970s saw a substantial decline in the proportion of labourers who were attached throughout Hilsa. A large proportion of agricultural labourers describe being 'bonded' in the 1960s or can recall their parents working under

---

<sup>6</sup> In a study of rural credit markets in Western Orissa, Sarap describes 'the threat of loss of future borrowing opportunity for the poorer households' as a 'collateral substitute', noting that 'in a small and immobile rural community the news of wilful default of borrowers can be quickly transmitted to most of the potential lenders'(Sarap, 1987:94)

these conditions. By 1981-82, 59 per cent of agricultural labourer households had no members working as attached labourers. Technological change is clearly a key factor determining this shift. As noted above, similar changes in the structure of labour demand have been observed elsewhere in India in the context of the introduction of tubewell irrigation. The changes in cropping patterns and the spread of HYVs which accompanied tubewell irrigation increased demand for labour, but intensified seasonal peaks in this demand. This generated a shift away from permanent labour to casual labour.

Subsequently there was some displacement of both casual and permanent labour through the adoption of threshers, which are now used by approximately 29 per cent of cultivators in Chandkura. The main labour-intensive tasks of harvesting and paddy transplanting continued (and still continue) to be performed manually by casual labourers. Thus the large scale displacement of casual labour and the increased proportion of permanent labourers employed to operate machinery predicted earlier (see for example Bardhan 1977c) did not take place in the fieldwork area.

In fact even the limited introduction of tractors which occurred in the area in the latter half of the 1970s, did not, as elsewhere, mean the employment of permanent labourers whose work included driving them. In households which had previously employed a male permanent labourer ('halwaha') whose principle task was ploughing with bullocks, the power tiller or tractor was often operated by a male family member. In other villages in Hilsa with landowners belonging to upper castes, it was observed that even those castes who traditionally refuse to perform manual labour - ploughing in particular - did not consider tractor driving demeaning. However, owners of large tractors often employed drivers. Tractor drivers in Hilsa are generally, like their owners, from cultivating Kurmi families, they receive a monthly salary of Rs 500-700, and do not identify themselves in any way as agricultural labourers. In any case, as we have seen, tractor driving is not exclusively, or even primarily an agricultural occupation in Hilsa.

Overall, therefore, the impact of the appearance of tractors and power tillers has been a decline in total labour demand, and specifically demand for permanent labour<sup>7</sup>.

However, the major impact of these processes had already been felt by the time the first study of Chandkura took place in 1981-82. Although there has been a further extension of irrigation during the last fifteen years, this has been largely a result of the adoption of diesel pumpset irrigation by small and marginal cultivators. The proportion of family labour in total labour used tends to be higher for these households. As Table 28 shows, on average, smaller landholdings in Chandkura have a greater number of both male and female family workers per acre cultivated in comparison to larger holdings. These households have never employed permanent labourers; in fact, many hire out both male and female labour. While their adoption of the new technology has increased their labour requirements during peak seasons, many of them meet these additional needs by exchanging labour, particularly women's labour, with other similar households, rather than hiring in casual labour<sup>8</sup>. Those small and marginal cultivators who hire in tractors do not displace wage labour but family labour in doing so. Thus the impact of the second, post-electricity phase of extension of irrigation has had relatively little impact on the

<sup>7</sup> The following table shows the direction of changes in demand for labour which were found to take place as a result of the introduction of tubewells, tractors and threshers, in two important studies from the 1970s (both referring to Punjab) discussed earlier in this chapter, and in the present study.

**Impact on total labour demand and use of permanent and casual wage labour by type of mechanisation**

Type of mechanisation	Name of Study	Total Labour Demand	Use of Permanent Labour	Use of Casual Labour
Tubewell	Punjab 1(Rudra)	increases	decreases	increases
	Punjab 2(Agarwal)	increases	increases	increases marginally
	Chandkura	increases	decreases	increases
Thresher	Punjab 1(Rudra)	n.a.	n.a.	n.a.
	Punjab 2(Agarwal)	decreases	decreases	decreases
	Chandkura	decreases	decreases	decreases
Tractor	Punjab 1(Rudra)	decreases	increases	decreases
	Punjab 2 (Agarwal)	decreases	decreases	no change
	Chandkura	decreases	decreases	decreases

Sources:

*Punjab 1: Rudra, 1971; Punjab 2: Agarwal, 1978; Chandkura: fieldwork*

*Note: In all three cases, it is assumed that tractors and/or threshers are introduced subsequent to the introduction of tubewell irrigation.*

<sup>8</sup> Bharadwaj has pointed out that for small cultivators hiring in labour, wage rates, like hire of equipment, may be higher. This is due in particular to the fact that small farmers hire in during peak seasons and the 'diseconomies of buying inputs in small quantities' (Bharadwaj, 1974b:62). Exchange of labour is a way of counteracting this effect.

structure and extent of demand for wage labour in Chandkura. If anything, the proliferation of small and marginal holdings at the expense of larger ones, which, as we have seen, occurred during the same period, may have slightly reduced the overall demand for wage labour.

**Table 28: Use of Adult Family Labour (persons per acre) in Cultivation by Size of Operated Landholding in Chandkura, 1995-96**

<b>Land Operated</b>	<b>Mean adult family members cultivating (persons/acre cultivated)</b>	<b>Mean male adult family members cultivating (persons/acre cultivated)</b>	<b>Mean female adult family members cultivating (persons/acre cultivated)</b>
less than 0.5 acres	3.8	2.4	1.4
0.5 - 0.99 acres	4.3	2.7	1.6
1 - 2.49 acres	2.8	1.5	1.3
2.5 - 4.99 acres	1.7	0.9	0.8
5 - 10 acres	0.7	0.4	0.3
10 acres and above	0.4	0.3	0.1
All landholdings	2.9	1.7	1.2

*Source: Fieldwork*

Further changes in the cropping pattern in this period have also been limited so far in their effects on demand for labour. As we have noted, onion growing has increased even in the smallest landholding size categories. Cultivation of onions requires intensive labour, and operations are extremely time-bound. This means that even the smallest cultivators, who do not employ labour at any other time, have to employ wage labour for weeding and harvesting the onions. Further increases could have important effects on the structure of demand for labour within the village: weeding is performed entirely by women, and is paid at the same rate as paddy transplantation. However onions are also a very capital intensive crop - requiring larger applications of fertilisers, pesticides and in particular irrigation than any other crop (onions need 12 to 13 waterings as compared to two waterings for wheat). Given the constraints described earlier, it seems unlikely that in this area there will be a rapid expansion beyond current levels in the immediate future.

The other crop which has seen considerable expansion during the last fifteen years, wheat, by contrast, mainly provides male employment in ploughing and sowing during the rabi season when it is grown, particularly as threshing is partially mechanised. However this too

has not been sufficient to change the basic pattern of demand for labour which provides a maximum of six months regular employment, peaking in July/August when kharif paddy is transplanted by women labourers, and November/December when it is harvested.

In summary, the period from the introduction of mechanised irrigation in the late 1960s until 1981-82 was one which saw an overall expansion in the total demand for wage labour, and an increase in the ratio of casual labour hours to permanent labour hours hired in. In the 1970s, the limited introduction of threshers led to some displacement of both permanent and casual labour, while the adoption of tractors by a small number of larger cultivators led to some further displacement of permanent labourers.

The pace of mechanisation from 1981-82 until 1995-96 has been much slower. This period has seen the adoption of mechanised irrigation by small and marginal cultivators. However, due to the greater use of family labour and exchange labour among these households, the impact on demand for wage labour has been limited. In fact, the proliferation of such holdings at the expense of larger cultivators may have led to some reduction in overall demand for wage labour. The impact of the use of tractors among the smallest size-groups of landholdings on demand for wage labour has not been significant. While changes in cropping patterns, particularly increased wheat and onion cultivation, may lead to further changes in the extent and structure of demand for wage labour in the future, they have not been of a sufficient magnitude to do so in this period.

Yet from the point of view of agricultural labourers in Chandkura, it is the 1980s and 1990s which have seen the most significant improvements in both the conditions of agricultural labour and relationships between employers and labourers in the village. A central reason for this has been the forms of class action which emerged and developed during this period. This is discussed in detail in the second half of this chapter, 'Agricultural Labourers' Struggles in Hilsa'. Other changes which are occurring beyond the confines of the village have also had a significant impact: in particular, changes in the alternative sources of employment available to households who engage in agricultural labour.

*e) Alternative Sources of Employment for Rural Labour Households*

There have been a number of changes in the pattern of non-agricultural employment available to labouring households in Hilsa during the 1980s and 1990s.

The ANSISS/ILO survey of 1981-83 found 'a number of caste groups like barber, carpenter, kahar (palanquin bearer) and teli(oil presser) who are still engaged in their caste occupations' in Chandkura (Prasad, Rodgers et al,1988:86). However, 72.7 per cent of those belonging to these castes also engaged in agricultural wage labour, and the remainder in cultivation, confirming the testimony of the older generation in the village that the main decline in income from these 'jajmani' (service) occupations had occurred earlier.

Nalanda district has not been an area of high outmigration in comparison to other parts of Bihar. The ANSISS/ILO survey found that for the villages surveyed in Nalanda, only 8 per cent of all households had outmigrant members, compared to 17 per cent at an all-Bihar level (Prasad, Rodgers et al, 1988: 136). (The incidence of migration did not however vary widely across classes although the type of work carried out by migrants from different classes was very different.[op cit.:125]) But from the point of view of labour households in this area, in the 1970s and 1980s migration represented the main possibility for non-agricultural employment.

In Hilsa there were three main types of migration open to these households<sup>9</sup>. Firstly, there was migration to Calcutta and the surrounding area for work in jute mills. Although the Magadh region of Central Bihar which includes Nalanda has historically been a less important source of Bihari workers for the jute mills of Bengal than the Bhojpur region (de Haan, 1997), it still provided considerable numbers. However, with the decline of the jute industry in the 1980s and 1990s, this is no longer a significant source of employment in Hilsa. In 1995-96, only two households in Chandkura had members who were currently jute mill workers, although there were a number of men in the village who had retired from this work.

---

<sup>9</sup> In comparison to North Bihar, there has been relatively little 'rural-to-rural' migration from Central Bihar to work in agriculture in Punjab and Haryana. But I was told of the recent emergence of such migration from areas of Bhojpur district in Central Bihar, where class conflicts have become very acute.



Secondly, and this was a much more recent phenomenon which emerged in the 1980s, men migrated to work in small factories in Punjab, Haryana, U.P. and the Delhi area. These were small scale units such as metal processing or furniture making, based in small urban centres rather than big cities. Men doing these jobs stayed away for periods ranging from five months to one year. Earnings could vary between Rs 300 to Rs 1,000 per month, out of which all living expenses had to be met. It was generally felt that the harsh working conditions together with isolation made it difficult to continue with such work for long periods. We do not have data on the extent of such migration in different periods. But in the light of the sharp decline in employment in the secondary sector I would hypothesise that this source of employment is a declining one.

The third type of migration involved both men and women going to work as construction labour or loaders or in brick kilns elsewhere in Central Bihar. This is the only type of migration which has not declined. In fact there appears to be a growing trend of groups of women or whole families migrating further afield to Haryana, Punjab and Kanpur (U.P.) to work in brick kilns. Where entire families migrate, they sometimes leave in September or October, and only return in July, when there is work available - mainly for women - in paddy transplanting. This type of migration was prevalent in several villages surveyed in 1995-96. Labourers said that one of the reasons was that in the wake of struggles over wages, local landowners were refusing to give them consumption loans, which had enabled them to survive the lean season in the village in the past (see below). However, this particular type of long-distance migration did not take place in Chandkura at the time of my survey.<sup>10</sup>

An important point to note is that both the first two types of migration - to jute mills and to small factories in Northwestern India - involved mainly young men. In the latter case in particular, it involved those who were educated, including graduates, but had been unable to find government jobs. The cutting off of these 'escape routes' has meant that increasing numbers of young male graduates are remaining in the village, and trying to make a living through agricultural labour. For example, in Chandkura in 1995-96, about eight

---

<sup>10</sup>Migration patterns are often extremely localised. As well as inter-village unevenness in wage rates and other socio-economic conditions, this is obviously partially to do with systems of recruitment and the dissemination of information about possibilities for employment, which have been analysed in depth by Breman (1978) and others. Chandkura was a village with relatively low outmigration overall.

households (approximately 7 per cent of agricultural labour households) had members who were university graduates working as agricultural labourers (all were male). Many more young male labourers had stayed on at school in the hope of getting a government job - several told me that because of this they had not learnt to plough or to carry heavy headloads and this meant that their earning capacity was actually lower. This section of agricultural labourers have in many cases been drawn to the CPI(ML) and emerged as articulate village level leaders of movements for higher wages and land redistribution and against caste-based forms of oppression.

Today the most important source of employment outside the village for both men and women is daily wage labour on construction sites in neighbouring villages or in Hilsa town. This is now an important source of income during the lean season for the majority of agricultural labour households. As Bhalla points out, construction is a 'residual sector' to which 'underemployed workers gravitate...as a last resort' (Bhalla, 1997). Jha (1997:45) refers to the use of the term 'distress diversification' to describe the movement of agricultural labour household members into low productivity/low earning non-agricultural work of this type.

In addition, several men from agricultural labour families in the village have become 'rajmistris' or masons during the last fifteen years and this is now a significant source of income for their families, although household members still participate in agricultural labour during peak seasons. My survey also found that in 1995-96, about one quarter of 'jajmani' caste households were no longer participating in agriculture at all. But this again was the result of an increase in construction and loading work rather than a revival of 'traditional' occupations.

The boom in construction has been mainly the result of the investment of the agrarian surpluses generated in the 1970s and early 1980s in 'conspicuous consumption'. Large new two and three storey houses both in the villages and in Hilsa town, are, along with extravagant weddings, enormous dowries and in some cases a formidable array of licensed and unlicensed weapons, potent symbols of the upward mobility of a section of the rich peasants of the area. These are the major sources of expenditure for that group which has been able to consolidate the improvement in their class status afforded by technological change and increased yields by integrating themselves into the political and bureaucratic

structures and networks which allow them to divert and appropriate a large portion of the Block's development resources. As this suggests, the growth of employment in the construction sector does not indicate the presence of the kind of productive investment which could be expected to create more diverse opportunities for non-agricultural employment in rural Central Bihar. Clearly too, the situation is not a stable one and construction work itself is liable to dry up as quickly as it proliferated.

The labour market in Chandkura has never of course been completely isolated, and it has long been common practice for casual agricultural labourers to occasionally work for employers in adjacent villages. In fact, this mobility, as well as the physical proximity of villages which are often less than a kilometre apart, has been a key factor in determining the impact of class conflicts. But a more recent development for agricultural labourers in Hilsa has been the increased demand for labourers for large-scale potato and onion cultivation in the Jalla area of neighbouring Patna district. In Chandkura, agents come to the village and recruit men in groups of ten or twenty for the potato harvest in March and the onion harvest in April. In a number of other villages however, whole families go to Patna district for a period of two to four months between January and April. They construct their own shelters on the land of the rich peasant employers. During this period each adult can earn between Rs 25 and Rs 40 daily.

Thus both of the major types of employment which were available to rural labour households outside their own villages in 1995-96, construction work and contract agricultural work, take place in nearby areas, are relatively short term, and are generally engaged in by both women and men. The change in the nature of employment available has several implications.

Firstly, whereas earlier forms of non-agricultural employment involved long-distance migration, and essentially removed a small number of people from the socio-economic arena of the village for long periods, today non-agricultural employment is engaged in by a far greater proportion of labouring households, but can only offer a secondary source of income. Whereas previously it was seen an escape route, as we will see today the availability of local construction work in particular has helped labourers to demand higher wages for agricultural labour from employers in the village, by allowing them to sustain long disputes.

Secondly, the emergence of contract work in a neighbouring district has had a direct impact on the expectations of agricultural labourers by providing an example of the possibility for earning more within the agricultural sector itself.

Thirdly, both these types of employment involve labourers being exploited by employers from the same class and caste as the village landowners. Thus it has intensified rather than defusing contradictions between labourers and employers in the village. For example dalit labourers in Bhokila described how one of them had been taken to another village to work on the construction of a new house for a local rich peasant landowner. A wall collapsed killing the young man. The landowner brought back the body and told his father that he had died of dysentery. But they found out what had really happened and this led to a campaign to have the landowner prosecuted (this ultimately failed due to the witnesses' fear of retaliation).

Fourthly, the participation of women and/or entire families rather than lone men in these activities means that the additional income has a greater impact on household consumption levels: as a number of studies have shown, women invariably spend a greater proportion of their earnings on family necessities (e.g. Kelkar and Gala, 1990:101, Agarwal 1994:28-29). Women's participation also reinforces all the effects described above, making alternative sources of earning more directly comparable with those in the village. And the availability of alternative sources of employment for women workers has a particularly important effect on disputes during periods of peak labour demand for agricultural operations in the village, since it is women's labour which is most in demand at these times.

Apart from increasing the bargaining power and confidence of labourers, strengthening their aversion to unequal relations based on caste, and intensifying class contradictions, the increased availability of work outside the village in 1995-96 meant that agricultural labourers in Chandkura felt that their earning capacity was now substantially greater if they were unattached and free to take up both non-agricultural casual daily labour and agricultural contract work. This is despite the fact that permanent labourer households carried out an average of 94 more persondays local agricultural wage labour per household in a year.

However, it is important to note that even in the case of unattached workers, local agricultural wage labour remained their primary source of income, and improving the conditions of this labour was a major concern. As I have suggested, one of the most significant effects of the growth in construction work in Hilsa was that it helped labourers to sustain long disputes with agricultural employers. These struggles are discussed in more detail below.

## **2. Agricultural Labourers' Struggles in Hilsa**

### *a) Issues and Strategies*

While there are a number of earlier instances of agricultural labourers in Hilsa organising to demand basic improvements in the conditions of their lives, during the 1980s these struggles entered a new and more concerted phase with the emergence of the movement led by the Communist Party of India (Marxist-Leninist).

Agitations led by the CPI(ML) began in Hilsa in 1979. As elsewhere in Bihar, the base and local leadership of the party was drawn from among the mainly dalit landless agricultural labourers and poor peasants. The main focus of the movement in its initial phase was wages, forced attachment of labour through debt, and caste-based or 'social' oppression. In several villages, mobilisation began around women's resistance to rapists of the higher caste landed classes.

While this movement had direct links with earlier struggles which had taken place elsewhere in central Bihar in the early 1970s, the catalyst for its emergence in this area at this juncture was the visibly growing profits of a section of the rich peasantry, which had not been paralleled by an increase in the wages of labourers. As a local activist of the movement explained, 'here we don't have landlords owning hundreds of acres as in some other parts of Bihar, but the rich peasants, the new economic class, are exploiting people brutally, and they are a target of our struggle. They are attacking women, attacking labourers. They have supported the big landowners - like the mahants - against our movement.'<sup>11</sup>

---

<sup>11</sup> A number of large tracts of land in this area are owned by religious trusts or 'maths' - the priests who control them are known as 'mahants'. In Hilsa, there are two major mahants: Swami Harinarain Anand, President of the All-India Sadhu Samaj, and Shamsundar Das Mahant, who controls approximately 1,500

Nor had there been a decline in the everyday experiences of humiliation and brutality faced by the dalit rural poor - and particularly dalit women - at the hands of the economically powerful higher castes. In fact this type of coercion had intensified as opportunities for rapid accumulation by the richer landowners grew and contradictions with labourers sharpened, and was increasingly occurring even in villages which, dominated by 'backward caste' cultivating landowners, had been relatively free of the extremes of feudal oppression.

As the authors of one of the few published accounts of this phase of the movement put it, 'ironically, the very sections of the better-off backward caste tenants which once provided the backbone of the erstwhile Kisan Sabha movement, have now transformed themselves into kulaks and are often found to be more aggressive than others against agricultural labourers demanding increased wages'(CPI(ML), 1986:47).

By 1980 a wave of strikes had begun, demanding an increase in wages. In a survey of 12 villages in the block where wage-related struggles had occurred, I found that in all these villages, strikes often lasting from the period of rice transplanting in July/August until the harvest in November/December, had taken place between 1980 and 1988. In all except one case, it was these struggles which had established the wage rate for casual labour which still predominates in the area, 2kg rice and 0.5kg sattu<sup>12</sup>, with or without a 250gm 'nasta' (breakfast), and one out of every twelve to fifteen bundles harvested. Often strikes had taken place in tens of villages simultaneously, and this was a key factor in preventing the employers from bringing in labour from other villages. Meanwhile in some villages, the labourers were able to negotiate a wage rise with the employers without going on strike after wages had increased in neighbouring villages. This was the case in Chandkura, where wages increased in 1988.

During these struggles, demands were also raised relating to the attachment of labour by employers. It was then still common for employers to give loans to permanent labourers in

---

acres across Bihar. In a CPI(ML)-led action on 23 August 1992, about 4,000 local people armed with traditional weapons such as sickles and knives marched onto and occupied a 200 acre stretch of land in Hilsa controlled by Shamsundar Das Mahant, planting red flags on it.

<sup>12</sup>Sattu is a flour usually made from ground gram, which is mixed with water to make a type of porridge (also known as sattu) which is a staple in the diet of the poor in much of Bihar.

order to compel them to remain working indefinitely for lower wages, ostensibly to pay off an ever-growing debt. The movement advised labourers not to take such loans if they could avoid it, and demanded that all such debts should be cancelled. This was one of the major factors which led to the virtual disappearance of long-term attached labour, which had previously lasted entire lifetimes. However as we will see, one of the responses of employers in many villages to labourers organising in general, and to the resulting decline in debt bondage in particular, has been to withdraw from the credit market, refusing to give loans to labourers altogether.

Struggles for land redistribution were launched in this block a few years later, focussing on two main types of land seizure - that of 'gair mazarua' (government and public commons) land occupied - and often left uncultivated - by the larger landowners of the village, and that of sections of the huge tracts of land controlled by religious trusts or 'Maths' (see Note 11). These campaigns generated a response which had as much to do with the threat posed to the authority of the dominant classes as with the actual land at stake.

For example, in Baradih, one of the villages in my survey, 19 acres illegally occupied by large landowners were seized in 1982. One night the dalit 'tola' of the village was invaded by armed members of the Kurmi landowners' army, the Bhoomi Sena (see below). The hut of a family belonging to the Bhuniya scheduled caste who had been active supporters of the movement was set alight with the occupants inside. The family only just managed to escape with their lives. But the police refused to take any action against the culprits.<sup>13</sup>

As well as organising armed attacks - supported by the police - on the labourers and poor peasants, the landowners used the mechanism of concertedly denying them access to key resources. Thus for example in Bairiganj, where the landowners are Awadhia Kurmis who do not engage in cultivation, at the height of a struggle to capture vested land, landowners

---

<sup>13</sup>The relationship between dominant landowners and the state apparatuses is explored in Chapter 7 below. Chaudhry gives the following illustration: 'on October 22, 1981, the Bhoomi Sena held an armed demonstration of about 3,000 people in defiance of prohibitory orders...The police was not only escorting this illegal procession but was even distributing pamphlets and raising slogans. This armed procession of landlords...included Diwaker Sharma and Jaiprakash Singh of Congress(I), Subhas Chandra Singh, vice-president of the Patna district BJP and Siddeshwar Singh of the CPI. Lok Dal activists were also reported to have been present in the procession'(Chaudhry, 1988:55). Even more explicit was police collaboration in the massacre at Ekwari, Bhojpur carried out by the Ranvir Sena on 10 April 1997. The police accompanied the Ranvir Sena men around the village, knocked at the doors of poor dalit households in the village and got them opened on the pretext of making enquiries, allowing the Ranvir Sena men to enter the houses and kill those inside.

tried to physically prevent the labourers from leaving the village, even setting up barricades on the roads out of the village and manning them with arms. At the same time they imposed a 'social boycott' by denying them their established right to graze their cattle and cut grass in the landowners' fields.

One section of landowners in Hilsa formed the 'Kshetriya Kisan Mahasangh', an armed organisation which conducted attacks on several villages and killed a number of poor peasants and agricultural labourers. The CPI(ML) responded with a combination of armed resistance, measures aimed at benefitting small Kurmi cultivators such as laying a canal and constructing a dam on the Lokayan river, and negotiations with 'middle peasants and a section of rich peasants' (CPI(ML), 1986:149), and by 1982-3 the Mahasangh had collapsed.

However large landowners of Nalanda district also took part in one of the most prominent of the 'private armies' or 'senas', the Bhoomi Sena, a Kurmi organisation formed in 1982 which operated in Patna, Gaya, Jehanabad and Nalanda districts. The Bhoomi Sena continued until the late 1980s, when it collapsed after key figures were targeted by armed squads of the CPI(ML) and several others were given life sentences as the main accused in the 1980 Pipra massacre in Patna district (carried out by an earlier incarnation, the Kisan Suraksha Samiti) in which fourteen labourers and poor peasants from both dalit and Kurmi castes were killed (Chaudhry, 1988; Patnaik, 1990; Bhatia, 1997a). Both these 'senas' however were dominated by the Awadhia Kurmi landlords, who had withdrawn from cultivation.

The Bhoomi Sena's activities have been described as follows: 'during 1982-85, they killed at least 65 persons, mostly rural poor...set 216 houses ablaze, and drove out 325 families from 13 villages of Poonpoon, Naubatpur and Masaurhi blocks. In the process, their heavy hand fell on their caste brethren also. They used to extort a massive amount of levy from Kurmi peasants, and also used to force them to provide shelters, chicken, liquor, and at times even women. And the Kurmis who sided with the peasant movement were simply done away with.'(CPI(ML), 1986:75)

However, the Bhoomi Sena also used subtler methods to try to gain the support of all sections of Kurmis: 'To a rich, well-to-do Kurmi peasant, they would say, "the life liberty



and property of the Kurmis is at stake. What remains in our life if there is no prestige and dignity?". And to the middle peasants or other middle strata the approach would be somewhat different: "You see, input costs are rising and you are the worst sufferers. And these Naxalites are instigating the labourers to demand higher wages. Those who are well-to-do can afford higher wages, but you will be ruined" '(op cit.:74).

As this implies, a key aspect determining the success or failure of landowners in resisting the movement's demands was the ability of the dominant landowners to mobilise smaller non-dalit cultivators behind them. Possibly the single most important factor in doing this was caste solidarity; in Kurmi dominated areas, the closely related 'kisan' identity was also extremely potent. But as we have seen, there are relations of dependence of smaller upon larger cultivators in both input and credit markets which have also often helped them to secure this support. This is despite the fact that CPI(ML) led movements have as a matter of policy avoided targetting smaller cultivators or 'middle peasants', whom they view as potential allies.

For example in Murarpur village in Hilsa, one of the villages in my survey which had a history of intense wage struggles, the most recent strike had occurred in 1995, beginning on 3 August during paddy transplanting and ending during the rice harvest, on 22 November. The labourers had deliberately targetted only the big landowners, and were prepared to work for the smaller ones. But the big landowners were able to put pressure on the smaller peasants, some of whom owned less than an acre, to also stop cultivation. They did this in order to both cut off all sources of employment for the labourers in the village, and to extend the range of those who suffered economically as a result of the strike to small cultivators.

In this case, labourers were able to find work in neighbouring villages, and the strike ultimately was successful in increasing wages paid by the main employers in the village. However, for agricultural labourers, the challenge of 'building solid unity with middle peasants', which is still viewed as 'a question of decisive importance in tilting the balance in favour of agrarian revolution' by the CPI(ML) (op cit.:48; CPI(ML), 1997) remains a difficult one.

## *b) Women's participation*

Women played a central role in all the struggles described here. On the one hand, strikes took place during the periods of peak labour demand - paddy transplanting, which only women are considered capable of doing, and paddy harvesting, in which women participate heavily. It was therefore women who initially placed wage demands before employers, and subsequently collectively refused to work. Women labourers in one village dominated by upper caste Bhumihar landowners related how, faced with losing the entire paddy crop during a strike, the employers frantically summoned home all the available males of their families from the towns - but still would not break the taboo on Bhumihar women working in the fields. However, as everyone knows, the women said, men can never do a good job of transplanting, and they still lost a lot of the crop.

Women have also led marches of thousands to physically occupy land for redistribution, and have been at the forefront of resistance and protest against the repression unleashed by the landowners and the police. It is women who, armed with bricks, small scythes or household utensils, have driven the police out of their villages when they have arrived heavily armed in midnight or dawn raids, or who have surrounded police jeeps and snatched back those arrested, even forcing the police to apologise in some instances.<sup>14</sup>

Women who had participated in such struggles often referred to women's courage and determination, that they were 'prepared to fire a gun' if necessary. Because of the movement's focus on rape and sexual harassment by upper castes, they perceived these struggles as primarily struggles for their own dignity.

At the same time, these women's involvement has led to their challenging oppressive domestic relations. These challenges have focussed on domestic violence, cases of abandonment of women by husbands, and the increasing incidence of dowry (for a discussion of dowry and its growth among poor dalit households, see Chapter 7). They

---

<sup>14</sup>A recent instance of this occurred in Bargaon village in Bhojpur district in the wake of the Lakshmanpur Bathe massacre perpetrated by the Ranvir Sena. Police entered the village in the early morning with the intention of arresting some local CPI(ML) activists. They were observed by three women in the fields on the outskirts of the village. They alerted others and within minutes 70 or 80 women had surrounded the police and prevented them from taking anyone away for several hours (in this case the police finally succeeded in making the arrests but only after radioing for reinforcements from several police camps which were nearby).

spring from a wider questioning of unequal relationships between men and women within the family. As Savitri Devi, a woman labourer attending the Jehanabad District Kisan Sabha (Peasant Association) conference in 1994 explained while introducing a song entitled 'give women respect in society' : 'a woman gets up in the morning, she has to wash the utensils, take the children out to relieve themselves, prepare the meal...the man just gets up, goes to relieve himself, comes back and if the food isn't ready, he'll start beating her'.

The question of gender inequality within the family remains a contested area for the movement at a local level, with many village-level male activists continuing to believe that such issues should not be within the scope of the movement, even while the All-India Progressive Women's Association, (AIPWA), which is linked to the CPI(ML), is trying to strengthen its network at the village level to take up questions of women's oppression.

The practice of paying women labourers less than their male counterparts prevails throughout Central Bihar. According to AWI data, at an all-Bihar level, wage rates of female agricultural labourers as a percentage of wage rates of male agricultural labourers rose fairly steadily from 81 per cent in 1970-71 to 93 per cent in 1984-85 (calculated from Jose, 1988:A48-A49) However the reliability of the Bihar AWI data appears doubtful: Jha points out that wage rates reported for female agricultural labour were higher than that of their male counterparts in 17.8per cent of the total data on sowing and weeding operations, and in 21.3per cent of the total data for harvesting and other operations, a phenomenon 'unheard of' in Bihar (Jha, 1997:127-128).

In Hilsa, there were some cases where men received three kgs of rice and women only two; what was universal was for women to receive a smaller 'nasta' despite the fact that they often have to feed young children who accompany them to work out of this amount. Despite women's participation in wage struggles, the question of unequal wages has not as yet been effectively addressed. In several cases women themselves as well as men have given the explanation that men's work - such as uprooting paddy seedlings for transplanting and carrying harvested bundles - is 'heavier', despite the fact that tasks performed by women are equally if not more arduous.

Again, the existence of women's organisations with some degree of autonomy appears to be a crucial factor in getting such questions onto the agenda of the movement. According to a recent survey carried out in four Central Bihar districts by the Bihar unit of AIPWA, 'our study shows that men and women receive equal wages only in areas where wage levels are very low. And where agricultural labourers have succeeded through struggles in pushing up wages, the increases agreed have not been equal. This is defended on the basis of the social understanding that women have less physical strength. Even some women labourers offered this argument. This shows the power of received patriarchal notions. The struggle for equal wages is thus not just for economic equality, but has to also be directed against patriarchal prejudices.' (Chaubey, 1996)

### *c) Changing Relationships*

The most striking aspect of the movement is that it enabled the dalit poor and landless to challenge the practices which underpin the social and economic authority of both the older and the more recently emerged dominant classes throughout central Bihar. These are forms of oppression based on caste and gender as much as class. Thus dalit women frequently explain that the men from higher caste landowning families used to sexually harass and abuse them, physically assault them if they missed a day's work, or refuse to allow them to take breaks to drink water, telling them to drink the muddy water in the drainage canals, but now they no longer 'dare' to do these things.

Naresh Ram, a dalit agricultural labourer who lives in Bhokila, a village dominated by large landowners of the Kurmi caste, uses the following example to explain how things have and haven't changed in his village during the last fifteen years:

*'Before if I remained sitting on the khatia outside my house when a landowner walked through this tola, he would abuse me or even beat me up. Now after we have got organised, I can carry on sitting here and invite him to sit down. But if I were to go to his house and sit down next to him on the khatia outside, it would be a different matter...'*

As this suggests, the change in the relationship between agricultural labourers and the landowners who employ them has been a complex one. It is one which has resulted not from a thoroughgoing transformation of production relations or the collapse of the

dominant caste-based ideology, but from a perception among all classes and castes that there has been a shift in the balance of forces in those villages where the CPI(ML) has a presence.

In Hilsa a very small number of dalit households - two or three in most villages - have experienced a significant improvement in their economic situation during the last 15 years as a result of having a family member in an urban white collar job, usually in government service. This has enabled them to build pucca houses and in some cases to buy tiny plots of land and to withdraw partially or completely from agricultural labour. It is noticeable that the members of such families are usually enthusiastic supporters of the CPI(ML). This is firstly because the change in their economic status originates outside the village and has had little impact on their relative position within the agrarian hierarchy - at most such households have shifted from total reliance on agricultural wage labour to marginal self-cultivation, usually supplemented by hiring out of family labour. Secondly they continue to be subject to the daily expressions of the social power of the dominant castes within the village. But it appears from discussions with them that it is the CPI(ML)'s ability to project itself as a progressive force in wider terms - challenging feudal and caste-based practices, corruption and crime - as much as its commitment to village-level struggles that attracts this section of dalit communities.<sup>15</sup>

#### *d) Wage Increases*

Although still a mere fraction of the minimum rate set by the Bihar government (Rs 27.30 per day with effect from 21.12.95 under the Minimum Wages Act 1948), wage rates have increased in response to the demands made by labourers in Hilsa. In 1995-96, the standard wage rate for casual labour, both male and female, was 2kg rice and 0.5kg sattu (equivalent to approximately Rs.10), with labourers in some villages being also given 'nasta' (breakfast). Significant inter-village disparities in wages persist however, with casual labourers in some villages still getting the old rate of one kachchi seer of rice (approximately 800g).

---

<sup>15</sup>This section of dalit communities form an important part of the Bahujan Samaj Party (BSP)'s base in neighbouring Uttar Pradesh. Bihar's history of left activism, and specifically the emergence and development of the Marxist-Leninist stream, in recent decades may be one reason why the BSP has failed to make inroads in the state.

In the case of attached labour, there is much more variation: in villages where the majority of labourers are still attached, they too receive this rate, as well as a small plot of land for self-cultivation. But in villages where the majority of labourers are casual, attached labourers are paid substantially less. Thus in Chandkura, whereas all casual labourers now receive 2kg rice and 0.5kg sattu, there is no fixed rate for attached labourers, who are paid on average 1.59kg of rice, with some receiving as little as 1kg.

The question of harvest wages is more complex. For casual labourers in Chandkura, the wage had almost universally risen in 1988 to one out of every 14 bundles harvested, from a previous rate of one out of every 21 bundles harvested. Similarly in the other villages surveyed, harvest wages increased in the 1980s from one out of 21 to one out of 12-15 bundles.

Interestingly, wages paid in kind predominate in Nalanda and Patna districts, the parts of Central Bihar which witnessed the most widespread signs of peasant-based capitalist development in the 1970s. I found no incidences of cash wages for agricultural labour in Hilsa itself, and neither employers nor labourers had attempted to bring about a shift to cash payments. Local CPI(ML) activists say that kind demands are more achievable: employers are facing falling rates of profit as a result of increases in input prices, and low produce prices, but yields are continuing to increase. Thus wage increases in kind are considered to be more affordable by employers than cash increases, since kind wage demands are not fully linked to prices, being mostly consumed rather than resold.

An increase in wage rates is also recorded in aggregate statistics for Bihar. According to Parthasarathy (1991:A72) 'the technologically lagging States of Bihar, Orissa, Madhya Pradesh, pockets of low wages, have been noted to show improvement in real wages since 1970s'. Bhalla points out that 'initially, in the late sixties and early seventies, when agricultural productivity went up, real wages had stagnated. After the mid-seventies, real wages went up everywhere, even in states where agricultural labour productivity was in long term decline, like Bihar.' (Bhalla 1997:215). Bhalla attributes this increase, which continued until the end of the 1980s, to an increased share of the workforce in non-agricultural employment in each state. I would argue that in Bihar intra-state regional

unevenness in productivity and the impact of class-for-itself action by agricultural labourers in the 1980s are both also key explanatory factors.

On the basis of 'Agricultural Wages in India' (AWI) data, Jose (1988:A51-A53) confirms that 'a prolonged period of stagnation or decline of real wages in agriculture' in Bihar until 1974-75 was followed by a sharp increase (despite considerable fluctuations) in the period up to 1984-85. But a recent study (Jha, 1997) casts serious doubt on the reliability of AWI data collection in Bihar, and argues that 'there is an important data source which seems to suggest that the wage-rate in Bihar has declined' between the late 1970s and 1983-84. Cost of cultivation studies, Jha suggests, point to a decline in the real wage rate for four major crops - wheat, paddy, maize and jute - for this period despite substantial increases in labour productivity in wheat and maize cultivation (Jha, 1997:117).

If this is indeed a more accurate source, it reinforces the view that organising by agricultural labourers in the 1980s and 1990s has been a key factor in bringing about wage increases in Bihar. Movements for higher wages initially took off in pockets of Central Bihar (including Hilsa) in the early 1980s, but it was only in the second half of the decade that such movements became widespread enough to potentially have an impact on aggregate wage levels. The successful negotiation of increases in real wages - albeit on the basis of extremely low previous levels, has continued in the 1990s.

In either case, it appears that class-for-itself action by agricultural labourers in parts of Central Bihar has been able to achieve increases in wage levels. This is despite, firstly a stagnation or even reduction in demand for wage labour (with little technological change and continuing land fragmentation and dispersion) from the early 1980s onwards, secondly declining profitability in cultivation from the mid-1980s; and thirdly, the collapse of non-agricultural employment leading to a fall in labour productivity in agriculture from the late 1980s.

#### *e) Employers' Responses*

In the wake of struggles over wages and an increase in the agreed rates, there have been a number of changes in employers' daily practices which reflect direct or indirect attempts to reduce the labourers' share in the produce. In Chandkura during harvesting there are

frequent arguments in which the employers try to reduce the size of the bundles taken by the labourers. In other villages in my survey too employers are now for the first time insisting on choosing or making up the bundles themselves. In Murarapur, labourers now have to carry the harvested crops to the landowners' homes before they are paid, leading to a delay of up to two days in payment. In Baradih, conflict has developed over the number of hours worked by the labourers, with the employers demanding that they start earlier; claiming that pigs owned by the labourers get into their fields and eat the crops, landowners have also begun confiscating the pigs and charging their owners Rs 15 each for their return.

More significantly, perhaps, employers have responded to successful agitations over wages by withdrawing from credit and tenancy relations with the labourers. In Chandkura and several other villages surveyed, the surplus-producing landowners, who were previously the main source of credit for all types of agricultural labourers, have begun refusing to give loans without collateral to casual labourers and have simultaneously increased interest rates substantially.

In Murarapur, the landowners stopped leasing out land on a crop-sharing basis to the labourers after the most recent wage struggle in 1995. Elsewhere too, landowners became unwilling to lease out on a sharecropping basis, the only form of lease accessible to most landless labourers, after wage struggles had occurred. The reasons given by the landowners were that they could no longer ensure that they got their share of the produce, and also that if the labourers could lease in land, they would no longer be available to work on the landowners' self-cultivated land.

This underlines the specific nature of the 'interlocked' relationships between 'kisans' and 'mazdoors' in Hilsa noted above. Although labourers were relatively rarely dependent solely on their own employers for leases or credit, their dependence on the large landowners of the village as a whole, which they consciously articulated as the dependence of one class upon another, meant that 'class for itself' action by the labourers in the labour market could lead to similarly conscious and co-ordinated action by the dominant class in the lease and credit markets.



Observers of the trajectory of capitalist development in Haryana have pointed out that in the context of an increased and more time-specific demand for labour, the interlocking of labour and credit markets can be used to undermine attempts to organise by labourers and create 'new' forms of attachment suited to the needs of capitalist employers (see for example Bhalla 1976; Brass 1995). Formal contracts for labourers lasting unprecedentedly long periods of up to five years, and various forms of interlocking including three-way credit arrangements between labourer, shopkeeper and employer were among what Bhalla describes as 'threads in the redesigned fabric of conservative rural power' in 'model Green Revolution' districts of Haryana as early as the mid-70s (Bhalla, 1976:A27).

However, the withdrawal of credit and land from casual labourers which has occurred in Hilsa does not appear to be primarily a systematic attempt to create new relations of dependence, but rather a long term extension of the 'social boycott' strategy of withdrawing key resources in a bid to maintain the status quo - particularly as far as wages are concerned - in the context of an agricultural economy where the process of accumulation has essentially come to a standstill. Thus in several villages, credit had been withdrawn across the board from permanent as well casual labourers, while there were also instances of landowners refusing to provide plots of land to permanent labourers in the aftermath of struggles over vested land.

In Chandkura, however, several labourers who had entered into contracts as permanent labourers in 1995-96 had done so (as in earlier periods) in order to get a loan without collateral in an emergency, along with a small plot which would help them pay off the loan. But these labourers too expressed an aversion to this form of employment, and were determined not to remain attached for long, not only because daily wages were lower, but because of the element of feudal coercion which remained in the relationship - for example, if the labourer could not come to work on a particular day, his wages might be withheld the next day. The labourers use of the term 'bandhua'(bonded) as opposed to 'chhuta' (free) reflects their continuing perception of a strong element of coercion in the relationship.

And most importantly, the period when these changes occurred has witnessed a further reduction in the incidence of permanent labour in both relative and absolute terms: the proportion of agricultural labourer households with at least one member employed as a permanent labourer has declined from 41 per cent of agricultural labour households

1981-3 to only 26 per cent in 1995-96. My survey indicates that a similar decline has occurred in at least 50 per cent of the villages in Hilsa. In villages where struggles had occurred but where permanent labour was still prevalent, labourers regarded this as an indication of their current lack of organisation and relative weakness within the overall balance of class forces in the village.

Landowners employing labour throughout Hilsa complained of a decline in the availability of labour, the increase in labour costs, and the labourers' 'unwillingness to work', which they attributed to new sources of employment 'in the towns' as well as the 'misleading' of the labourers by the CPI(ML). But the evidence suggests that in general they have been unable to effectively resist the changes initiated by the agricultural labourers' movement in the area through the introduction of new forms of attachment or dependence.

*f) New aspects of class confrontations*

At the same time, the involvement of one section of the dominant classes in Hilsa in networks of criminals, bureaucrats and politicians stretching across central Bihar and beyond has changed the very nature of class confrontations since the early 1980s. On the one hand, landowners are now more on the defensive, and less likely to respond to agitations by labourers as in the past, by personally orchestrating violence against them. And for the moment, perhaps because of the heterogeneity, in both caste and economic terms, of the dominant classes, there is no consolidated landowners' army active in Hilsa. On the other hand, that section which has links with criminal gangs and their ubiquitous patrons in political parties and the administration are able to use them to unleash brutal attacks on anyone who challenges their dominance. (Nalanda has the distinction of having the highest number of licenced arms of any district in Bihar [Gupta 1997] - many more are unlicensed). Today it is those with such connections, the major source of capital accumulation in the area, who, regardless of caste background, are adopting the coercive practices previously associated with the extremes of feudalism.

Thus in a case in Hilsa in early 1997, supporters of a medium sized landowner, who was also a Member of the Legislative Assembly (MLA) belonging to the Janata Dal, killed an agricultural labourer who wanted to work elsewhere. The man was being treated as a bonded labourer although he had no debts. Although the killers had the support of the

Block Development Officer and several other MLAs, mass protests by the people of the village succeeded in having them arrested. (The implications of the links between landowners, politicians, the administration and criminal gangs in the fieldwork area is discussed further in Chapter 7, 'Patterns of Accumulation in the Fieldwork Area').

This 'criminalisation' of the landowners' response, which has intensified during the 1990s, has also affected the nature of the agricultural labourers' movement in Hilsa, as elsewhere in central Bihar. Precisely by continuing to wage struggles on issues affecting the lives of landless agricultural labourers and poor peasants, the CPI(ML)-led movement has found itself posing a challenge to forces whose terror tactics extend beyond the dalit poor and landless to other sections of rural society, particularly small cultivators from the backward castes. This tenacity, expressed in a new wave of wage and land-related struggles since 1992<sup>16</sup>, seems to be effectively widening the support base of the movement to include new sections of the working people.

## **Conclusion**

In conclusion, the dependence of rural poor households on agricultural wage labour as a means of survival has increased in Bihar, as in other States, during the 1970s and the 1980s. We have argued that, in Bihar, this increase is linked to a declining access to land - either owned or leased in - for such households. The situation has been further exacerbated by the decline in non-agricultural employment on an India-wide scale, particularly after 1991.

The technological changes which occurred in the fieldwork area in the 1970s - primarily the spread of mechanised irrigation and the adoption of High Yielding Varieties and chemical fertilisers, with only limited mechanisation of other tasks - led to an overall increase in the demand for agricultural wage labour, and a shift in the composition of labour demand from permanent to casual labour. However, in the 1980s and early 1990s,

---

<sup>16</sup> According to reports, in the first two months of a 'land-grab' movement launched in August 1992 by the Indian People's Front and the Bihar Pradesh Kisan Sabha, mass fronts linked to the CPI(ML), 1,829 acres of land were taken over in 27 cases of seizure in Nalanda district. This included land belonging to 'Maths', trusts, and estates as well as ceiling surplus and 'gair mazarua' land, and land controlled by absentee landlords (Indian People's Front, 1992).

when the further extension of the 'new' technology mainly involved its adoption by small and marginal cultivators, there have not been major changes in the extent and structure of demand for wage labour.

Despite these apparently unfavourable conditions, in the 1980s and 1990s agricultural labourers have been able to bring about significant changes in the relations of production, through concerted class action.

The left-led movement of the rural exploited classes which emerged during the initial spurt of capital accumulation by a section of larger landowners has been consolidated and has continued to develop in this period. This movement has been shaped by the interrelated questions of class, caste, and gender. There is a significant overlap between class and caste identities in the fieldwork area; further, practices based upon the ideology of caste inequality have been a key aspect of agricultural production relations in the area. These forms of oppression have been directed at dalit women labourers in particular. Bihar does not appear to be undergoing the process of 'feminisation' of agricultural labour which has been identified in several States which are experiencing various forms of capitalist development and state intervention in agriculture. But agricultural labour is and continues to be the only substantial source of income for poor women in the state.

The role of women labourers in peak agricultural seasons has meant that they have been at the forefront of struggles over wages; women have also played an active part in other aspects of the movement. At the same time an ideology in which the seclusion and subordination of women is an important marker of family status and 'dignity' remains dominant. However this ideology is being increasingly challenged by women from within the movement.

Changes which had taken place in agricultural production relations since the early 1980s were a direct result of demands put forward by agricultural labourers in the course of organised struggles.

Firstly, the movement has succeeded in enabling the dalit poor and landless to challenge the practices which underpin the social and economic authority of both the older and the more recently emerged dominant classes.

Secondly, organising by agricultural labourers in the 1980s and 1990s has been a key factor in bringing about wage increases - albeit on the basis of extremely low previous levels.

In the wake of struggles over wages and an increase in the agreed rates, employers in the fieldwork area have introduced a number of changes in their daily practices which reflect direct or indirect attempts to reduce the labourers' share in the produce. Employers have also responded to successful agitations over wages by withdrawing from credit and tenancy relations with the labourers.

However, the withdrawal of credit and land from casual labourers does not appear to be primarily a systematic attempt to create new relations of dependence, but rather a long term extension of the 'social boycott' strategy of withdrawing key resources in a bid to maintain the status quo, particularly as far as wages are concerned - in the context of an agricultural economy where the process of accumulation has essentially come to a standstill. Significantly, the incidence of permanent labour has also declined more dramatically in those villages where organisation by agricultural labourers has been sustained.

Thus, in contrast to areas where capitalist development has taken root, employers in the fieldwork area had not been able to incorporate new forms of exploitation and control of labour into processes of production. Rather their responses were essentially defensive attempts to maintain the status quo.

In the 1990s, while the incidence of violence against agricultural labourers by individual landowners has declined, a section of landowners with connections with criminal gangs, politicians, and administrators are increasingly attempting to terrorise those who challenge their dominance. By resisting this 'criminalisation' of the agrarian economy, the agricultural labourers' movement is gaining the support of wider sections of rural society.

## CHAPTER 7: PATTERNS OF ACCUMULATION IN THE FIELDWORK AREA

### **Introduction**

In the preceding three chapters, through an examination of changes in technology use, landholding patterns and production relations, we have argued that the dominant landowners in the fieldwork area have not been engaging in a process of expanded reproduction in agriculture - the accumulation and reinvestment of surplus in agricultural production, leading to the generation of surplus values on an ever-expanding scale - in the period since the early 1980s. In this chapter we will look in more detail at the forms of accumulation which, by contrast, have developed or been sustained in the fieldwork area during the same period.

Bharadwaj has identified the central role of an analysis of accumulation in identifying capitalist development: 'the question is..one of the *process* of transformation, of the dissolution of feudal features and the onset of pervasive dominance of capitalist relations...the forces that work towards retarding and muting such a dynamic outcome...can be seen, in summary, as a struggle between the forces promoting productive accumulation and those stabilising, perpetuating and reinforcing unproductive investment' (Bharadwaj, 1985: 21).

The key factor underlying the forces which 'stabilise, perpetuate and reinforce' unproductive investment in Indian agriculture, Bharadwaj argues, is the 'desperate dependence on land as the basis for survival' and the resulting preponderance of marginal landholders who 'are in no position to undertake productive accumulation themselves but could provide the ground for diversion of surplus into unproductive avenues' (op cit.:7). On the one hand, for the dominant, surplus producing landholders, 'possibilities of exploiting labour become almost limitless' and there is thus 'less incentive to improve productive forces, that is, undertake productive investment'(op cit.:15). On the other hand, the relations of inequality and dependence between the 'chronically deficit' households and the dominant surplus producing households create the conditions for various types of usurious and speculative investment by the latter.

The participation of the rural poor in land, labour, credit and produce 'markets' has been characterised as 'compulsive involvement' (Bharadwaj, 1979) or 'forced commerce' (Bhaduri, 1983, 1986). This characterisation refers both to their acute dearth of resources and to the production relations which 'socially interrelate both the parties to the exchange'(Bharadwaj, 1985:12): for example those between agricultural labourers and their employer or small tenants and their landlord.

More specifically, the existence of interlinked markets, in which 'market and social power is vested in the dominant rural classes and...the dominant party often combines multiple functions, thus enjoying a superior position simultaneously in a number of markets'(Bharadwaj 1974b:4), may have two important implications. Firstly, the compulsory participation of the weaker party in exchange. For instance, for poor tenants taking loans from moneylender-landlords, 'trading in the credit market in the form of consumption loans, usually induced by a threat to survival, leads to involuntary participation in exchange in some other markets'(Bhaduri 1986:269). And secondly, interpenetration of markets, by intensifying dependence, may facilitate an increase in the rate of exploitation. Thus creditors may be able to extract free labour services or to impose more exploitative tenancy arrangements on borrowers<sup>1</sup>.

Amit Bhaduri (Bhaduri, 1973) incorporated the concept of interlinked markets or 'interlocked modes of exploitation' into his analysis of 'semi-feudalism' in the context of rural Bengal (see Chapter 1 for a discussion). Other writers, notably Prasad (Prasad, 1973; Prasad,1974; Prasad,1987) applied the 'semi-feudal' thesis to conditions in Central Bihar. Prasad emphasised the fact that this type of creditor will channel resources into lending under conditions where default is almost a certainty, precisely in order to facilitate the appropriation of a surplus from the borrower through lease, labour, product and consumption markets (Prasad, 1974; Breman, 1974). Bhaduri later elaborated on the concept of 'borrower's risk'. The burden of risk is shifted to the borrower through the treatment of collaterals: since the collaterals the poor peasants can offer are not readily acceptable in the organized credit market, the lender is in a position to substantially

---

<sup>1</sup> Srivastava (1989b) notes the distinction between the appropriation of the borrower's own labour through adjustments in wages, and the appropriation of family labour through adjustments in tenancy arrangements. For example, in U.P. he observed stock adjustments against the sale of buffaloes (raised on a shared basis) which implied 'the appropriation of surplus labour of women and children in the labourer's household' (Srivastava 1989b: 516)

undervalue them, transferring the risk of default from the lender to the borrower (Bhaduri 1983)<sup>2</sup>.

These forms of unproductive investment have a tendency to be self-perpetuating: 'the greater the predominance of the chronically deficit households, the greater the diversion of re-investible resources into usury. Not only does this offer a fertile ground for exploitation but its relative attraction over productive investment persists so long as the backward production conditions continue' (Bharadwaj, 1985:20).

However, as we have noted (see Chapter 1), interlocked relationships may persist or even be introduced as a means of intensifying control over labour in situations where technological change and productive investment in agriculture are taking place (see for example Bhalla 1976, Srivastava, 1989b). The central question for capitalist development, therefore, concerns the dominant pattern of accumulation : the presence or absence of expanded reproduction; the outcome (in the short term as well as the longer term) of the struggle identified by Bharadwaj (op cit.) between the forces which promote productive accumulation and those which retard it.

More recently, observers of Bihar have attempted to develop an analysis which draws on this work but examines the dynamics of perpetuation and transformation of these relationships in the wider context of the social, political and technological changes which have taken place in the post-independence period. As Das has pointed out, 'semi-feudal' also implies 'semi-capitalist' (Das, 1992). Over the past one-and-a-half decades the process of agrarian change in Bihar as well as the role of bourgeois capitalist institutions such as the state apparatuses and electoral politics in the accumulation of economic surpluses by Bihar's powerful classes have become a compulsory focus for analysts who

---

<sup>2</sup> The question of interlinked markets has also been addressed by neoclassical economists (see for example Newbery, 1977, Bardhan and Rudra, 1979, Srinivasan, 1979, Braverman and Stiglitz, 1982, Stiglitz, 1986). From the neoclassical perspective, when actions in one market affect the outcome in another, 'a natural market solution is to internalise the externality, and that is precisely what the interlinkage of markets does' (Stiglitz 1986:259). Interlinkage is therefore viewed as increasing 'economic efficiency' but without definite implications regarding the improvement or deterioration of the relative position of the participants in the interlinked transactions. Braverman and Stiglitz put forward the view that interlinkage increases the landlord's control over the inputs - including labour - applied by the sharecropping tenant, in the face of 'imperfect information'. However, this is not analysed as a strategy for intensifying exploitation - and the question of the landlord's economic and social power is simply not considered (Braverman and Stiglitz 1982; Stiglitz 1986).



aim to go beyond the dominant view of Bihar as inherently and inevitably corrupt, violent and caste-ridden.

Das argues that 'the proliferation of the bureaucracy, the enormous accretion of power with the government and the rise of corruption and crime as the fastest modes of accumulation changed occupational patterns and social urges. The plateauing off of agricultural growth was contrasted with the immense opportunities availed by those who had access to governmental position and patronage'(Das, 1992:25)

Similarly, Dev Nathan (1990:16)observes that '...upper caste landlords have sought to use their bureaucratic-political positions, their control of the state machinery to get a share of the peasants' surplus, through taking a cut in the distribution of state-controlled inputs to peasants. Along with looting the state exchequer through contracts, this bureaucratic feudalism is stronger than the tendency to capitalist landlordism among the upper castes. In fact the possibility of earning income through controlling the distribution of inputs inhibits their use in production and thus retards the transformation of the landlord economy'

Drawing mainly on developments up to the early 1980s, Dev Nathan restricts this analysis to 'upper caste landlords', whom he distinguishes from the more production-oriented 'peasant capitalists' of the backward castes. Das argues that the phenomenon has become more widespread and that the possibility of gaining access to state structures and using them to appropriate wealth provided a major impetus for intervention in the electoral arena by rich peasants of the backward castes: 'one way for traditionally agrarian groups to move into the "modern sector" where faster, albeit primitive, accumulation is more feasible is through the assertion of the power of numbers in a democratic polity...This is the political economy of casteism'(Das, 1992:25).

Rameshwar Verma, Secretary of the Bihar Pradesh Kisan Sabha in Jehanabad District, described the activities of surplus producing landowners in the district. This group, he explained, do not invest in land: they channel their surpluses into contracting, buses, trucks, cinema halls, clothes shops, hardware shops, and brick kilns. Rs 1 lakh (100,000) per year is allocated to each panchayat for development purposes: this vanishes into the pockets of local politicians who pass some of it on to their supporters among the

landowners, corrupt officials, thikadars (contractors) and dalals (middlemen).(Interview, 14.1.94, Jehanabad)

In this chapter we look at patterns of accumulation adopted by the dominant landowners in the fieldwork area - backward caste cultivators who in the 1970s had shown signs of dynamic investment in agriculture - in the 1980s and early 1990s. We aim to test the hypothesis that this group has increasingly channeled surpluses into unproductive avenues such as moneylending, house construction, and dowries as well using them to gain access to the sources of wealth referred to by Arvind Das and Dev Nathan, as cited above. If this is the case, what has been the impact on the different classes within the fieldwork area and the relations between them? How has it affected the process of expanded reproduction in agriculture?

By looking in more detail at forces and processes which have become synonymous with the state of Bihar, we also hope to gauge whether these processes actually are 'uniquely Bihari' or whether they can provide insight into wider questions of political economy. Further, we consider their implications for the nature of power in this context. How far has power - economic, political and social - remained rooted in agrarian production relations?

### **1. Credit, Usury and Agricultural Production**

This section examines the nature of credit in the fieldwork area, looking in particular at the access of different agrarian classes to 'traditional' and institutional loans; the purposes for which they are used; the role of different types of credit in agricultural production; the investment of agrarian surpluses in lending; and the implications of lending both as a source of direct accumulation and a mechanism for strengthening the economic and social power of the lender. Wherever possible we have attempted to assess the changes which have occurred between 1981-82 and 1995-96; however, much of the data on credit from the ANSISS/ILO study is only available in an aggregated form which refers to all twelve of the villages in the study.

*a) Access to and use of traditional credit*

The ANSISS/ILO study defines credit according to source as falling into two main categories - 'modern' from an 'institution or government agency', and 'traditional', from 'moneylenders and landlords' (those from 'relations' are treated separately to reduce variations in the characteristics of 'traditional' loans) (Prasad, Rodgers et al., 1988:471). Sources of 'traditional' cash loans in Chandkura in 1995-96 were rich peasants in the village itself, and goldsmith-cum-moneylenders in Hilsa town, who generally required gold or silver jewellery as collateral.

According to the 1981-82 findings of the ANSISS/ILO survey, overall 'traditional debt has mainly been used for non-productive purposes like current consumption, exceptional social expenditure and health expenditure and hardly at all for development purposes' (Prasad, Rodgers et al., 1988:480).

In 1995-96, the use of traditional credit to meet costs of medical treatment or in other emergencies was universal in Chandkura across classes. All households had either taken loans for this purpose or could envisage doing so should such situations arise. Among those households who had actually taken traditional loans, this was the most frequently cited reason. The second most frequently cited reason was to meet the 'exceptional social expenditure' incurred by marriage. Marriage, and in particular the marriage of daughters, was a significant item of expenditure across classes, a fact which is discussed in more detail below.

The ANSISS/ILO study found that 41.9 per cent of all households used traditional credit to meet current consumption needs in 1981-82. My survey of Chandkura in 1995-96 found 21 per cent of households using traditional loans for this purpose. However, this should be viewed in the context of declining access to traditional credit for agricultural labourers, in the wake of struggles over wages. The use of traditional loans to meet current consumption needs was confined to households participating in agricultural labour in 1995-96. 43 per cent of agricultural labour households and at least 75 per cent of non-cultivating agricultural labour households took such loans, which included loans of rice and wheat from richer peasants in the village. This underlines the continuing extent of

acute poverty among this class, despite some increase in wages and alternative sources of employment.

Only 8.5 per cent of households in the ANSISS/ILO study as a whole used traditional credit for agricultural operations in 1981-82. In contrast, 31 per cent of all cultivating households and 45 per cent of poor and middle peasant households in Chandkura in 1995-96 used traditional loans to meet the costs of fertiliser and other agricultural inputs. This reflects the phenomenon of small cultivators being drawn into the 'new' technology under conditions which, as we have discussed earlier, are highly unfavourable.

It also seems likely that despite their adoption of these inputs, these cultivators still have very limited access to institutional credit. We examine this below.

The pattern of borrowing and lending in Chandkura clearly also implies that there is considerable potential for the interlocking of markets.

*b) Interest rates variations and interlocking relationships*

There has been no significant change in the mean interest rate on traditional loans in Chandkura, which was calculated to be 56.37 per cent per annum in 1981-82 and 55.09 per cent per annum in 1995-96. But variations by class appear to have become more pronounced.

Class-wise interest rates for Chandkura are not available for the earlier period. But according to the authors of the ANSISS/ILO study, in the early 1980s for the study villages as a whole, 'apart from the tendency for wage labour to pay higher interest rates, there is no clear pattern to interest rate differentials' (Prasad, Rodgers et al., 1988:475). However, considerable inter-village variations in interest rates may have made such patterns more difficult to identify in aggregate figures. The ANSISS/ILO study found a stronger correlation between interest rates on traditional loans and land owned, than between interest rates and class, and linked the former to the capacity of the borrower to repay. After allowing for inter-village variations, there were 'over twenty percentage points difference in interest paid between the top and bottom of the land hierarchy (op cit.:477).

The reverse was the case in Chandkura in 1995-96, when as Table 29 shows, no clear correlation between interest rates and land owned was discernible, but, as Table 30 shows, there were marked variations in interest rates across classes. Not only were interest rates charged to labouring households almost twice as high as those charged to poor middle peasants, but, strikingly, loans taken by middle peasants were interest free.

I would argue that in the intervening decade and a half, credit relationships between different groups in the village had become enmeshed in the class conflicts which have emerged or intensified during the period. Some aspects of this have already been discussed. Interest rates charged to agricultural labourers had increased after wage struggles with some rich peasants charging as much as 120 per cent per annum interest on loans and others demanding jewellery as collateral. In this situation several agricultural labourer families found it preferable to pawn their few pieces of jewellery in Hilsa town where the rate of interest was much lower at 42 per cent. Permanent labourers paid rates similar to those paid by casual labourers, but were not asked to provide collateral by employers, who had the option of confiscating the crops from their allotted plots in case of default.

While the rise in interest rates could be seen as an attempt by employers to compensate for the loss of income due to increased wages paid to labourers, my discussions in Chandkura and other villages in Hilsa suggest that it was more of an attempt to use the interlocking of markets to maintain the status quo, by effectively withdrawing access to credit from labourer households who challenged it, an attempt which has however largely failed in its objective (see Chapter 6, 'Agricultural Labour in the Fieldwork Area').

**Table 29: Interest Rates on Traditional Loans in Chandkura in 1995-96**

**by Land Owned by Borrowers**

<b>Land Owned (acres)</b>	<b>Mean Interest Rate on Traditional Loans (percent per annum)</b>
None	72.6
Up to 0.99	93
1 - 2.49	0
2.5 - 4.99	72
5 and above	36

*Source: Fieldwork*

**Table 30: Interest Rates on Traditional Loans in Chandkura in 1995-96  
by Economic Class of Borrowers**

Class	Mean Interest Rate on Traditional Loans (percent per annum)
Permanent Labourer	72
Casual Labourer	75.6
Poor Peasant	41
Middle Peasant	0
Rich Peasant	36

*Source: Fieldwork*

*Note: Loans taken by rich peasants were from goldsmith-moneylenders in Hilsa town. All the other loans were taken from landowning peasants in the village itself.*

On the other hand, poor middle peasant households (who by definition did not participate in agricultural wage labour) paid much lower interest rates on the loans they took from the richer cultivators in the village. Their creditors were often also those from whom they hired in diesel pumpsets, threshers and power tillers. In cases where the loans were used for purchasing inputs, they were also often the black market sources of these inputs. Given the existence of 'interlocked' relationships of this kind, it appears that rich peasant lenders charged relatively low interest rates (albeit still very high compared to those on 'modern' loans) to poor peasants in order to reinforce and cement other profitable interactions with them.

But there was also another crucial role played by these interest rate differentials - they served to reinforce 'kisan'<sup>3</sup> solidarity among cultivators across classes, which has become increasingly important for rich peasants as class conflicts with labourers have intensified. As we have seen, caste is a key aspect of the 'kisan' identity, and in Chandkura, where all the rich peasant lenders as well as many of the poor and middle peasant borrowers, were of the Kurmi caste, Kurmis as a whole paid an average interest rate of only 12 per cent, only one fifth of the average for the village. But even more significant is the fact that middle peasants, who cultivated as little land as poor peasants, but unlike the latter also employed wage labour, generally paid no interest at all on the loans they took from richer peasants. Several middle peasant respondents explained this in terms of 'good relations' with the rich peasants in the village. An important aspect of these relations was the extent

<sup>3</sup> *Kisan* means literally 'peasant'. For a discussion of the significance of 'kisan' and 'mazdoor' (labourer) identities in the fieldwork area, see Chapter 6, 'Agricultural Labour in the Fieldwork Area'.

of solidarity they showed with the richer peasants during disputes with labour, which as we have seen was a key factor in the outcome of these disputes.

However, while as elsewhere traditional credit in Chandkura mediates a variety of class relations, and thus cannot be assessed simply in terms of direct returns to the lender, lending is also clearly an important direct source of surplus for a number of households in the village.

### *c) Lending and Accumulation*

Traditionally the dominant ethos among the Kurmi cultivating peasants of Chandkura has been one which ascribes a high moral value to the productive labour they engage in as self-cultivating farmers, and conversely, devalues unproductive 'exploitative' activities such as moneylending. This means that very few people were willing to give detailed information about their lending activities which would enable these surpluses to be quantified. However, the experience of one of these lenders, one of the smaller landowners engaged in lending in the village, gives us an insight into this phenomenon.

Bachchu Prasad is a 32 year old Kurmi cultivator owning 2.7 acres, which he cultivates himself along with his wife, 26 year old Binita. Their two sons, aged 10 and 8, attend school and also have private tuition at home. They employ casual labourers during transplanting and harvesting, and hire in a diesel pumpset and wheat and rice threshers when needed. Bachchu Prasad does his own ploughing with the pair of bullocks he owns.

Bachchu Prasad's cropping pattern and use of inputs is comparable with those of other small cultivators in the village, with HYVs used in wheat and rice. In 1996, he had planted onions for the first time on three katthas of land. His operational costs were rather high due to the fact that all the machinery he used was hired in. The gross value of output at 1995-96 prices on Bachchu Prasad's farm was approximately Rs 20,375. With total operational costs at around Rs7,355, this implies that the net crop income of the farm was an estimated Rs 13,020. Allowing for inflation, this barely exceeds the 'subsistence' level of annual net crop income per farm estimated by Haque (1996) as Rs 11,000 in 1990-91 (see Chapter 4, 'Agriculture, Technology and Class'). Even taking into account the fact that the family is slightly smaller than average, there does not appear to be scope for capital

accumulation through cultivation under existing production conditions. Like the majority of households in Chandkura, the small size of the holding is a major constraint to accumulation.

Despite this however, the family was able to have a brick house costing Rs 1 lakh (100,000) constructed in 1992. They see this as the major change in their living standard which has occurred during the last fifteen years. These savings have only been possible via shrewd investment in lending over several years. Currently, Bachchu Prasad gives loans to other cultivators of up to Rs 3,000 at a time, at interest rates of at least 48 per cent per year. He also gives loans of rice and wheat which are repaid in kind at 50 per cent interest. This he feels is more profitable than investing in a diesel pumpset or any other agricultural equipment.

Both Bachchu Prasad and his wife identify strongly as Kurmi peasants who work hard on their own land. But it is only through moneylending and the extremely high returns it yields, that they have been able to accumulate surpluses on a scale which has had a significant impact on their living standards.

#### *d) Access to and use of institutional credit*

The ANSISS/ILO study found that in 1981-82, 'very little of modern debt as a whole has been used for capital investment...the use of modern debt has been more for agricultural operations'. However for the study as a whole the highest percentages of households using modern loans for capital investments were found among big peasants and those of the Kurmi caste, who were concentrated in Nalanda district (Prasad, Rodgers et al, 1988:478).

Significantly, as Table 31 shows, in 1981-82 the value of modern capital goods (and of machinery) actually owned was highest among those cultivating 5-10 acres, but the use of institutional loans to purchase them was by far the highest among those owning ten or more acres. (Data is not available on the use of loans according to land cultivated, however the differences are large enough to remain significant even when referring to landholding categories rather than landownership categories). While the study's authors suggest that 'the availability of modern debt can be taken to indicate the productive use of



credit', this inconsistency points to greater access to institutional loans among the biggest landowners, who were not the most production-oriented.

**Table 31 : Use of Institutional Loans for Capital Investment and Value of Capital Goods in 12 Bihar Villages, 1981-82**

Land Owned (acres)	Percentage of households using institutional debt for capital investment	Land Cultivated(acres)	Per capita value of modern capital goods(Rs.)
Up to 0.5	3.6	Up to 0.5	0
0.5 to 1	0	0.5 to 1	6.74
1 to 2	1.8	1 to 2	9.7
2 to 5	11.5	2 to 5	60.89
5 to 10	7.4	5 to 10	155.48
10 or more	20.8	10 or more	96.89

Source: Prasad, Rodgers et al., 1988

Shivsagar Sharma, Secretary of the Bihar Pradesh Kisan Sabha, recalls that 'in the 1970s, you had big landowners getting bank loans and buying up to four or five tractors at a time - each one was worth one lakh then. Typically, for every five people given 12 lakhs in loans between them, there would be another 300 people, applying for smaller things like pumpsets and horse-carts, who would be given a total of only 2 lakhs'(Interview, Patna, 7.3.97).

The ANSISS/ILO data does not provide the composition of the capital investment referred to, but is consistent with the phenomenon of the largest landowners cornering a large proportion of the available institutional credit in the late 1970s and early 1980s to purchase tractors which were mainly used for hiring out and non-agricultural activities (see Table 31).

My study found that in 1995-96, an estimated 23 per cent of households in Chandkura had at some point in time received institutional loans for capital investments. This figure includes buffaloes and horse carts (which are used for non-agricultural activities) purchased under the IRDP which is specifically aimed at the rural poor (see below). Even

so, more than half of these loans, and nearly 75 per cent of total institutional credit, went to the small minority of rich peasants in the village.

In an in-depth field study of transactions in rural credit markets in Sambalpur District in Orissa, another Indian State frequently characterised as 'backward', Sarap (1987) found that 'there is a large gap between the demand (current as well as potential calculated on the basis of adoption of HYV technology) and supply of formal credit to small farmers. For instance, hardly 21 per cent of the total requirement for production of small farmers in the non-irrigated area and about 37 per cent in the irrigated area, has been met by formal credit institutions in the survey year. By contrast, the large farmers have obtained further credit which was more than their requirement for production purposes' (Sarap, 1987: 87). He further noted, in a situation which parallels that in our fieldwork area, that 'large farmers' have 'political connections and dominance in formal credit institutions'. This allows them to postpone repayment of institutional loans over much longer periods than small farmers. 'To the extent that the price of credit in the regulated market is very low...it is a sort of income transfer to the large farmers'(op cit.: 90).

The reality of differential access to institutional loans in our fieldwork area is illustrated by the fact that many poor and middle peasants interviewed in 1995-96 commented that they had never applied for bank loans because they were 'too costly' - a reference to the bribes that have to be paid to bank officials by those without connections. Several also feared losing land as a result of getting into debt. The experience of small cultivator Raghbir Prasad is illuminating in this context.

Raghbir Prasad Yadav is a fifty year old farmer who owns 2.7 acres in Chandkura, consisting of 15 different plots. He cultivates this land himself alongside his wife Munni, elderly father, two sons aged 12 and 25, and one daughter aged 13. The two younger children are also at school while the eldest son is a BA pass. Raghbir Prasad is basically a subsistence cultivator, and unlike many others is almost self-sufficient, producing his own oil and vegetables and exchanging rice at the village shop for salt, sugar etc. He uses fertilisers intensively on rice, wheat and onions, and irrigates rabi crops using a hired diesel pumpset. In order to cover these input costs he frequently takes loans from larger landowners, which are repaid by selling a small proportion of his crops.

But this pattern has changed slightly since 1990. That year his eldest daughter got married, and to raise the expenses of the marriage, Raghbir Prasad had to sell off a small amount of land (0.03 acres). A larger amount (two-thirds of an acre) was mortgaged to another large landowner for Rs 20,000. In order to pay this off, Raghbir Prasad began cultivating onions - which other farmers told him were a good source of earnings - on one third of an acre. This helped him to pay off the loan within four years. However, the capital intensity of onion cultivation means that he also needs to take bigger loans than before, of up to Rs 1,200, from the rich peasants in the village. He pays interest on these loans of between 72 and 120 per cent. This high rate reflects a number of factors - as a Yadav, Raghbir Prasad does not benefit from the 'good relations' between Kurmi peasants of different classes in the village; and unlike many poor and middle peasants of the Kurmi caste who have lost land through subdivision quite recently, he is a second generation small cultivator. He cultivates entirely through family labour and is thus not bound by the solidarity which exists between employers of labour.

Despite the change in his cropping pattern, Raghbir Prasad is not optimistic about the future - buying a diesel pumpset would lower his production costs, but he fears that applying for a bank loan to buy one would involve him in endless demands for bribes and spiralling debt. His younger daughter's marriage has to be arranged and will cost up to Rs 40,000: Rs 5,000 on the ceremony, and Rs 35,000 on the dowry. He may well have to sell more of his land this time. The only improvement he can visualise would be his son using his BA to get a (preferably government) job. But again, this would require a bribe of at least Rs 5,000 which the family can't afford unless they sell land. Thus Raghbir Prasad's adoption of a capital intensive, high value crop (onions) was motivated primarily by the requirement of unproductive expenditure on his daughters' marriages; rather than leading to accumulation it has increased his dependence on large landowners who are able to appropriate a significant part of his surplus as interest. Without capital for bribes he is effectively denied access to institutional credit.<sup>4</sup>

---

<sup>4</sup> Interestingly, Raghbir Prasad, who is from the Yadav caste, felt that there was no difference between Janata Dal and Congress(I) rule in Bihar in this respect. While Janata Dal Chief Minister Laloo Yadav and his successor Rabri Devi have often been portrayed as providing preferential treatment to Yadavs as a caste, the experience of Raghbir Prasad and others in my study underlines that poor peasant and agricultural labourer households of this caste have benefitted little.

In Chandkura very little of the machinery in use had been purchased (whether using loans or other sources) since the early 1980s. Some of the possible reasons for this have been discussed in earlier chapters in the context of a 'stalling' of capitalist development in agriculture in this area.

A factor which has clearly both contributed to and been exacerbated by this process is the 'drying up' of institutional credit under government schemes from 1985 onwards. This has intensified after 1991: as Sharma notes, 'the credit flow to agriculture in Bihar through financial institutions has...deteriorated in real terms in the post- reforms period. The total flow of institutional credit to agriculture in Bihar in 1989-90 was Rs 138 crores which marginally increased to Rs 139 crores in 1991-92 and further to Rs 142 crores in 1992-93. In the wake of inflation and rise in fertilizer prices, it certainly denotes a declining availability of credit in real terms' (Sharma,1996:14). In 1992-93, total agricultural credit requirements under existing conditions in rural Bihar were estimated as between Rs1,900 and Rs2,900 crores (Singh and Singh, 1993), i.e at least 13 times the amount actually disbursed. Per capita bank credit to agriculture in 1993 was Rs110 in Bihar, half the all-India figure of Rs 222. In Nalanda district, the corresponding figure was Rs 146.

#### *e) The Integrated Rural Development Programme*

Another development which has taken place since the ANSISS/ILO study was carried out is the implementation of the Integrated Rural Development Programme (IRDP). This was only brought into full operation under the Sixth Plan (1980-1985) and is not covered in the earlier study. As Jha notes, public sector credit institutions, by linking credit to collateral (basically size of landholding), ensured that agricultural labourers were almost universally excluded until recently. 'Since the inception of IRDP, which aims at providing concessional credit for productive purposes to households below the poverty line, a new source has become accessible to the labourers in principle' (Jha, 1997:184).

The IRDP has been widely criticised, both conceptually and in relation to its implementation. It has been pointed out that, in common with other target-oriented poverty alleviation programmes, it was delinked from agrarian reform and 'designed as if redistributive land reform and security of tenure had nothing to do with poverty alleviation' (D.Bandhyopadhyay, Unpublished Manuscript, cited in Jannuzi,1996:194). It

has been further argued that the adoption of such programmes, which accompanied the shift of emphasis away from land reforms in the Five Year Plans, was a result of pressure from global capital on the Indian state to abandon an independent accumulation strategy which required thoroughgoing agrarian reform. According to Prasad, 'that is why international governmental organisations (like World Bank, International Labour Organisation, Asian Development Bank, etc.) began to aggressively follow the McNamara strategy of high consumption-oriented, concessional loans programmes for target groups... This also suited the rural oligarchy as it would be able to usurp the bulk of the funds flowing into the rural areas for poverty alleviation and also pressure would be diverted away from land reforms' (Prasad, 1987:64-65).

As regards implementation, Vaidyanathan (1995:339) summarises the existing studies as follows: 'Among the main points repeatedly made, the following are the most common: 1. The benefits of the programmes are not reaching the intended beneficiaries because it is easy for the better-off, by virtue of their superior connections with local bureaucracy, to appropriate a sizeable part of the benefits. 2. Even when the beneficiaries are part of the target groups, their selection is often biased, and intermediaries tend to siphon off a substantial part of the resources. 3. The intended beneficiaries lack knowledge/information about the programmes under which they could seek assistance or about its form and terms. 4. Intended beneficiaries are not organised to press their claims, to correct biased selection and other defects.'

An analysis of the functioning of the IRDP in Hilsa is outside the scope of the present study. However, it is worth noting that Chandkura clearly has a high proportion of households whose total household income places them below the poverty line and who are therefore eligible for credit under the programme. Awareness of the programme is widespread, and since 1982, thirteen households have actually received credit under the IRDP accounting for 5.6 per cent of all households. Two had received loans for horse-carts and the remaining eleven for buffaloes. Six of these households were completely landless. However, another twenty households had applied for loans for several different types of productive assets and been rejected, of whom twelve were completely landless labourer households, and only three households were already operating above the poverty line. And once again, demands for bribes raised the real costs to the borrower of these loans and restricted access to them. In a typical experience, Gulabchand Das and

Ghauri Devi, agricultural labourers who also owned a small amount of land, had to pay Rs 700 to staff at the Allahabad Bank in Hilsa in order to get their loan of Rs 4,000 for a buffalo released. It was reported that bank managers and various 'dalals' (middlemen) in the block administration frequently charged 'commissions' of up to 50 per cent on government loans.

The question of institutionalised corruption - and in particular, the appropriation of development resources - as a source of accumulation is explored further below. First however we will look at patterns of expenditure of surpluses in Chandkura.

## **2. Major expenditures in Chandkura**

As we have seen, there had been remarkably little expenditure (whether using credit or accumulated surpluses) on capital goods in the village since the early 1980s, the exception being a tractor bought by one of the largest landowners in 1992 solely for the purpose of hiring out in transport and construction work. And purchase of land in this period had been negligible.

The main avenues of major expenditure (which we have defined as expenditures of Rs 10,000 and above at 1995-96 prices) in this period fall into two categories: house construction, and marriage.

### *a) House Construction*

In contrast to the near-stagnant land market, construction was clearly booming in all the twelve villages I surveyed in 1995-96, as well as in Hilsa town. Some of the implications of this have been discussed in earlier chapters: it provides a source of employment outside agriculture (although often with the same group of employers) for labouring households which has increased their ability to demand higher wages in agriculture, but it is an inherently unstable and limited source of income. It is also a source of accumulation for tractor-owners who can hire out their tractors for construction work.

In this section however, our concern is with how accumulated surpluses are being invested in the fieldwork area. Spacious two and three storey houses both in the villages and in

Hilsa town, are, along with extravagant weddings, vast dowries and in some cases a formidable array of licensed and unlicensed weapons, potent symbols of the upward mobility of a section of the rich peasants of the area. House construction is a major source of expenditure for that group which has been able to consolidate the improvement in their class status afforded by technological change and increased yields by integrating themselves into the political and bureaucratic structures and networks which allow them to divert and appropriate a large portion of the Block's development resources.

However house construction has also been an important channel of expenditure for a much wider section of rural households. Remarkably, as many as 30 per cent of all households and 44 per cent of households cultivating land in Chandkura had invested more than Rs 10,000 on house construction in the period 1981-96. The majority of these investments were in 'pakka' houses (i.e with walls of brick and cement rather than mud) costing one lakh (Rs 100,000) or more. Of these households, approximately one third were rich peasants, half were classified as middle peasants and the remainder as poor peasants. However, all the 'poor peasant' constructing households had sources of non-agricultural income, mainly family members with salaried employment outside the village, and this was what had made it possible to construct a new house. In fact, 62 per cent of all the constructing households had used savings from non-agricultural salaried employment. The remaining 38 per cent had used agricultural surpluses generated either directly through their own activities in cultivation, or, as we have discussed, indirectly, through moneylending.

It was through family members in 'government service' that the only two 'pakka' houses belonging to scheduled caste households in Chandkura had been constructed in the early 1990s. Since 1980, Jagroop Das spent most of the time away from the village due to his job as a police wireless operator in Saharsa district - although he returned to the village during the peak season to help cultivate the small amount of land the family had also bought from his savings. In 1991 the family had built a two storey house painted in pastel shades, whose roof commanded a view of the entire village from its location at the farthest corner of what the Kurmi peasants referred to contemptuously as the 'Chamar tola'. While this family had withdrawn from agricultural wage labour, their neighbours, Ghauli Devi and her husband Gulabchand Das, continued hire themselves out to work on others' land, although their two younger sons, both college students, worked only on the tiny plots the

family leased in. The eldest son, a graduate, worked for the Life Insurance Corporation in Nawada district. At the time of this son's marriage in 1992, they had received a dowry of Rs.10,000 from his bride's family, which allowed them to begin the construction of a 'pakka' house in 1993.

*b) Expenditure on Marriage and the Nature of Dowry*

Marriage expenses have in much of the literature on agrarian change and rural poverty been included within the general category of 'social expenditure' or, in the terms of the 'semi-feudal' thesis, conspicuous consumption.

On the one hand, the ANSISS/ILO study, for instance, states that 'it is a common feature in tradition-bound rural Bihar that people spend lavishly on occasions such as marriage, shradha, festivals etc. Not only do the deficit households take loans for spending on such occasions, but this is true even of the relatively better off households' (Prasad, Rodgers et al, 1988:479).

On the other, Das has argued forcefully that 'much is made by smug urbanites and officials about the 'extravagant social needs' of the rural poor which drive them into debt. It is even suggested that they should stop getting married and dying. What is not realised is that the marriage loan is not generally a loan for a *band-baaja-ghori-gas barat*<sup>5</sup>; it is for consumption. The occasion may be a marriage or a death, but the cause is poverty and starvation. In the situation in which the rural poor exist, a 'good' meal once in 5 or ten years is not a luxury; it is a necessity. The pitifully small amounts borrowed - ten, fifteen, twenty, a maximum of two hundred rupees - bear testimony to this' (Das, 1979:13).

But while Das's argument still rings true as far as 'social expenditure' in general is concerned, I would argue that marriage expenses, and specifically the giving and receiving of dowry ('dahej' or 'tilak') which is prevalent in Bihar<sup>6</sup> need to be analysed as a separate category from other social expenditure and consumption.

---

<sup>5</sup> This refers to the necessary components of an ostentatious 'barat' - the wedding procession which the groom and his relatives take to the bride's house: a band, firecrackers, a horse and lights.

<sup>6</sup> Agarwal (1994:505) defines dowry thus: 'in broad terms a dowry transaction involves a transfer (of movables or immovables) from the girl's family to the girl, her husband or his kin, at the time of her marriage.'



The practice of dowry is not simply a form of social interaction: it is inextricably linked to patterns of accumulation. In pre-capitalist agrarian societies, it can be analysed as a means by which households with sons can consolidate resources - and land in particular - in their hands. Dowry practices, like those of inheritance, are subject to considerable variation according to region, community and caste. But the dominant form of dowry throughout North India allows property to be transferred from one family to another via daughters without giving women themselves any control over it or challenging the patriarchal pattern of inheritance which takes place solely through the male line. Some writers have argued that dowry is a 'rotating fund', where families get back on the marriage of sons what they spend on the marriage of daughters, but, as Mies argues, this fails to recognise 'the basically asymmetric, non-reciprocal and hypergamous relationship between bride-giving and bride-receiving families in India...the groom's family can almost totally determine the amount of the dowry' (Mies, 1986:158).

At the same time, the institution of dowry is part of an ideology which justifies and reinforces the subordination and exploitation of women by devaluing them, and their role in production in particular. The link between dowry and property has meant that dowry in India has traditionally been most prevalent among the upper caste groups who own the land. As Chakravarti argues 'the status of women in the high castes is related among other things to control over property inherited by men, which may foster the degradation of women in order to exclude them from a share in inheritance...An important factor responsible for the differences between high and low castes is the contrast between high castes as landowners and the low castes as wage earners. There is here an equality between adult sons and father, and between husband and wife, which comes from their separate and more or less equal status as wage earners. The lower caste woman's economic role accounts for her more equal rights both in her marital and natal homes. Thus the difference between high caste and low caste women is caused by differences in relation to production'(Chakravarti, 1995:2254).

The extent of dowry and its implications for women's status have also been linked to the place of residence after marriage: with women being most vulnerable in situations where the woman goes to live with her husband's family on marriage (patrilocal) especially when it is compulsory to marry outside one's natal village. According to Kelkar and Gala (1990:108)'the rules of patrilocal residence governing women have been considered to be

a key element in the origins of sexual stratification of women's role in production which enable men to utilize and appropriate women's labour in ways that ultimately enhance the authority of the husband's family'. All the castes in my fieldwork area practiced patrilocality. The only exceptions were in cases in which landed families had no sons, where one or more daughters remained at home to look after the family land together with their husbands, who either lived with their wives and parents-in-law or visited them frequently.

Like other forms of interaction which together make up the relations of production, the nature of dowry in particular regions- its prevalence, extent and form, cannot be regarded as determined by static 'traditions'. It has been transformed by changes in the mode of production. For example, it has been observed that in regions which have witnessed considerable capitalist development in agriculture, levels of dowry among landowning groups have escalated sharply. This has been linked to both the penetration of the market as well as a decline in women's status as they are increasingly marginalised from the direct production process (see for example Jain et al, 1987; Wilson, 1991).

My data on dowry costs is limited to those households who had married - or got their children married - recently, or were planning to do so, in Chandkura village (although group discussions in other villages included in my study revealed that similar levels prevail among the same castes and classes there). It should therefore only be treated as giving a rough approximation of the situation prevailing in the area.

As Tables 32 - 34 show, dowry is considerably higher among higher landowning size groups, as well as among the landowning castes (Kurmis and Yadavs in this case) and among middle peasants, rich peasants and landlords. As we have noted, the Kurmis who dominate the fieldwork area are a peasant caste in which women traditionally work on the land cultivated by the family. In the colonial period they were occupancy tenants : in Chandkura for example rent was levied by an Bhumihar absentee zamindar who lived in Gaya District. If dowry is regarded as inextricably linked to property, it can therefore be hypothesised that substantial dowries spread among the Kurmis after they gained land ownership rights in the period following zamindari abolition. However further research would be required to verify this.

**Table 32: Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by amount of land owned**

Land ownership category	Mean cost of dowry in Rs.(1995-96 prices)
Landless	5,666
Up to 0.49 acres	12,500
0.5 to 2.49 acres	16,583
2.5 to 4.99 acres	60,833
5 acres and above	67,500

*Source:Fieldwork*

**Table 33: Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by caste**

Caste	Mean cost of dowry in Rs.(1995-96 prices)
Scheduled Caste	7,190
Lower Backward Caste	17,500
Yadav	34,775
Kurmi	40,642

*Source:Fieldwork*

**Table 34: Mean value of dowry paid on marriage by brides' families in Chandkura at 1995-96 prices, by economic class**

Class	Mean cost of dowry in Rs.(1995-96 prices)
Agricultural Labourer	5,850
Poor Peasant	21,250
Middle Peasant	37,333
Rich Peasant	30,000
Landlord	82,500

*Source:Fieldwork*

Interestingly, the value of dowry among rich peasants appears to be less than that among middle peasants (Table 34). This may be a result of the rather fuzzy distinction between these two class categories (see Chapter 3 ); since it refers to dowries paid out by 'bride-giving' families, it could also be reflecting the higher demand faced by less well-off Kurmi families who marry their daughters into better-off families (middle peasant and rich peasant households both mainly belong to the Kurmi caste). Dowries vary most

systematically according to caste: the big leap in dowry values between landownership categories of 'up to 2.49 acres' and 2.5 - 4.9 acres (Table 32) reflects a difference in caste.

But what is also significant from the point of view of accumulation is the high level of dowries in 1995-96 when viewed as a proportion of surpluses accumulated by households in Chandkura through cultivation. In fact these payments exceeded average total annual net crop income for every landholding size group. This was the case even for households with no other source of income other than cultivation.

In this context it is perhaps not surprising that raising the costs of dowry for a daughter's marriage was one of the main reasons given for the sale of small portions of land (see Chapter 5, 'Changing Patterns of Land Ownership and Access to Land'). However, it is also important to note that firstly, land itself was never part of the dowry, which was paid largely in cash, although also including jewellery and consumer durables ranging from watches and bicycles in poor households to televisions, refrigerators, sofa sets and motorcycles in richer ones. Secondly, none of the richer cultivating households who had received large quantities of cash on the marriage of a son had invested them either in buying land or in agricultural production. Some of the tangible uses to which the money was put included house construction, setting up a member of the family as a contractor or in a transport business, and paying the bribes necessary to procure a government job. This reflects current perceptions among cultivating households that more effective avenues for accumulation lie outside the agricultural sector and suggests that the surpluses which are translated into dowries generally find their way into essentially 'unproductive' sectors of the economy.

While Tables 32 - 34 confirm that dowries are considerably higher among larger landowners, dominant classes and higher castes, there has been a qualitative change in dowry patterns among dalit agricultural labourers during the last fifteen years. Women and men who had married in the 1970s and earlier explained that in their day, the 'tilak' was a token payment of five rupees or so. During the past fifteen years, a more substantial dowry of at least Rs 1,000, quite distinct from the expenses of the wedding itself, had become commonplace. For a husband who had matriculated (and thus had a chance of getting non-manual employment), a dowry as high as Rs 30- 40,000 could be demanded. As one

fifty year old man in Bhokila village put it, 'we have to give these amounts if we want to marry our girls into more developed families. Otherwise the dowry is only Rs 1,000 - but the girl will have to work in the kisans' fields right from the day of her wedding'.

This emergence of dowry among the landless and near- landless dalit communities gives further credence to the theory that dowry, while remaining linked to property and accumulation, is no longer tied to land ownership and agricultural production, and therefore underlines the growing disarticulation between agricultural production and accumulation patterns in the fieldwork area.

The fact that the limited increase in access to education and non-manual employment which has occurred in these communities since the early 1980s appears to have led to the adoption of the practice of dowry, previously limited to the higher castes, also raises questions about women's status. It suggests that while the ideology which legitimises caste-based inequalities is being challenged in a number of ways, these challenges have not involved questioning the values and practices of the higher castes in relation to gender, which have remained dominant. Rather, a perceived improvement in status for lower caste households has been associated with the adoption of these values and practices.<sup>7</sup> This has been discussed earlier in the context of attitudes to women's participation in agricultural wage labour (see Chapter 6).

In the case of dowry however, dalit women involved in the movement of agricultural labourers and poor peasants have spoken out against its emergence among these classes and its detrimental impact on women's position. In fact this is one of the issues which has been raised when women have organised autonomously within the context of the movement.

The luxury consumer goods included in dowries also raise questions about the changing nature of 'conspicuous consumption'. In the 'semi-feudal' model, conspicuous consumption by the dominant landowners signifies power and status which, in theory at

---

<sup>7</sup> Referring to differences in practice regarding widow remarriage, Chakravarti (1995: 2248) argues that in the past, upper caste practices have often been prohibited for the lower castes because, 'a single caste framework functioning both at the level of ideology and material arrangements requires distinctive patriarchal arrangements and cultural codes among the hierarchy of castes to reproduce the structure of production'.

least, is ascribed by birth and cannot be acquired through a process of accumulation. Who is allowed to consume what is limited and subject to strict rules. Contemporary rural society in Central Bihar is however, now integrated into a wider capitalist market, even while relations and forces of production have not been fully transformed. This capitalist market perpetuates itself through the myth that its commodities are accessible to all. Thus in Central Bihar today, conspicuous consumption is one of the goals of accumulation of surpluses for all social groups. And unlike the earlier, relatively static 'semi-feudal' conspicuous consumption, it is constantly changing and growing in response to new 'needs' and demands created by the market. The practice of dowry further fuels these demands and dowries themselves in turn continue to grow.

### **3. Development, the Administration, Crime and Accumulation**

When asked if he uses the new varieties of HYV seed supplied by the block development office, Siri Doman, a dalit agricultural labourer and marginal cultivator in Chandkura, replies: 'when those seeds come in us poor people don't even get to hear about it - the rich peasants buy them up at low rates from the block by paying bribes. Then they sell them again - but they charge too much for us to afford.'

In another Hilsa village, when asked about development funds, a group of poor peasants point out one of the ruins of partially constructed state tubewells which dot the land on both banks of the Lokayan river - part of the World Bank-funded 'Bihar Public Tubewell Project'<sup>8</sup>: 'politicians, officials and contractors ate up all the funds - and this is what we are left with'.

The state, as Engels and later Lenin wrote, is 'as a rule, the state of the most powerful, economically dominant class, which, through the medium of the state, becomes also the politically dominant class, and thus acquires new means of holding down and exploiting

---

<sup>8</sup> This project was initiated in 1985-86 and was intended to construct 500 new state tubewells as well as constructing dedicated power lines to 5,212 state tubewells. According to Basavan Sinha, ex-Chief Engineer, Irrigation, the project was a 'disaster': by April 1994, only 89 new tubewells had been completed under the project (256 had been drilled) and only 47 per cent of all energised state tubewells in the state were working. Dedicated power lines turned out to be unworkable given the extremely poor power supply in Bihar (Interview, Patna, 26.4.96). The final cost was estimated at more than double the appraisal estimate of Rs 1296.2m, and the World Bank itself ultimately financed only 19 per cent of the total estimated cost, compared to 70 per cent on appraisal, 'severely increasing the burden on the State budget' (Government of India, 1995).

the oppressed class' (F. Engels cited in Lenin, 1968:270). As we will see, the state in Bihar not only fulfils this role but it is also a medium through which the dominant class can consolidate its economic power. For the rural poor of Hilsa and other parts of Central Bihar, the nature of the local state apparatuses as not only representatives of the interests of the dominant groups, but as a source of further accumulation for these groups is glaringly obvious.

By the mid-1990s, as little as ten acres was estimated as the minimum size of landholding necessary to gain access to such sources - once a landowner owned more than this amount of land and was generating a surplus, he potentially gained access to political power and this transformed his position, this transformation being far more significant than the quantitative change in landholding size or income from land (P.P. Ghosh, Director of the Asian Development Research Institute (ADRI), Patna, personal communication).

One of the indicators of the extent to which resources are being appropriated through the state structures is the remarkable proliferation in the number of administrative districts in Bihar. The State, which consisted of 17 districts in the early 1970s, was composed of 55 separate districts in 1997. According to observers there are two main reasons for this. Firstly, in order to facilitate the repression unleashed during the first phase of the 'Naxalite' agrarian struggles in the early 1970s, new police districts were created; these later became administrative districts. Secondly, more recently there has been a continuous process of lobbying by locally dominant classes for the creation of sub-divisions from blocks and districts from sub-divisions. For them, the creation of a new district means the creation of new jobs within the bureaucracy, a District Development Corporation with its own funds, and other resources.

In this context Choudhary (1991) describes the 'wider social connections' of the rich peasants of the area: 'one member of his family will be found working in any public sector or private industry in South Bihar, one may be a daroga, another may be a doctor or an engineer, one close relative will be found working as a peon or clerk while another relative may be a state government official, and some other a political leader'.

A small survey of twenty contractors holding contracts from the Public Works Department and other State government departments which I carried out in 1995 illustrates similar

connections, with members of the same family working in the administration, the police, as contractors and as leaders of political parties, and in some cases engaging in organised crime such as smuggling, as well as cultivating the family land (see Table 35). However, more significant than the kinship links of the personnel of state and political institutions, or even their class affiliations, are the specific ways these institutions articulate to provide, maintain and protect the patterns and sources of accumulation of the dominant classes as a whole.

The situation prevailing in Hilsa in 1995-96 was not an extreme one by Central Bihar standards, but illustrates the dynamics of the relationship between social power based on landownership, administrative corruption, crime and electoral politics which characterises the region as a whole.

During this period peasants and small shopkeepers in a large part of the block were being terrorised by an armed criminal gang led by Dhananjay Singh which was extorting money and had committed a number of murders. In a typical attempt to intimidate and terrorise the inhabitants, the gang staged military style marches through the villages, armed with around 50 rifles, firing into the air. The police were clearly not prepared to take action against the gang. According to the Sub-Divisional Officer for Hilsa, the major problem in arresting Dhananjay Singh was the inaccessibility of his area of operation, the Karai Parsarai area bordering Patna and Jehanabad districts, which she described as a 'Naxalite' area, for the police. But even when the gang took out a march under their noses in Chiksaura village, where a police camp had been set up, nothing was done.

However, the Dhananjay Singh gang's activities were not restricted to extorting money from those who had managed to accumulate some surplus, however meagre. The gang was also close to many of the larger Kurmi landowners in the area, and had acted on their behalf, particularly during elections.

For example in Fatehpur village, agricultural labourers organised by the CPI(ML) went on strike for higher wages in 1982. During the strike, which lasted fifteen days, the landowners tried to bring in labourers from neighbouring villages, but the village labourers prevented them from working. The strike was successful in increasing wages and in



**Table 35: Occupational Profiles of Some Landowning Contractors**

Name	Caste	Occupation	Subsidiary Occupations	Occupations of family members	Amount of land owned (acres)
Ramjas Rai	Bhumihar	Class 1 Contractor, State and Central Govts	Transport business	Brother Under-Secretary in State Assembly, father oversees cultivation	15 acres
K.D. Ojha	Brahman	Alcohol Shop Contractor	None	Father police inspector, 1 brother contractor, 1 brother police constable	30 acres
Brijendra Yadav	Yadav	Politician (Janata Dal)	Alcohol shop contractor, transport business, cannabis smuggler	Father central defence accounts auditor, one brother owns petrol pump, one cultivates	10 acres
Ashok Kumar Singh	Awadhia Kurmi	Contractor	Supervising cultivation	Father Assistant Engineer, Public Works Department	14 acres
Jagdish Prasad Yadav	Yadav	Class 4 Contractor	None	1 brother labour mate, 1 brother peon in government department	6 acres
Mohan Singh	Rajput	Brick kiln owner	Petrol pump owner, cinema, hotel and market under construction; cannabis smuggler	Brother cultivates	17 acres
Ramroop Singh	Yadav	Class 3 Contractor	Alcohol shop contractor	1 brother Congress(I) politician, brothers cultivate	12 acres

reducing the incidence of attached labour, and since then there has been continuing tension between the 'mazdoors' in the village, and the 'kisans' who in different periods have had links with various Senas (see Chapter 6) as well as political parties such as the Janata Dal and the Samata Party. During the 1995 Assembly elections, the landowners brought in Dhananjay Singh's gang to 'capture' the polling booth and prevent the labourers from casting their votes for the CPI(ML) candidate.<sup>9</sup> The CPI(ML) activists of the village resisted and bullets were exchanged. While the police refused to take action against either the gang or their patrons in the village, the incident was used as a pretext for the police to register cases against five of the people who had been active in the wage struggle, cases which were still continuing.

While the police are generally, as in the Fatehpur case, openly collusive with the dominant landowners, (some of the many more extreme examples of this have been cited in Chapter 6, 'Agricultural Labour in the Fieldwork Area'), a whole range of state apparatuses reinforce this collusion both practically and ideologically. The attitude of the recently appointed Sub-Divisional Officer for Hilsa, V. Nirja, when asked about the problems and issues of conflict in her area, was revealing: 'in a lot of these villages, the poor - they are not really poor because they are armed - they are extortionists! So our sympathies are not with them. Wages are always mutually agreed. The problem is when political parties intervene. Initially it helps, but now people are so aware in Nalanda! Now the real poor are only the Musahars<sup>10</sup>' (Interview, Hilsa, 3.3.96).

Meanwhile, in February 1996, the Dhananjay Singh gang murdered Binay Paswan, a landless dalit who was also a CPI(ML) sympathiser, in Berthu village in the Karai Parsarai area of Hilsa Block. The background to this was that the construction of fifty pakka houses for dalit

---

<sup>9</sup> 'Booth-capturing' - the forcible takeover of polling booths by armed men affiliated to one of the candidates, in order to prevent the supporters of other candidates from casting their votes - has become a hallmark of elections in Bihar. In the fieldwork area, until the late 1980s it was common for agricultural labourers not to attempt to vote at all: their votes would be cast by the landowners who dominated their village, for whichever party the landowners were affiliated to. This situation changed with the advent of the Indian People's Front (a mass organisation linked to the CPI[ML]). The IPF began fielding candidates in Bihar in 1985. The IPF began fighting elections precisely in order to challenge this disenfranchisement of the poor which was rooted in the very structure of agrarian power. For the first time poor dalit men and women began to assert the right to vote for the candidate of their choice. Not surprisingly then, the landowners and their candidate (whose party affiliation varied considerably from one constituency to the next - as well as in many cases changing from one election to the next) responded by considerably strengthening the armed force they deployed during elections.

<sup>10</sup> The Musahars, a Scheduled Caste, are almost exclusively landless, and have historically been among the poorest of the poor as their name, which means 'mouse-eaters' implies.

households in this village had been sanctioned under the Indira Awas Yojana scheme. The Block Development Officer (BDO) had demanded bribes of Rs 1,000 per household and was refusing to allow the construction to go ahead until he received this money. Binay Paswan had initiated resistance to this illegal demand.

The BDO concerned was notorious for his corruption. But these phenomena and the linkages they illustrate - between corruption, violent crime, the protection of landed interests, the manipulation of electoral politics, and state and private acts of repression against the working people - are replicated throughout Central Bihar.

#### **4. Politics and Power: Competition and Collaboration Among the Rural Rich**

There is today a marked heterogeneity among the classes which dominate Central Bihar. Developments in the 1970s and early 1980s led to the acceleration of a process of consolidation of a section of rich peasants, cultivating mainly through hired and family labour, which had been underway since Independence. While they included some of the Bhumihar ex-'occupancy tenants', a significant proportion belonged to 'Backward Caste' peasant groups: Yadavs, Kurmis and Koeris. This process, which in the political arena culminated in the coming to power of Laloo Prasad Yadav's Janata Dal government in 1990, posed a powerful challenge to the economic and political dominance of the upper caste non-cultivating landowners, Bhumihars, Rajputs and Brahmans.

As we have argued in this chapter, control over state institutions - in collaboration with politicians and officials - is a key factor in the accumulation strategies of both the 'old' and the 'new' rural rich. But while these institutions may be local - often block level - for a particular section of rich peasants to gain control of them in this way presupposes organising on a larger scale to intervene in the electoral process. Thus competition between these different sections of the rural landed classes - for resources themselves, and for political power, is an inevitable feature of Central Bihar's contemporary political economy. It is a competition whose edge is sharpened by a much longer history of Backward Caste resistance to the oppression of the upper castes.

In this context the increasing collaboration of these competing landed groups in attempting to suppress movements of the rural exploited classes is all the more striking. Whereas during the 1980s the 'private armies' organised by landowning groups had been identified with a particular caste - for example the Bramarshi Sena of the Bhumihars, the Lorik Sena of the Yadavs, the Bhoomi Sena of the Kurmis and the Kuer Sena of the Rajputs - the early 1990s saw the emergence of armies like the Kisan Sangh which brought together Bhumihars, Yadavs and Kurmis with the support of both the Janata Dal and the Congress Party.

However the Kisan Sangh proved short-lived, and was succeeded by the Ranvir Sena. This was an armed gang explicitly representing the upper caste Bhumihars and increasingly also Rajputs. Despite this, the response of the political parties of the Backward Caste rich peasantry to the Ranvir Sena has been an ambivalent one to say the least, with well-documented instances of these parties providing the Sena with tacit support. In this context it is worth looking at the character of the Ranvir Sena in more detail.

### *The Ranvir Sena*

The Ranvir Sena, which was formed in Bhojpur in 1994, is now also active in several adjoining districts of Central Bihar, and has carried out a series of massacres of dalit labourers, which have been characterised by their scale and barbarity and in particular by their extreme violence against women (see for example Bhatia 1997a and 1997b; Chaubey 1998). The Ranvir Sena can also be distinguished from earlier 'landlord armies' which have been active in the region by the extent of its resource mobilisation, with funds flowing in from upper caste-controlled mafias in the steel and coalmining towns of Bokaro and Dhanbad; and by its organic links with the Hindu communal Bharatiya Janata Party (BJP) which provides it with direct and systematic support.

As it has grown in strength across India, the BJP has emerged as the most aggressive representative of upper caste landed interests in Bihar. Its practical connections with the Ranvir Sena - sharing local leaders, funds and arms - have been well-documented (see for example PUDR, 1997). The links are also reflected in the Ranvir Sena's specific targeting of Muslims and attempts to create divisions along communal lines such as their attempt to build a Hanuman Temple on 'Karbala' land (land reserved for Muslim burials) in 1995; or their

'celebration' of the 1998 Pokhran nuclear tests by killing several dalits and Muslims. In terms of propaganda too, the Ranvir Sena's discourse bears the stamp of the BJP, accusing the CPI(ML) of being 'agents of foreign powers' seeking to destroy the 'social fabric of Indian society' (for which read the caste-based social hierarchy) and vowing to wipe out the 'red flag' not only from Bhojpur but from the face of India.

While the victims of Ranvir Sena massacres have been almost all dalits and Muslims, their treatment of other non-upper caste people reflects their determination to maintain the privileged status of the upper castes. In Belaur village, where a protracted struggle culminated in the formation of the Ranvir Sena, the actual trigger for conflict was an incident where a Bania shopkeeper refused to sell a cigarette to a member of one of the Bhumihar landowner families. One of the main issues in Belaur was the attempted rape of a Yadav woman by the son of one of the largest Bhumihar landowners. When a people's court was organised to hear the case, this landowner is reported to have responded with the remark 'I have reared a stud' (*'maine sard posa hai'*). In the same village, the Ranvir Sena later prevented a Backward Caste bride from travelling in a palanquin because this was seen as usurping the traditional prerogative of the upper castes (group interview, Belaur, 15.2.95). In yet another case in Kauran Dihri village, they threatened to shoot a Backward Caste labourer who 'dared to belch in front of us'!

But despite this open party allegiance and aggressively caste supremacist approach, the Ranvir Sena has also received material and moral support from the political parties which represent the intermediate caste rich peasantry. Around the time of the Sena's formation, when Congress(I) and other leaders representing upper caste landowning interests were visiting the village and making inflammatory speeches encouraging the Bhumihar landowners, local Janata Dal politician Brijendra Yadav also visited the village and threatened the people with dire consequences if they did not 'leave the Red Flag' and come under the banner of the Janata Dal. Several well-known criminals from other districts, known to be close to Chief Minister Laloo Yadav, also visited Belaur and are believed to have taken money from the Bhumihars (group interview, Belaur, 15.2.95). Tacit support from the Janata Dal intensified in the period after CPI(ML) candidates won two seats in Bhojpur in the 1995 Assembly elections, in the run-up to the 1996 parliamentary elections. Subsequently, the Janata Dal MP for Ara constituency (which includes much of Bhojpur), Chandradeo Prasad Verma, who was also

serving as Union Minister of State for Rural Areas Employment, demanded a lifting of the ban on the Ranvir Sena, and that the CPI(ML) be banned in its place. Shortly afterwards, on July 11 1996, as national newspapers reported, the Ranvir Sena hacked to death ten women, nine children and one man in the Bathani Tola hamlet of Barki Kharaon village in Bhojpur, where many Dalit and Muslim households were close to the CPI(ML). It subsequently emerged that the Janata Dal ruled administration and the police had been informed in advanced about the planned attack, but chose to take no action. In fact, there were three police posts within a one kilometre radius of the village, but no police arrived there for over six hours, during which time the Ranvir Sena men remained in the village 'celebrating' the atrocity (see for example PUDR, 1997, Sinha and Sinha, 1996).

Since then, the peculiarly political character of the Ranvir Sena, acting for a heterogeneous alliance of landed interests against the electoral intervention of the rural poor through the CPI(ML), has become more marked, with the scale, timing and other features of recent massacres in Bhojpur, Patna and Jehanabad districts of Central Bihar seemingly determined by clear electoral calculations<sup>11</sup>

### **Conclusion**

In this chapter, we have looked at the extent to which the dominant landowners in the fieldwork area have adopted strategies of accumulation which involve directing surpluses into unproductive channels outside agriculture.

Credit is a key aspect of this: earlier studies have identified 'moneylending' by landowners and the 'interlocking of markets' associated with it as a key factor inhibiting agrarian transformation. On the other hand, institutional credit can play an important role in promoting such a transformation in the hands of production-oriented cultivators. But it is also a mechanism through which those who have preferential access to institutional loans, or control over their disbursement, can divert and appropriate resources.

---

<sup>11</sup>It is important to note that these massacres cannot be viewed as 'reprisals' for actions carried out by agricultural labourers - in fact since the Bathani Tola massacre, the Ranvir Sena has largely targetted villages where the labourers and poor peasants are unorganised and have no links with the CPI(ML). The aim seems to be to create a general climate of terror among the rural poor, particularly around the time of elections.

My fieldwork showed that in the period between 1981-82 and 1995-96, 'traditional' loans remained a significant source of credit in Chandkura and other villages in Hilsa. Rich peasants in the creditor's village were the major lenders. There was significant interlocking: of credit and labour markets in the case of loans to agricultural labourers (which are often consumption loans); and of credit and the market for hired and purchased agricultural inputs in the case of loans to poor and middle peasants (which are frequently production loans). However, as well as using credit to facilitate surplus appropriation from the borrower in other markets, as described by Bharadwaj (1974b; 1985) and Bhaduri (1973; 1983; 1986), these lenders attempted to use the credit market to maintain the status quo in response to challenges to their economic and social power. As I have argued, the interest rates charged by these lenders have become more highly differentiated according to the class of the borrower, as class conflicts have intensified. When agricultural labourers have demanded higher wages, interest rates charged to them have been increased to such an extent as to make credit inaccessible to them. At the same time, much lower rates - or even, in the case of Kurmi middle peasants, interest free loans - serve to reinforce solidarity among different classes of employers.

As this implies, the gains from moneylending cannot be assessed simply in terms of direct returns to capital advanced. However, my observations also suggest that even the direct returns on lending make it a profitable alternative to investment in agriculture. On the one hand, there has been an increase in real production costs since the early 1990s, which is exacerbated by the relatively small and fragmented landholdings of even the richer cultivators in the fieldwork area. On the other hand, the persistence of acute poverty, as well as the lack of access of small cultivators to institutional credit, ensures continued demand for, and dependence upon, traditional credit. In fact as we have argued in Chapter 4, 'Agriculture, Technology and Class', this dependence has if anything increased in the case of small cultivators, who have effectively been compelled to adopt the 'new' technology. In this context a number of rich peasants, while continuing to cultivate their own land, choose to invest surpluses in lending rather than making capital investments to sustain a process of expanded reproduction in agriculture.

The major portion of institutional credit to agriculture was received by rich peasants in the period 1981-82 to 1995-96, although in the 1990s overall credit flows had declined in comparison to their levels in the 1970s and 1980s, when many rich peasants had taken loans

for one or more tractors to hire out and use in non-agricultural activities like construction and transport. While the 1980s and early 1990s saw poor peasants being compelled to adopt 'new' technology under unfavourable conditions, their access to institutional credit had not increased proportionately. Where they applied for such loans and they were sanctioned, a significant proportion was appropriated by bank officials and block level state functionaries who demanded bribes in order to disburse the loans. This was also a source of accumulation for powerful landowners in the fieldwork area who had links with these officials.

The pattern of major expenditures also throws light on the ways in which surpluses are utilised. There had been very little expenditure on agricultural capital goods during the period between 1981-82 and 1995-96, and land purchase too, had been negligible. House construction and dowries paid on the marriage of daughters accounted for nearly all the major expenditures by surplus producing households in Chandkura. Rich peasants in the fieldwork area also used surpluses to invest in buses, brick kilns, shops or cinemas, to buy weapons, and in some cases to build political careers. Dowry payments constituted a significant proportion of income for all classes in Chandkura and were much higher among higher castes, dominant classes and larger landowning groups. However dowries did not include land, nor was cash received as dowry used to buy land, or invested in agricultural production. Rather dowries were used for house construction, setting up a member of the family in business or for paying the bribes necessary to procure a government job. Thus while dowry remains inextricably linked to accumulation, it is disarticulated from landed property and from the process of surplus accumulation in agriculture, even as it has become articulated with a wider market. This is also reflected in the rise of dowry among landless dalit households, where dowries depended largely on the access of the groom to salaried employment.

The situation in the fieldwork area in 1995-96 also illustrated how social power based on landownership on the one hand, and administrative corruption, crime and electoral politics on the other, interact to create, sustain and protect the prevailing patterns of accumulation. While inevitably difficult to quantify, state apparatuses and institutions are clearly being used by the dominant landowners in the fieldwork area to appropriate resources on a significant scale. But to do this requires political power, which has meant competition at a wider level with other powerful landed groups in Central Bihar. However the 1990s have seen all these groups



collaborating to resist the economic, social and political challenge posed by the organised movements of the rural working people.

Overall, the findings presented in this chapter demonstrate that in the 1980s and early 1990s accumulated surpluses were channeled, in the form of both consumption and investment, into a variety of unproductive avenues outside agriculture. But in order to assess the impact of this on the process of expanded reproduction in agriculture - and potential agrarian transformation - we also need to ask whether these non-productive activities are actually taking place at the expense of - rather than just alongside - productive ones.

Many of the phenomena we have described here have also been observed in regions which have witnessed substantial capitalist development in agriculture. For example, rich peasants have used their connections with the local bureaucracy to appropriate and resell subsidised inputs in Haryana (Bhalla, 1976); traditional credit has remained a significant input in agricultural production in Punjab and new forms of informal credit have emerged (Gill, 1996); and interlinked markets have characterised new relations of production which have accompanied rapid development of the productive forces in Haryana and Western U.P. (Bhalla, 1976; Srivastava, 1989b). This reflects the complexities of the transition to capitalism, in which elements from an earlier mode of production may be retained during the early stages. These elements may in fact be incorporated into new, capitalist forms of surplus extraction and reinvestment. The point to be noted is that, as all the sources cited here testify, these activities have not substantially displaced the process of accumulation and productive reinvestment of surpluses in agricultural production<sup>12</sup>. The balance of forces between those 'promoting productive accumulation' and those 'stabilising, perpetuating and reinforcing unproductive investment' (Bharadwaj, 1985:21) appears to have shifted decisively in favour of the former.

These areas have witnessed increasing concentration of land holdings in the hands of larger holders through the operation of both land and lease markets (see Chapter 5); and investment in technological inputs, particularly agricultural machinery, leading to an increasing organic

<sup>12</sup>In fact, Gill (1996) gives the surplus of demand for agricultural credit from investment-oriented large cultivators over the supply of institutional credit as a reason for the development of new forms of informal credit in Punjab. This contrasts with the situation observed by Sarap in Orissa, which has witnessed relatively little capitalist development, where large farmers had access to institutional credit in excess of their production needs under existing production conditions (Sarap, 1987).

composition of capital (see for example Gill, 1988). Changes in the relations of production which have taken place in these areas, including those which have created new forms of 'unfreedom' for the exploited groups (Brass, 1990), have been geared towards increasing dominant landholders control over labour in the context of new production processes (see for example Srivastava 1989a and b).

In the fieldwork area, by contrast, underlying structures which favour the diversion of surpluses into unproductive avenues have not been transformed. The area continues to be characterised by widespread dependence on the land as the only means of survival, extreme inequality of land distribution, and a preponderance of small and marginal holdings. This pattern and the acute poverty associated with it, perpetuates the dependence of poor peasant and agricultural labour households on the dominant landowners in interlocked credit, input and labour markets. This has been further exacerbated since the early 1980s as small landholders producing for subsistence have found themselves compelled to adopt the 'new' technology. Given these conditions, even in the absence of productive investment in agriculture, a very high rate of exploitation of labour ensures that rich peasants continue to extract some surpluses. These surpluses form the initial capital which provides access to networks which link administrators, criminal gangs and political parties. Thus agrarian power provides not only the social but the economic basis for entry into other, more lucrative, avenues of accumulation.

## CONCLUSIONS

The findings of this study confirm the hypothesis that the process of transition to a more dynamic agriculture based on 'peasant' capitalism which appeared to have begun in parts of Central Bihar in the 1970s has subsequently encountered powerful constraints which are rooted in both the agrarian structure itself and the nature of State power in Bihar. The findings also confirm that the movement of agricultural labourers and other sections of the exploited classes which has emerged and developed during the same period is bringing about significant changes in the relations of production, and challenging the basis of power in rural Central Bihar.

The agrarian economy of Central Bihar is firstly characterised by acute inequalities and an extremely high incidence of landlessness. Secondly, small and marginal landholdings predominate in the region. Thirdly, even the small number of dominant 'big' landowners rarely cultivate large tracts of land. And in the absence of land consolidation, their holdings generally consist of a large number of small plots, while the persistence of chronic fragmentation continually increases the numbers of small holdings.

An impetus towards 'peasant capitalist' development emerged in certain parts of Central Bihar, including the fieldwork area, under uniquely favourable conditions which prevailed during the 1970s. However, this impetus did not prove powerful enough to effect a transformation of the relations and forces of production along the lines observed elsewhere in India (notably Punjab, Haryana and western U.P). Instead surpluses accumulated in this phase were directed into unproductive activities, the conditions for which were created by the prevailing poverty, inequality and dependence on the land for survival. The most widespread of these are moneylending, and the hiring out of agricultural machinery. When more substantial surpluses have been accumulated in agriculture, they have been diverted into avenues such as contracting and organised crime, which are inextricably linked to political parties and the state.

This is also one of the factors behind the virtual collapse of the infrastructure since the early 1980s, leading to spiralling costs of production, which in turn has served to reinforce a situation where it is more profitable for richer peasants to use their assets to extract a rental surplus from poor peasants - whether through moneylending, hiring out equipment, or using

their control over the local bureaucracy to appropriate and re-sell subsidised inputs - than to invest in agricultural production.

Further, these activities, and the very nature of the state in Bihar which facilitates them, are underpinned by the continuing stranglehold of the dominant classes over rural society. The left-led movements of mainly dalit agricultural labourers, who are the most exploited section of this society, pose a direct threat to this power. And the experiences of the land and particularly wage struggles which are currently forming the central thrust of these movements suggest that they represent the most resilient and potent force for change in the region today.

### *Comparisons and Contrasts*

In the previous four chapters we have noted a number of comparisons between the fieldwork area and regions of India which have witnessed more resilient capitalist development, and about which a considerable literature exists (notably Punjab, Haryana and Western Uttar Pradesh in north-western India). These have proved illuminating in the context of various aspects of our hypotheses.

In summary, these regions have witnessed sustained productive investment in agriculture by substantial landowners, leading to increasing productivity of land and labour. There has been considerable concentration of land through the operation of both land and lease markets, so that the increase in the numbers of marginal holdings has been accompanied by an increase in the proportion of land controlled by large cultivators.

Against this background, these rich peasant 'proto-capitalists' have mobilised along class lines to create the conditions for accelerating capitalist accumulation, raising demands relating to access to agricultural inputs, agricultural prices, infrastructural development and consolidation of landholdings. Further, this class has responded to attempts to organise by agricultural labourers by introducing new forms of exploitation and control over labour suited to the needs of capitalist production.

All these phenomena stand in sharp contrast to our observations of the fieldwork area presented in the previous four chapters. These findings are summarised below.

## *Technological Change*

The period from the mid-1960s until 1981-82 saw a process of accumulation through investment in agricultural production among larger cultivators in the fieldwork area. The introduction and rapid extension of tubewell irrigation was accompanied by a change in the cropping pattern, in particular the adoption and spread of High Yield Variety rice and wheat, increased fertiliser use, and some initial mechanisation. However, the period from the early 1980s until 1995-96, when my study was carried out, did not see further development along the same lines.

While irrigated area and per hectare fertiliser use continued to increase, in the second phase this increase represented primarily the adoption of the 'new' technology by small and marginal cultivators cultivating less than 2.5 acres. A large proportion of these cultivators are essentially subsistence producers who have been compelled to adopt high yielding crops and technologies in order to pay rents and service debts. These producers are characterised by the marketing of a 'distress surplus' and by the large proportion of land devoted to the cultivation of high value crops for sale. Our findings cast considerable doubt on studies which have characterised adoption of these inputs by small and marginal cultivators as leading to 'income diffusion'. In the fieldwork area, poor peasants' dependence on rich peasants has actually increased as a result of their adoption of new technology, and their forced integration into a number of markets.

Irrigation has largely been extended through larger cultivators hiring out diesel pumpsets to smaller cultivators. With the electricity supplies cut off from the early 1980s onwards, irrigation costs have increased steeply, with much of the burden of the increase being borne by those who hire in irrigation facilities. Fertiliser costs have also risen sharply in the 1990s, after the withdrawal of subsidies. All this has made poor and middle peasants more dependent on rich peasants for loans to cover both consumption as well as input costs. Very high rates of interest are frequently charged on these loans. And the supply of fertiliser, seeds and diesel at the block level is frequently cornered by rich peasants with links with the administration, who resell it at much higher prices.

At the same time, with the rise in production costs, the rich peasants who were identified as potential 'capitalist farmers' in the early 1980s have ceased to invest their surpluses in agricultural production. They are using their existing assets (diesel pumpsets, tractors, and threshers) largely to exploit smaller cultivators through the operation of rental markets. Far from overcoming the resource constraints faced by the smaller cultivators, as neoclassical economists suggest, these rental markets are characterised by the appropriation of surpluses produced by them on the basis of monopoly rents. However, unlike the exploiting peasants in Kritsman's model of rental markets for means of production, rich peasants in the fieldwork area are not investing the surpluses thus appropriated in agricultural production. Rather they are engaged in moneylending and other non-productive activities, while there has been little further technical change. The process of expanded reproduction in agriculture, a key indicator of capitalist development, has not been established.

### *Land Ownership and Access to Land*

The concentration of cultivated land, either owned or operated, in the hands of a small proportion of landowners which is associated with the development of capitalism in agriculture has not occurred in the fieldwork area during the period from 1981-82 until 1995-96. In fact, the reverse phenomenon, that of dispersion of land in increasing numbers of small and marginal holdings, can be identified. While a decline in tenancy (involving leasing out by larger to smaller landowners) has reduced poor and landless households' access to land, it has not been sufficient to counter other trends away from the concentration of operated land.

Some of these trends result from increased demographic pressure on cultivable land. Both the number of households and the total population fully or partially dependent on cultivation have increased considerably during the reference period. The division of land on inheritance has been a major factor in increasing the numbers of small and marginal holdings without a corresponding increase in the share of land controlled by larger holdings. This has been accompanied by fragmentation of holdings which has important implications for production.

These factors in themselves would not be expected to act as a barrier to concentration in a situation where large-scale surplus producing landowners were oriented towards acquiring

land through purchase and lease. But this is clearly not the case in the fieldwork area. The extent of land transfers through the market has continued to be marginal during the reference period. And the phenomenon of large landowners using the lease market to concentrate operated land in their hands is completely absent.

A decline in the profitability of investment in agricultural production; increased access to state structures opening up new avenues of accumulation; a growing culture of conspicuous consumption; and increasing class conflicts with labourers (and potential tenants) all militated against land concentration by the richest section of the peasantry.

For poor and middle peasants, these same conditions have effectively blocked any possibilities for accumulation or land acquisition. Having been compelled to adopt the new technology, they have been badly affected by increased input costs, and by the virtual collapse of the infrastructure (both of which have been exacerbated by the appropriation of resources by rich peasants described above). Faced with chronic fragmentation of holdings through inheritance, they are becoming increasingly pauperised.

### *Patterns of Accumulation and Investment of Surpluses*

Moneylending was an important channel into which surpluses accumulated by rich peasants were channeled. Under the conditions we have described, even the direct returns on lending make it a more profitable alternative to investment in agriculture. But the gains from moneylending cannot be assessed simply in terms of direct returns to capital advanced. There was significant interlocking: of credit and labour markets in the case of loans to agricultural labourers (which are often consumption loans); and of credit and the market for hired and purchased agricultural inputs in the case of loans to poor and middle peasants (which are frequently production loans).

As well as using credit to facilitate surplus appropriation from the borrower in other markets, these lenders attempted to use the credit market to maintain the status quo in response to challenges to their economic and social power. The interest rates charged by these lenders have become more highly differentiated according to the class of the borrower, as class conflicts have intensified. When agricultural labourers have demanded higher wages, interest

rates charged to them have been increased to such an extent as to make credit inaccessible to them. At the same time, much lower rates serve to reinforce solidarity among different classes of employers.

The major portion of institutional credit to agriculture was received by rich peasants in the period 1981-82 to 1995-96. While the 1980s and early 1990s saw poor peasants being compelled to adopt 'new' technology under unfavourable conditions their access to institutional credit had not increased proportionately. Where they applied for such loans and they were sanctioned, a significant proportion was appropriated by bank officials and block level state functionaries who demanded bribes in order to disburse the loans. This was also a source of accumulation for powerful landowners in the fieldwork area who had links with these officials.

In terms of the pattern of major expenditures in the fieldwork area, there had been very little expenditure on agricultural capital goods during the period between 1981-82 and 1995-96, and land purchase too, had been negligible. House construction and dowries paid on the marriage of daughters were the most significant major expenditures by surplus producing households. But dowries did not include land, nor was cash received as dowry used to buy land, or invested in agricultural production. Dowries remained inextricably linked to accumulation, but had become disarticulated from landed property and from the process of surplus accumulation in agriculture. Rich peasants in the fieldwork area also used surpluses to invest in buses, brick kilns, shops or cinemas, to buy weapons, and in some cases to build political careers.

The situation in the fieldwork area in 1995-96 also illustrated how the social power based on landownership, administrative corruption, crime and electoral politics interact to create, sustain and protect the prevailing patterns of accumulation. State apparatuses and institutions are clearly being used by the dominant landowners in the fieldwork area to appropriate resources on a significant scale. But to do this requires political power, which has meant competition at a wider level with other powerful landed groups in Central Bihar. However the 1990s have seen all these groups collaborating to resist the economic, social and political challenge posed by the organised movements of the rural working people. This resistance has



taken extremely violent forms, and has been explicitly or tacitly supported by various political parties and the administration.

Thus in the 1980s and early 1990s accumulated surpluses were channeled, in the form of both consumption and investment, into a variety of unproductive avenues outside agriculture. Further, these activities have taken place at the expense of productive investment in agriculture, because, as we have argued above, the underlying structures which favour them have not been transformed.

### *Relations of Production and Struggles of Agricultural Labourers*

The initial spurt of capital accumulation among a section of larger landowners employing wage labour provided the catalyst for the emergence of concerted struggles waged by the rural exploited classes in the fieldwork area, shaped by the interrelated questions of class, caste and gender. Based predominantly among the mainly dalit agricultural labour households, these struggles were part of the movement led by the Communist Party of India (Marxist-Leninist) in Central Bihar.

Changes which had taken place in agricultural production relations since the early 1980s were in general a result of demands put forward by agricultural labourers through these struggles. In contrast to areas where capitalist development has taken root, employers in the fieldwork area had not been able to incorporate new forms of exploitation and control of labour into processes of production. Rather their responses were essentially defensive attempts to maintain the status quo.

Firstly, the movement has succeeded in enabling the dalit poor and landless to challenge the practices which underpin the social and economic authority of both the older and the more recently emerged dominant classes: forms of oppression based on caste and gender as much as class.

Secondly, organising by agricultural labourers in the 1980s and 1990s has been a key factor in bringing about wage increases - albeit on the basis of extremely low previous levels. This is despite, firstly, technological changes in agricultural production reducing overall labour

demand in the 1970s and early 1980s, secondly, the declining profitability of cultivation from the mid-1980s, and thirdly, the collapse of non-agricultural employment leading to a fall in labour productivity in agriculture from the late 1980s.

In the wake of struggles over wages and an increase in the agreed rates, employers in the fieldwork area have introduced a number of changes in their daily practices which reflect direct or indirect attempts to reduce the labourers' share in the produce. Employers have also responded to successful agitations over wages by withdrawing from credit and tenancy relations with the labourers.

However, the withdrawal of credit and land from casual labourers does not appear to be primarily a systematic attempt to create new relations of dependence, but rather a long term extension of the 'social boycott' strategy of withdrawing key resources in a bid to maintain the status quo - particularly as far as wages are concerned - in the context of an agricultural economy where the process of accumulation has essentially come to a standstill. Significantly, the incidence of permanent labour has also declined more dramatically in those villages where organisation by agricultural labourers has been sustained.

In the 1990s, these struggles have drawn the movement into direct conflict with a network of criminal gangs, politicians, administrators and powerful landowners. As a result, the movement is gaining the support of wider sections of rural society, who see it as providing the only resistance to the endemic corruption and criminalisation rooted in the agrarian economy.

Under existing conditions, demands for higher wages will ultimately face limits set by the stalling of capitalist development in agriculture. But it is precisely when these limits are exposed through struggles that wider goals of political and economic transformation take on the character of mass demands. Similarly the limited scope for redistribution of ceiling surplus and vested land in much of Central Bihar, which is currently seeing fragmentation and sub-division rather than capitalist concentration of holdings, is serving only to reinforce and widen a growing popular conviction of the necessity of a fundamental reorganisation of the distribution and use of land and resources, which will require a radical change in the character of the state in Bihar and beyond.

In fact, while the dominant patterns of accumulation effectively direct surpluses away from agriculture, it is the relations of production in agriculture which underpin these patterns - by perpetuating both rural poverty and rural power.

Firstly, the extreme inequality of land distribution which characterises the region, with a growing proportion of marginal holdings, and the acute poverty associated with it, perpetuates the dependence of poor peasant and agricultural labour households on the dominant landowners in interlocked credit, input and labour markets. This has been further exacerbated since the early 1980s as small cultivators have found themselves compelled to adopt the 'new' technology.

Secondly, even in the absence of productive investment in agriculture, a very high rate of exploitation of labour ensures that rich peasants continue to extract surpluses. These surpluses form the initial capital for entry into other, more lucrative, avenues of accumulation. Agrarian power provides not only the social but the economic basis from which to enter networks of politicians, administrators, police and criminals.

Thirdly, the relations of production in agriculture are inextricably linked to the nature of the state in Bihar. Rich peasants have not, as elsewhere, mobilised to demand state intervention which will create favourable conditions for investment in agriculture; rather development resources have been treated as a source of 'primitive accumulation' through corruption and crime. This has been one of the factors leading to a crisis in the availability of key inputs - including the 'de-electrification' of large areas and the deterioration of state irrigation facilities - which in turn has made agricultural investment even less profitable.

Fourthly, the articulation of caste identities, which are reinforced by existing agrarian production relations, are crucial to the process of political intervention by heterogeneous dominant landholding groups, through which these groups gain access to such sources of accumulation.

Finally, the continuation of all these processes, premised as they are on the denial of basic resources to the direct producers, the agricultural labourers and poor peasants, clearly requires the perpetuation of the repressive and coercive practices which are inherent in existing

relations of production. These are epitomised by the literal disenfranchisement of the dalit poor.

All these factors serve to explain why a challenge to the agrarian structure constitutes a threat to the entire accumulation process of the dominant groups, and is met with extreme violence, whether through state apparatuses or private armed gangs supported by an increasing range of political parties representing different sections of the rural rich. However, such challenges are growing in strength, and as this polarisation intensifies, we can only expect more decisive battles ahead.

## **APPENDIX 1: Chandkura Census Survey Questionnaire (All Households)**

1. Name
2. Age
3. Caste
4. Main occupation/Source of income
5. Subsidiary occupations/Sources of income
6. Household members: sex; age; occupation
7. Land owned (area)
  - a) irrigated (area); method of irrigation
  - b) unirrigated (area)
8. Land leased in, fixed rent (area)
  - a) irrigated (area); rate; method of irrigation
  - b) unirrigated (area); rate
9. Land leased in, sharecropped (area)
  - a) irrigated (area); rate; method of irrigation
  - b) unirrigated (area); rate
10. Land leased out, fixed rent (area)
  - a) irrigated (area); rate; method of irrigation
  - b) unirrigated (area); rate
11. Land leased out, sharecropped (area)
  - a) irrigated (area); rate; method of irrigation
  - b) unirrigated (area); rate
12. Wage labour hired in (harvest and transplanting)
  - permanent: number; days per year
  - casual : number; days per year
13. Wage labour hired in (other times)
  - permanent: number; days per year
  - casual : number; days per year
14. Wage labour hired out (harvest and transplanting)
  - permanent: number; days per year
  - casual : number; days per year
15. Wage labour hired out (other times)
  - permanent: number; days per year
  - casual : number; days per year

16. Loans given to labourers/ received from employer(s) (Y/N)

If yes: amount; purpose; interest rates

17. Land given to labourers/ received from employer(s)(Y/N)

If yes: amount

18. Farm implements and machinery (owned(number)/hired in (number)/not used)

i. plough

ii. tractor

iii. power tiller

iv. harvester

v. rice thresher

vi. wheat thresher

vii. diesel pumpset

viii. private tubewell

ix. other

19. Cattle owned: number

bullocks

cows

buffaloes

20. Currently outstanding loans: source; amount; purpose; interest rate

21. Recent expenditures on marriage: on marriage ceremony; on dowry(cash); dowry (in kind - specify)

22. Perceived changes which have occurred in the village over time

(Increased/Decreased/No Change; Reason for change if any;

Period when change occurred if any)

Land leased out

Extent of sharecropping

Extent of fixed rents

Extent of self-cultivation

Use of permanent labour

Use of casual labour

Wages for permanent labour

i. men

ii. women

Wages for casual labour

i. men

ii. women

Extent of irrigation

Cropping pattern

Use of machinery(specify)per acre

Fertiliser type and use per acre

Labour days/acre

Output per acre

i. wheat

ii.rice  
iii.other crops (specify)  
Prices  
i.wheat  
ii.rice  
iii.other crops (specify)  
iv.irrigation costs  
v.fertilisers  
vi.pesticides  
vii.seeds  
viii.machinery (specify)  
Public Investment  
Availability of Credit  
Availability of Fertilisers  
Availability of HYV seeds  
Employment outside the village  
Marriage Expenses  
Other Changes

## **APPENDIX 2: Agricultural Labourers' Questionnaire**

1. Name
2. Age
3. Caste
4. Main Occupation/Source of income
5. How long have you/your family engaged in this occupation?  
What was your family's previous main source of income?

### 6. Subsidiary Occupation

How long have you/your family engaged in this occupation?

What were your family's previous subsidiary occupations/income sources?

### 7. Education

### 8. Details of household members

Name	Age	Relationship	Education	Occupation
------	-----	--------------	-----------	------------

### 9. Details of agricultural labourers in household

Name

No. of employers

Casual/Permanent

Contract if any (details)

Advance if any

Land allotted if any

Loans given if any

Tasks carried out/

days per year/

wages

(give details of crops)

Unpaid labour if any

Have tasks and arrangements changed over time? If so, what are the reasons for this (e.g. changes in cropping pattern, new inputs, mechanisation etc.)

Has women's employment increased or decreased? If so what are the reasons?

### 10. Permanent/attached labourers

Reasons for this arrangement



Length of current arrangement (From...to...)

How often is there a change of employer

What are the reasons for the changes

### 11. Cultivation of allotted land

Input Costs                      borne by labourer                      borne by employer

plough and bullocks

seeds

fertiliser

pesticide

machinery (specify)

irrigation

other(specify)

Cropping pattern

Irrigated land

Season                      Rabi

Kharif

Crop

Area

cultivated

Seeds (HYV/

Local)kgs/Acre

Fertiliser

kgs/acre

Pesticide

kgs/Acre

Diesel Ltrs/acre

Yield

qtls/acre

tractor(hours/acre)

thresher (total hours)

diesel pumpset (hours/acre)

other machinery

(specify)

Unirrigated land



Wage Labour    Number                      Days per year

Crops Cultivated

Sale of Output

Crop

Quantity Sold

Value(Rs)

Earnings per year

What happened to the land? What were the reasons for the change?

23. (Non-leasing Households) Did the household lease-in any land previously? (give details)

When leased in (from...to...)

Sharecropped  
(details)

Fixed cash rent

Fixed kind rent

Family Labour    Number                      Days Per Year

Wage Labour    Number                      Days per year

Crops Cultivated

Sale of Output

Crop

Quantity Sold

Value(Rs)

Earnings per year

What were the reasons for ending the lease?

**APPENDIX 3: Self-Cultivating Landowners' Questionnaire**

1. Name
2. Age
3. Caste
4. Main Occupation/Source of income
5. How long have you/your family engaged in this occupation?  
What was your family's previous main source of income?

6. Subsidiary Occupation

How long have you/your family engaged in this occupation?  
What were your family's previous subsidiary occupations/income sources?

7. Education

8. Details of household members

Name	Age	Relationship	Education	Occupation
------	-----	--------------	-----------	------------

9. Village(s) where land owned owner resident owner non-resident

Total land owned

Cultivated

Uncultivated

10. Land cultivated by owner

Total Area

Number and Sizes of plots

Dates (from...to...)

11. Area Irrigated	Owned	Hired(rate)	Borrowed
Diesel Pumpset/open boring			
Private Tubewell			
Government Tubewell			
Well			
Government Canal			
River			
Other(specify)			

12. Area Unirrigated

### 13.Cropping pattern

#### Irrigated land

Season                      Rabi    Kharif

Crop

Area  
cultivated

Seeds (HYV/  
Local)kgs/Acre

Fertiliser  
kgs/acre

Pesticide  
kgs/Acre

Diesel kgs/acre

Yield  
qtls/acre

tractor (hours/acre)

thresher (total hours)

diesel pumpset (hours/acre)

other machinery  
(specify)

#### Unirrigated land

Season                      Rabi    Kharif

Crop

Area  
cultivated

Seeds(HYV/  
Local) kgs/acre

Fertiliser  
kgs/acre

Pesticide  
kgs/Acre

Yield  
qtls/acre

tractor (hours/acre)

thresher(hours)

other machinery  
(specify)

14. Machinery	Owned	Hired(rate)	Borrowed
Plough and Bullocks			

Tractor  
(who drives)  
Power Tiller

Rice Thresher

Wheat Thresher

Other

15. How have cropping patterns and technology used changed? What are the reasons for the changes? (Were HYVs ever used in the past)

16. Consumption of output  
Crop  
Quantity Consumed (per annum)

17. Sale of Output  
Crop  
Quantity sold  
Value (Rs)

To whom sold  
consumer  
retailer  
wholesaler  
local trader

Where sold  
around village  
market(details)

field  
home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

18. Family labour

	men	women	children	days per month/year
Task (Cultivation)				

19. Rearing own livestock

Task

Household members

Days per month/year

Amount produced per month/  
year

Amount consumed per  
month/year

Where Sold

Price

Average Earnings per  
month/year

20. Wage labour (Permanent)

Tasks

Men

Women

Children

Caste

Days per year

Wages in cash

Wages in kind

When paid

Contract  
written  
oral  
witnessed

Conditions of  
contract

Length of contract

Advance

Allotted plot  
size  
crops grown  
inputs provided  
-by worker

-by owner

Loans  
purpose  
security  
amount  
interest rate  
mode of repayment

Are contracts with permanent workers renewed?

21. Wage Labour (Casual)

Tasks

Men  
Women  
Children  
Caste  
Days per year  
Wages in cash  
Wages in kind  
When paid

Loans  
purpose  
security  
amount  
interest rate  
mode of repayment



22. Reasons for employing labour (e.g. scarcity of family labour, alternative occupations, caste and status considerations). Has extent of employment changed?

23. Have conditions of employment of labourers changed? What has been the reason for these changes?

24. Was land earlier leased out? (give details)

What was the reason for the change?

25. Have any improvements been made to the land?(give details)

26. Non-Agricultural Occupations/Sources of Income Activity

Days per year

Income/Wage

How long have you/your family engaged in this activity? Is it a traditional caste occupation? Has income from it increased or decreased?

27. Are loans given to anyone other than employees?

purpose

security

amount

interest rate

mode of repayment

Average estimated income/annum

**APPENDIX 4: Tenants' Questionnaire**

1. Name

2. Age

3. Caste

4. Main Occupation/Source of income

5. How long have you/your family engaged in this occupation?

What was your family's previous main source of income?

6. Subsidiary Occupation

How long have you/your family engaged in this occupation?

What were your family's previous subsidiary occupations/income sources?

7. Education

8. Details of household members

Name      Age    Relationship    Education    Occupation

9. Land Leased-in

Owner resident    owner non-resident

Total land owned by landowner

Main occupation of landowner

10. Land leased-in by respondent

Total Area

Number and Sizes of plots

Dates Acquired

11. Leasing Arrangements

Fixed Cash Rent

Fixed Kind Rent

Sharecropping

Tenant

Landowner

Rental Share

Contract

Written

Oral

Witnesses

Conditions of Contract



kgs/acre

Pesticide  
kgs/Acre

Diesel ltrs/acre

Yield  
qtls/acre

tractor(hours/acre)

thresher (total hours)

diesel pumpset (hours/acre)

other machinery  
(specify)

Unirrigated land

Season	Rabi	Kharif
--------	------	--------

Crop

Area  
cultivated

Seeds (HYV/  
Local)kgs/Acre

Fertiliser  
kgs/acre

Pesticide  
kgs/Acre

Diesel ltrs/acre

Yield  
qtls/acre

tractor(hours/acre)

thresher (total hours)

other machinery  
(specify)

17. Machinery etc. Owned Hired(rate) Borrowed  
Plough and Bullocks

Tractor

Power Tiller

Rice Thresher

Wheat Thresher

Other

18. How have cropping patterns and technology used changed? What are the reasons for the changes?

19. Have improvements been carried out by the tenants? (specify). Who takes the decision regarding this?

20. Have improvements been carried out by the landowner? (specify). Who takes the decision regarding this?

21. Consumption of output

Crop

Quantity Consumed (per annum)

22. Sale of Output

Crop/by-product

Quantity sold

Value (Rs)

To whom sold

consumer

retailer

wholesaler

local trader

Where sold

around village

market(details)

field

home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

23. Family labour

men women children days per month/year  
Task(Cultivation)

24. Rearing own livestock

Task

Household members

Days per month/year

Amount produced per month/  
year

Amount consumed per  
month/year

Where Sold

Price

Average Earnings per  
month/year

25. Wage labour(Permanent)

Tasks

Men

Women

Children

Caste

Days per year

Wages in cash

Wages in kind

When paid

Contract

written

oral

witnessed

Conditions of  
contract

Length of contract

Advance

Allotted plot

size

crops grown

inputs provided

-by worker

-by owner

Loans

purpose

security

amount

interest rate

mode of repayment

Are contracts with permanent workers renewed?

26. Wage Labour (Casual)

Tasks

Men

Women

Children

Caste

Days per year

Wages in cash

Wages in kind

When paid

Loans

purpose

security

amount

interest rate

mode of repayment

27. Reasons for employing labour (e.g. scarcity of family labour, alternative occupations, caste and status considerations). Has extent of employment changed?

28. Have conditions of employment of labourers changed? What has been the reason for these changes?

29. Reasons for Leasing-in

30. Non-Agricultural Occupations/Sources of Income

**Activity**

**Days per year**

**Income/Wage**

**How long have you/your family engaged in this activity? Is it a traditional caste occupation? Has income from it increased or decreased?**



**APPENDIX 5: Leasing Out Landowners' Questionnaire**

1.Name

2. Age

3. Caste

4. Main Occupation/Source of income

5. How long have you/your family engaged in this occupation?

What was your family's previous main source of income?

6. Subsidiary Occupation

How long have you/your family engaged in this occupation?

What were your family's previous subsidiary occupations/income sources?

7.Education

8. Details of household members

Name	Age	Relationship	Education	Occupation
------	-----	--------------	-----------	------------

9.Land Leased-out

Owner resident owner non-resident

Total land owned by landowner

Total Area Leased Out

Number and Sizes of plots

Dates Acquired

Number of tenants, caste of tenants, do tenants own land?

10. Reasons for leasing out

11. Was land previously self-cultivated?

12. Leasing Arrangements

Fixed Cash Rent

Fixed Kind Rent

Sharecropping

Tenant

Landowner

Rental Share

Contract

Written

Oral

Witnesses

## Conditions of Contract

### Length of Contract

How often are tenants changed? For what reason are they changed?  
Are contracts renewed?

Does the tenant do any agricultural labour or other paid or unpaid work for the landowner? (give details)

### Are loans given to tenants?

purpose  
security  
amount  
interest rate  
mode of repayment

13. Input Costs      borne by tenant      borne by landowner  
plough and bullocks  
seeds  
fertiliser  
pesticide  
machinery (specify)  
irrigation  
other(specify)

14. Decisions taken by      tenant      owner      jointly  
crops grown  
amount/type of seed,  
fertiliser etc.

Is harvesting or any other process supervised? If yes by who?  
(For sharecroppers)Where does sharing of crops take place?

15. Area Irrigated      Owned      Hired(rate)      Borrowed  
Diesel Pumpset/open boring  
Private Tubewell  
Government Tubewell  
Well  
Government Canal  
River  
Other(specify)

16. Area Unirrigated

17. Cropping pattern

Irrigated land  
Season      Rabi      Kharif

Crop

Area  
cultivated

Seeds (HYV/  
Local)kgs/Acre

Fertiliser  
kgs/acre

Pesticide  
kgs/Acre

Diesel litres/acre

Yield  
qtls/acre

tractor (hours/acre)

thresher (total hours)

diesel pumpset (hours/acre)

other machinery  
(specify)

Unirrigated land

Season

Rabi

Kharif

Crop

Area  
cultivated

Seeds(HYV/  
Local) kgs/acre

Fertiliser  
kgs/acre

Pesticide  
kgs/Acre

Yield  
qtls/acre

tractor (hours/acre)

thresher (total hours)

other machinery  
(specify)

18. Machinery etc.	Owned	Hired(rate)	Borrowed
Plough and Bullocks			

Tractor

Power Tiller

Rice Thresher

Wheat Thresher

Other

19. How have cropping patterns and technology used changed? What are the reasons for the changes?

20. Have improvements been carried out by the tenants? (specify). Who takes the decision regarding this?

21. Have improvements been carried out by the landowner? (specify). Who takes the decision regarding this?

22. Consumption of rental share  
Crop  
Quantity Consumed (per annum)

23. Sale of rental share  
Crop  
Quantity sold  
Value (Rs)

To whom sold  
consumer  
retailer  
wholesaler  
local trader

Where sold  
around village  
market(details)  
field

home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

#### 24. Use of Rental Income

consumption (give details)

investment(give details)

#### 25. Non-Agricultural Occupations/Sources of Income

Activity

Days per year

Income/Wage

How long have you/your family engaged in this activity? Is it a traditional caste occupation? Has income from it increased or decreased?

#### 26. Are loans given to anyone other than tenants?

purpose

security

amount

interest rate

mode of repayment

Average estimated income/annum

#### 27.Rearing own livestock

Task

Household members

Days per month/year

Amount produced per month/year

Amount consumed per month/year

Where Sold

Price

Average Earnings per month/year

## **APPENDIX 6: Assets and Expenditure Questionnaire**

	<b>Number</b>	<b>Value(Rs.)</b>	<b>When acquired</b>		
<b>1.Total Owned Land(acre)</b>					
<b>2.Homestead Land (acre)</b>					
<b>3.House(s) (kacha)</b>					
House(s) (paka)					
Cattlesheds					
Grain Stores					
Other Structures					
<b>5.Cattle</b>					
Bullocks					
Cows					
Buffaloes					
<b>6.Goats</b>					
Pigs					
Other Livestock					
<b>7.Vehicles</b>					
Personal (specify)					
Commercial "					
<b>8.Non-Agricultural machinery/equipment (specify)</b>					
<b>9.Farm implements</b>	<b>Plough</b>	<b>Bullock cart</b>	<b>Diesel Pumpset</b>	<b>Tractor</b>	<b>Power Tiller</b>
Date bought					
Price					
Reason					
<b>Current Value</b>					
Date Sold					
Price					
Reason					

Rice Thresher Wheat Thresher Private Tubewell Other

Date bought

Price

Reason

Current Value

Date Sold

Price

Reason

10. Household consumer durables      Date bought      Price      Current Value

TV

Radio

Fridge

Sofa Set

Others(specify)

11. Gold/silver  
jewellery

12. Weapons      Date bought      Price      Reason      Current Value

13. Financial assets

a. Savings(Rs)

Source

Form

b. Outstanding dues  
(give details)

c. Outstanding loans  
(give details)

14. Major household expenditures (Rs/Annum 1995/6)

Cooking Oil

Rice, Wheat

Other foodgrains

Vegetables

Other food

Kerosene

House maintenance

Education

Medical

Other (specify)

15. Ceremonial expenses (Rs)

Marriage ceremony

Dowry (specify)

Other ceremony(specify)

16.Sources of credit

institutional loans

	Source	Date	Purpose	Amount	Interest Rate	Outstanding
--	--------	------	---------	--------	---------------	-------------

consumption

investment

informal loans

	Source	Date	Purpose	Amount	Interest Rate	Outstanding
--	--------	------	---------	--------	---------------	-------------

consumption

investment



## APPENDIX 7: Contractors' Questionnaire

1.Name

2.Age

3.Village/Town of origin

4.Village/Town of residence

5.Caste

6.Educational background

7.Main occupation / source of income

1975

1985

1990

1995

8.For how long have you/ your family engaged in this occupation?

9.Subsidiary occupations / sources of income

1975

1985

1990

1995

10.For how long have you/ your family engaged in these occupations?

11.Occupations of other family members

12. Children's education

13.Asset position

1975  
No./value(Rs)

1985  
No./value(Rs)

1990 1995  
No./value(Rs)

No./value(Rs)

House(s)

Commercial buildings

Non-Agricultural  
machinery/equipment  
(specify)

	1975 No./value(Rs)	1985 No./value(Rs)	1990 No./value(Rs)	1995 No./value(Rs)
--	-----------------------	-----------------------	-----------------------	-----------------------

Vehicles  
Personal  
Commercial

Homestead land (acre)

Owned land (acre)

Cattle owned

Farm implements Plough Bullock cart Tractor Harvester

Date bought  
Price  
Reason

Current Value

Date Sold  
Price  
Reason

Thresher Diesel Pumpset Pvte Tubewell Other

Date bought  
Price  
Reason

Current Value

Date Sold  
Price  
Reason

Farm implements Plough Bullock cart Tractor Harvester

Hired from, to  
Rate  
Reason

Thresher Diesel Pumpset Pvte Tubewell Other

Hired from, to

Rate

Reason

Household Consumer durables Date bought Price Current Value

TV

VCR

Fridge

Sofa Set

Others(specify)

Gold/silver jewellery

Weapons Date bought Price Current Value

Financial assets

Savings(Rs)

Source

Form

14. Major household expenditures (Rs/Annum)

Food, Clothing etc.

Education

Other (specify)

Ceremonial expenses (Rs)

Marriage ceremony

Dowry (specify)

Other ceremony(specify)

15. Earnings and Investment

Agriculture

1975

1985

1990

1995

earnings per annum

investment per annum

Other Activities

(specify)

1975

1985

1990

1995

earnings per year

investment per year

16. Sources of credit  
institutional loans

	Date	Purpose	Amount	Interest Rate	Outstanding
consumption					

investment

traditional loans

	Date	Purpose	Amount	Interest Rate	Outstanding
consumption					

investment

Landowners

17. Village(s) where land owned   owner resident   owner non-resident

18. Total land owned

    Cultivated

    Uncultivated

19. Land leased out (Fixed Rent)

Total Area

Dates (from...to...)

No. of tenants

Caste(s) of tenants

Sizes of plots

Area Irrigated

    Tubewell

    Well

    Government Canal

    River

    Other(specify)

Area Unirrigated

20. Cropping pattern

Irrigated land

Season    Crop    HYV/Local    Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvester,thresher,other(specify)

Unirrigated land

Season    Crop    HYV/Local    Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvester,thresher,other(specify)

21. Leasing arrangements

In kind  
area  
amount

In cash  
area  
amount

Contract  
written  
oral  
witnesses

22. Input costs            borne by tenant    borne by landlord  
bullocks(own/hired)  
fertiliser(type)  
pesticide

machinery(specify)  
irrigation

### 23. Decisions

who takes the decision regarding crops to be grown

owner  
tenant  
jointly

who takes the decision on what/how much fertiliser, seed etc. is used?

owner  
tenant  
jointly

are certain investments in the land carried out by tenants?(specify)

if yes, who takes the decision?

owner  
tenant  
jointly

are certain investments in the land carried out on a share basis by owner and tenants?(specify)

if yes, who takes the decision?

owner  
tenant  
jointly

are certain investments in the land carried out by owner(specify)

### 24. Is harvesting supervised?

If yes, by who?

Does supervision occur at other times?

### 25. Do the tenants employ labour?

	Number	Days/year	Wages	Caste
Men				
Women				

### 26. Length of lease

Are leases extended?

### 27. Are loans given to tenants?

purpose security amount interest rate mode of repayment

28.Sale of Output by tenant

Crop

Quantity sold

Value (Rs)

Earnings/year

To whom sold

retailer

wholesaler

trader

owner

Where sold

market

field

home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

29. Do tenants or members of their families do any paid or unpaid work for the landowner(specify)

30. Number of years landowner has engaged in this type of contract

31.Land leased out (Sharecropping)

Total Area

Dates (from...to...)

No. of tenants

Caste(s) of tenants

Sizes of plots

Area Irrigated

Tubewell

Well

Government Canal

River

Other(specify)

Area Unirrigated

32.Cropping pattern

Irrigated land

Season    Crop    HYV/Local    Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvester,thresher,other(specify)

Unirrigated land

Season    Crop    HYV/Local    Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvestor,thresher,other(specify)

33.Leasing arrangements

Rental payments cash

kind

tenant

landowner

Percentage rental share

Contract

written

oral

witnesses

Input costs            borne by tenant    borne by landlord

bullocks(own/hired)

fertiliser(type)

pesticide

machinery(specify)

irrigation



34. Decisions

who takes the decision regarding crops to be grown

owner

tenant

jointly

who takes the decision on what/how much fertiliser, seed etc. is used?

owner

tenant

jointly

are certain investments in the land carried out by tenants?(specify)

if yes, who takes the decision?

owner

tenant

jointly

are certain investments in the land carried out on a share basis by owner and tenants?(specify)

if yes, who takes the decision?

owner

tenant

jointly

are certain investments in the land carried out by owner(specify)

35. Is harvesting supervised?

If yes, by who?

Does supervision occur at other times?

36. Where does the sharing of crops take place?

37. Do the tenants employ labour?

	Number	Days/year	Wages	Caste
--	--------	-----------	-------	-------

Men

Women

38. Length of lease

Are leases extended?

39. Are loans given to tenants?

purpose security amount interest rate mode of repayment

40. Sale of Output by tenant by landowner

Crop

Quantity sold

Value (Rs)  
Earnings/year

To whom sold  
retailer  
wholesaler  
trader  
owner

Where sold  
market  
field  
home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

41. Do tenants or members of their families do any paid or unpaid work for the landowner(specify)

42. Number of years landowner has engaged in this type of contract

43.Land cultivated by owner

Total Area

Dates (from...to...)

Sizes of plots

Area Irrigated  
Tubewell  
Well  
Government Canal  
River  
Other(specify)

Area Unirrigated

44.Cropping pattern

Irrigated land  
Season Crop HYV/Local Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvester,thresher,other(specify)

Unirrigated land

Season Crop HYV/Local Area cultivated

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvestor,thresher,other(specify)

45.Family labour

men women children days per year

Task

46.Wage labour(Permanent)

Tasks Men Women Children Caste Days per year Wages

47. Wages

in cash

in kind

when paid

48. Contract

written

oral

witnessed

49. Conditions of contract

50.Is worker given a plot of land?

size

crops grown

inputs provided by worker

owner

51.length of contract

Is contract renewed?

52. Are loans given to permanent workers?  
purpose security amount interest rate mode of repayment

53. Wage Labour (Casual)  
Tasks Men Women Children Caste Days per year Wages

54. Wages  
in cash  
in kind  
when paid

55. Contract  
written  
oral  
witnessed

56. Conditions of contract

57. length of contract

Is contract renewed?

58. Are loans given to casual workers?  
purpose security amount interest rate mode of repayment

59. Sale of Output  
Crop/by-product  
Quantity sold  
Value (Rs)

To whom sold  
retailer  
wholesaler  
trader

Where sold  
market  
field  
home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

60. Land cultivated by owner (leased-in)

Total Area

Dates (from...)

Sizes of plots

Total land owned by lessor(s)

Area Irrigated

Tubewell

Well

Government Canal

River

Other

Area Unirrigated

61. Cropping pattern

Irrigated land

Season	Crop	HYV/Local	Area cultivated
--------	------	-----------	-----------------

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvestor,thresher,other

Unirrigated land

Season	Crop	HYV/Local	Area cultivated
--------	------	-----------	-----------------

Rabi

Kharif

Fertiliser(type)per acre

Machinery:tractor,harvestor,thresher,other

62. Leasing arrangements

Fixed rent in kind

area  
amount

Fixed rent in cash  
area  
amount

Sharecropping  
area  
percentage rental share

Contract  
verbal  
oral  
witnesses

63. Family labour  
men women children days per year  
Tasks

64. Wage labour (Permanent)

Tasks Men Women Children Caste Days per year Wages

65. Wages  
in cash  
in kind  
when paid

66. Contract  
written  
oral  
witnessed

67. Conditions of contract

68. Is worker given a plot of land?  
size  
crops grown  
inputs provided by worker owner

69. length of contract

Is contract renewed?

70. Are loans given to permanent workers?  
purpose security amount interest rate mode of repayment

71. Wage Labour (Casual)

Tasks    Men    Women    Children    Caste    Days per year    Wages

72. Wages

in cash

in kind

when paid

73. Contract

written

oral

witnessed

74. Conditions of contract

75. length of contract

Is contract renewed?

76. Are loans given to casual workers?

purpose    security    amount    interest rate    mode of repayment

77. Sale of Output

Crop/by-product

Quantity sold

Value (Rs)

To whom sold

retailer

wholesaler

trader

Where sold

market

field

home

When sold (months after harvest)

Storage facilities if any

Contract with buyer if any

Changes over time    1970                      1980                      1990    1995    Reason for change

Land leased in

Land leased out

Extent of sharecropping

Extent of fixed rents

Extent of self-cultivation

Use of permanent labour

Use of casual labour

Wages for permanent labour

men

women

Wages for casual labour

men

women

Extent of irrigation

Cropping pattern

Use of machinery(specify)per acre

Value (Rs)

Amount

Fertiliser type and use per acre

Rs

quintals

Labour days/acre

Output per acre

wheat

rice

others(specify)

Price

wheat

rice

others(specify)

Public Investment

Availability of Credit

Further Comments



## REFERENCES

- ADRI (Asian Development Research Institute), 1997, *Statistical Profile of Bihar*, mimeo.
- Agarwal, Bina, 1983, *Mechanization in India Agriculture: An Analytical Study Based on the Punjab*, New Delhi: Allied Publishers
- Agarwal, Bina, 1994 *A Field of One's Own: Gender and Land Rights in South Asia*, Cambridge, Cambridge University Press
- Agarwal, S.K., 1971, *Economics of Land Consolidation in India*, New Delhi: S. Chand and Co.
- Athreya, Venkatesh B., Goran Djurfeldt and Staffan Lindberg, 1990, *Barriers Broken: Production Relations and Agrarian Change in Tamil Nadu*, New Delhi, Sage Publications
- Bagchi, Amiya Kumar, 1982, *The Political Economy of Underdevelopment*, Cambridge, Cambridge University Press
- Bagchi, Amiya Kumar (ed.), 1988, *Economy, Society and Polity*, Calcutta, Oxford University Press
- Balagopal, K., 1987a, 'An Ideology for the Provincial Propertied Class', *Economic and Political Weekly*, Vol. 22, Nos. 36 and 37, September 5-12
- Balagopal, K., 1987b, 'Discussion', *Economic and Political Weekly*, Vol. 22, No. 50, December 12
- Balagopal, K., 1988, 'Discussion', *Economic and Political Weekly*, Vol. 23, No. 37, September 10
- Banerjee, D., and A. Ghosh, 1988, 'Indian Planning and Regional Disparity', in Bagchi (ed.) [1988]
- Banerjee, Sumanta, 1984, *India's Simmering Revolution: The Naxalite Uprising*, London, Zed Press
- Banerjee, Nirmala, 1997, 'How Real is the Bogey of Feminization?', *Indian Journal of Labour Economics*, Vol. 40, No. 3
- Bardhan, P. and A. Rudra, 1978 'Interlinkage of Land, Labour and Credit Relations - an analysis of village survey data in East India', *Economic and Political Weekly*, Annual Number, Vol. 13, Nos. 6 and 7, February
- Bardhan, Kalpana, 1977a, 'Rural Employment, Wages and Labour Markets in India. A Survey of Research - II. Agricultural Growth and Technological Change: Impact on Wages and Employment' *Economic and Political Weekly*, Vol. 12, No. 27, July 2

- Bardhan, Kalpana, 1977b, 'Rural Employment, Wages and Labour Markets in India. A Survey of Research - III. Supply/Demand Behaviour and Wage Determination in Rural Labour Market' *Economic and Political Weekly*, Vol. 12, No. 28, July 9
- Bardhan, Kalpana, 1986, 'Stratification of Women's Work in Rural India: Determinants, Effects and Strategies' in Basu and Sissons (eds.) [1986]
- Basu, Dilip K., and Richard Sissons (eds.), 1986, *Social and Economic Development in India: A Reassessment*, New Delhi, Sage Publications
- Bennett, Lynn, 1992, *Women, Poverty and Productivity in India*, Economic Development Institute Seminar Paper No. 43, Washington DC, The World Bank
- Bhaduri, Amit, 1973 'Agricultural Backwardness Under Semi-Feudalism' *Economic Journal* Vol. 83, No. 329, March
- Bhaduri, Amit, 1983, *The Economic Structure of Backward Agriculture*, London, Academic Press
- Bhaduri, Amit, 1986 'Forced Commerce and Agrarian Growth', *World Development*, Vol. 14, No. 2
- Bhaduri, Amit, Hussain Zillur Rahman and Ann-Lisbet Arn, 1986, 'Persistence and Polarisation: a study in the dynamics of agrarian contradiction', *Journal of Peasant Studies*, Vol. 13, No. 3
- Bhaduri, Amit, and Deepak Nayyar, 1996, *The Intelligent Person's Guide to Liberalization*, New Delhi, Penguin Books
- Bhalla, Sheila, 1976, 'New Relations of Production in Haryana Agriculture', *Economic and Political Weekly*, Vol. 11, No. 13, March 27
- Bhalla, Sheila 1997a, 'Trends in Poverty, Wages and Employment in India', *Indian Journal of Labour Economics*, Vol. 40, No. 2
- Bhalla, Sheila, 1997b, 'Liberalisation, Workforce Restructuring, Wages and Want: the Haryana Story in an All India Context', paper presented at workshop on *Rural Labour Relations in India*, London School of Economics, 19 and 20 June
- Bhalla, G.S., and Gurmail Singh, 1998, *Recent Developments in Indian Agriculture: A District Level Study*, Centre for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University (mimeo.)
- Bharadwaj, Krishna, 1974a, 'Farm Size and Productivity', *Economic and Political Weekly*, Vol. 9, No. 13, March 30
- Bharadwaj, Krishna, 1974b, *Production Conditions in Indian Agriculture: a study based on farm management surveys*, London, Cambridge University Press

- Bharadwaj, Krishna, 1979, 'Towards a Macro-Economic Framework for a Developing Economy: the Indian Case', *The Manchester School*, Vol. 47, No. 3, September
- Bharadwaj, Krishna, 1982, Regional Differentiation in India, *Economic and Political Weekly*, Vol. 17, Nos. 14-16, Annual Number, April
- Bharadwaj, Krishna, 1985, 'A View on Commercialisation in Indian Agriculture and the Development of Capitalism', *Journal of Peasant Studies*, Vol. 12, No. 4
- Bharti, Indu, 1990, 'Bihar's Most Wretched', *Economic and Political Weekly*, Vol. 25, No. 38, September 22
- Bharti, Indu, 1991, *A Study on Rural Unrest in Bihar*, Patna, A.N. Sinha Institute of Social Studies (mimeo.)
- Bhatia, Bela, 1997a 'Reasserting Dominance in the Face of Resistance: Caste Senas and the Naxalite Movement in Central Bihar', paper presented at workshop on *Rural Labour Relations in India*, London School of Economics, 19 and 20 June
- Bhatia, Bela, 1997b, 'Massacre on the Banks of the Sone', *Economic and Political Weekly*, Vol. 32, No. 51 December 20-26
- Bhattacharya, B., and A. Mitra, 1989, 'Industry-Agriculture Growth Rates: A Widening Disparity - An Explanation', *Economic and Political Weekly*, Vol. 24, No. 34, August 26
- Bienefeld, M. and M. Godfrey (eds.), 1982, *The Struggle for Development: National Strategies in an International Context*, London, John Wiley and Sons
- Billings M.H., and A. Singh, 1970, 'Mechanisation and Rural Employment - With Some Implications for Rural Income Distribution' *Economic and Political Weekly*, Vol. 5, No. 26, June 27
- Binswanger, Hans P., 1984, *Agricultural Mechanization: a Comparative Historical Perspective*, World Bank Staff Working Papers No. 673, Washington DC, The World Bank
- Binswanger, Hans P. and Graeme Donovan, with the assistance of Raymund Fabre and Prabhu Pingali, 1987, *Agricultural Mechanization: Issues and Options*, Washington DC, The World Bank
- Bose, S.R. and P.P.Ghosh, 1976, *Agro Economic Survey of Bihar: A Pilot Study*, Patna, B.K. Enterprise
- Boyce, James K., 1987, *Agrarian Impasse in Bengal - Institutional Constraints to Technological Change*, Oxford, Oxford University Press
- Brass, Tom, 1990, 'Class Struggle and the Deproletarianisation of Agricultural Labour in Haryana (India)', *Journal of Peasant Studies*, Vol. 18, No. 1

- Brass, Tom, 1995, 'Unfree Labour and Agrarian Change - A Different View' *Economic and Political Weekly*, Vol. 30, No. 13, April 1
- Braverman, Avishay, and Joseph E. Stiglitz, 1982, 'Sharecropping and the Interlinking of Agrarian Markets', *American Economic Review*, Vol. 72, No. 4, September
- Breman, Jan, 1974, *Patronage and Exploitation*, Berkeley, University of California Press
- Breman, Jan, 1978-9, 'Seasonal Migration and Co-operative Capitalism: the crushing of cane and of labour by the sugar factories of Bardoli, south Gujarat', *Journal of Peasant Studies*, Vol. 6, No.1 and Vol. 6, No.2
- Breman, Jan, 1985, *Of Peasants, Migrants and Paupers - Rural Labour Circulation and Capitalist Production in West India*, Delhi, Oxford University Press
- Breman, Jan, 1993, *Beyond Patronage and Exploitation - changing agrarian relations in South Gujarat*, Delhi, Oxford University Press
- Byres, T.J., 1972, 'The Dialectic of India's Green Revolution', *South Asian Review*, Vol. 5, No. 2
- Byres, T.J., 1981, 'The New Technology Class Formation and Class Action in the Indian Countryside', *Journal of Peasant Studies*, Vol. 8, No. 4
- Byres, T.J., 1982, 'India: Capitalist Industrialization or Structural Stasis' in Bienefeld and Godfrey (eds.) [1982]
- Byres, T.J., 1986, 'The Agrarian Question and Differentiation of the Peasantry', Foreword to Atiur Rahman, *Peasants and Classes: A Study in Differentiation in Bangladesh*, London, Zed Press
- Byres, Terence J., 1988, 'Charan Singh (1902-87): An Assessment', *Journal of Peasant Studies*, Vol. 15, No.2
- Byres, Terence J., 1996, *Capitalism from Above and Capitalism from Below : An Essay in Comparative Political Economy*, Basingstoke, Macmillan
- Byres, T.J., Karin Kapadia and Jens Lerche, 1999, *Rural Labour Relations in India*, London, Frank Cass Publishers
- Centre for Monitoring Indian Economy, 1993, *Profiles of Districts*, November, Bombay: Economic Intelligence Service
- Centre for Monitoring Indian Economy, 1995, *India's Agricultural Sector - A Compendium of Statistics*, September, Bombay: Economic Intelligence Service
- Chadha, G.K. (ed.), 1994, *Policy Perspectives in Indian Economic Development*, New Delhi, Har Anand Publications

- Chadha, G.K., 1997, 'Access of Rural Households to Non-Farm Employment: Trends, Constraints and Possibilities', in Chadha and Sharma, eds. [1997]
- Chadha, G.K. and Alakh N. Sharma (eds.), 1997, *Growth, Employment and Poverty: Change and Continuity in Rural India*, New Delhi, Vikas Publishing House
- Chakravarti, Uma, 1995 'Gender, Caste and Labour - Ideological and Material Structure of Widowhood' *Economic and Political Weekly*, Vol. 30, No. 36, September 9
- Chandra, Nirmal K., 1974 'Farm efficiency under semi-feudalism - a critique of marginalist theories and some Marxist formulations' *Economic and Political Weekly*, Vol. 9, Nos. 32-34, Special Number, August
- Chaubey, Saroj, 1996, 'Saman Kam, Saman Mazdoori', *Samkalin Lokyudh*, 15 September
- Chaubey, Saroj, 1998 'Women Resist Feudal-Fascist Terror', *Women's Voice*, No.1
- Chaudhry, Praveen K., 1988, 'Agrarian Unrest in Bihar - A Case Study of Patna District 1960-1984', *Economic and Political Weekly*, Vol. 23, Nos. 1 and 2, January 2-9
- Chelliah, Raja J. and R. Sudarshan, 1998, *Income, Poverty and Beyond: Human Development in India*, New Delhi, Social Science Press
- Cheung, S.N.S. 1969, *The Theory of Share Tenancy, with special application to Asian agriculture and the first phase of Taiwan land reform*, University of Chicago Press, Chicago
- Chowdhry, Prem, 1993, 'High Participation, Low Evaluation - Women and Work in Rural Haryana', *Economic and Political Weekly*, Vol. 28, No. 52, December 25
- Cox, Terry, 1984, 'Class Analysis of the Russian Peasantry: the Research of Kritsman and his School', *Journal of Peasant Studies*, Vol. 11, No. 2
- CPI(ML), 1986, *Report from the Flaming Fields of Bihar - A CPI(ML) Document*, Calcutta, Prabodh Bhattacharya
- CPI(ML), 1997, 'Policy Resolutions of the Communist Party of India (Marxist-Leninist)', adopted at the *Sixth Party Congress*, Varanasi, 20-25 October
- da Corta, Lucia and Davuluri Venkateshwarlu, 1997, 'Labour Relations, Domestic Relations and The Feminisation of Agricultural Labour in Andhra Pradesh', paper presented at workshop on *Rural Labour Relations in India*, London School of Economics, 19 and 20 June
- Das, Arvind N., 1979 *Does Bihar Show the Way - Apathy, Agitation and Alternatives in an Unchanging State*, Calcutta, Research India Publications
- Das, Arvind N. (ed.), 1982, *Agrarian Movements in India: studies on 20th century Bihar*, London, Frank Cass and Co.

Das, Arvind N., 1983, *Agrarian Unrest and Socio-Economic Change in Bihar, 1900-1980*, Delhi, Manohar

Das, Arvind N., 1992, *The Republic of Bihar*, New Delhi, Penguin

De Haan, Arjaan, 1997, 'Migration and Poverty: The Case of Bihar', paper presented at *Bihar in the World and the World in Bihar*, a conference organised by the Asian Development Research Institute and the European Science Foundation, 16-19 December, Patna

Dev Nathan, 1990 'Agricultural Labour and Poor Peasant Movement in Bihar: Nature of Resistance and Problems of Strategy', mimeo.

Dhawan, B.D., 1977, 'Tubewell Irrigation in the Gangetic plains', *Economic and Political Weekly*, Vol. 12, No. 39, September 24

DN, 1988, 'Problem of Unity in the Agrarian Struggle - Case of Bihar', *Economic and Political Weekly*, Vol. 23 No. 19, May 7

Dyer, Graham, 1991, 'Farm Size - Farm Productivity Re-examined: Evidence from Rural Egypt', *Journal of Peasant Studies*, Vol. 19, No. 1

Ellis, Frank, 1993, *Peasant Economics, Farm Households and Agrarian Development*, (second edition), Cambridge, Cambridge University Press

Engels, Frederick, 1972, *The Origin of the Family, Private Property and the State*, London, Lawrence and Wishart

Feldman, Shelley and Florence. E. McCarthy, 1987, 'Persistence of the Smallholder, Withering Away of the Small Farmer: Comments on Bhaduri, Rahman and Arn', *Journal of Peasant Studies*, Vol. 14, No. 4

Frankel, Francine R., 1971, *India's Green Revolution: Economic Gains and Political Costs*, Princeton, Princeton University Press

Ghosh, P.P., 1992, 'A Note on Data Source', in Kantha, (ed.)(1992]

Gill, Anita, 1996, 'Interlinked Agrarian Credit Markets in Punjab - Exploitative, Yet Growing', *Economic and Political Weekly*, Vol. 31, No. 10, March 9

Gill, Sucha Singh, 1988, 'Contradictions of Punjab Model of Growth and Search for an Alternative', *Economic and Political Weekly*, Vol. 23 No. 42, October 15

Gill, Sucha Singh, 1995, 'Agrarian Capitalism and Political Processes in Punjab', in Sathyamurthy (ed.)(1995]

Gill, S. S., and K. C. Singhal, 1984, 'Farmers' Agitation - Response to Development Crisis of Agriculture', *Economic and Political Weekly*, Vol. 19, No. 40, October 6

Government of India, 1976a, *Report of the National Commission on Agriculture*, Part 5, 'Resource Development', New Delhi, Government of India, Ministry of Agriculture and Irrigation

Government of India, 1976b, *Report of the National Commission on Agriculture*, Part 15, 'Agrarian Reforms', New Delhi, Government of India, Ministry of Agriculture and Irrigation

Government of India, 1991, *Cost of Cultivation of Principal Crops in India*, New Delhi, Government of India, Ministry of Agriculture (Directorate of Economics and Statistics, Department of Agriculture and Co-operation)

Government of India, 1992, *Agricultural Prices in India*, New Delhi, Government of India, Ministry of Agriculture, (Directorate of Economics and Statistics, Department of Agriculture and Co-operation)

Government of India, 1995, *Report on Performance Evaluation Study of Minor Irrigation Schemes in Bihar*, New Delhi, Government of India, Ministry of Water Resources (Minor Irrigation Division),

Government of India, 1996a, *Cost of Cultivation of Principal Crops in India*, New Delhi, Government of India, Ministry of Agriculture (Directorate of Economics and Statistics, Department of Agriculture and Co-operation)

Government of India, 1996b, *Some Aspects of Operational Holdings, N.S.S. 48th Round, 1991-92*, New Delhi, Government of India, Ministry of Planning and Programme Implementation (National Sample Survey Organisation, Department of Statistics)

Guha, Ranajit, 1989, 'Dominance Without Hegemony and its Historiography' in Ranajit Guha (ed.) [1989], *Subaltern Studies VI - Writings on South Asian History and Society*, Delhi, Oxford University Press

Gupta, Shaibal, 1997, 'Local Entrepreneurship in Bihar - Social Context and Economic Constraint', paper presented at *Bihar in the World and the World in Bihar*, a conference organised by the Asian Development Research Institute and the European Science Foundation, 16-19 December, Patna

Hanumantha Rao, C.H., 1971, 'Uncertainty, Entrepreneurship and Sharecropping in India', *Journal of Political Economy*, Vol. 79, No. 3, May/June

Hanumantha Rao, C.H., 1975, *Technological Change and Distribution of Gains in Indian Agriculture*, Delhi, Macmillan of India

Haque, T., 1996, *Sustainability of Small Holder Agriculture in India*, New Delhi, Concept Publishing Co.

Hauser, Walter, 1994, *Sahajanand on Agricultural Labour and the Rural Poor*, New Delhi, Manohar

Indian People's Front, 1992, 'Land Captured by IPF-BPKS in Phase One of Land Grab Movement', *People's Front*, September-October

Ishikawa, Shigeru, 1967, *Economic Development in Asian Perspective*, Tokyo, Kinokuniya Bookstore

Jaggar, Alison M., 1988, *Feminist Politics and Human Nature*, New Jersey, Rowman and Littlefield Publishers, Inc.

Jain, S., Misra, N., Srivastava, K. 1987, 'Deorala Episode - Women's Protest in Rajasthan', *Economic and Political Weekly*, Vol. 22, No. 45, November 7

Jannuzi, F. Tomasson, 1974, *Agrarian Crisis in India - the case of Bihar*, Austin, University of Texas Press

Jannuzi, F. Tomasson, 1996, *India's Persistent Dilemma - the Political Economy of Agrarian Reform*, New Delhi, Orient Longman

Jha, Praveen K., 1997, *Agricultural Labour in India*, New Delhi, Vikas Publishing House

Jodha, N.S., 1981, 'Agricultural Tenancy : Fresh Evidence From Dryland Areas in India', *Economic and Political Weekly*, Vol. 16, No. 51, December 19

Jodhka, Surinder S., 1994, 'Agrarian Changes and Attached Labour - Emerging Patterns in Haryana Agriculture', *Economic and Political Weekly*, Vol. 29, No. 39, September 24

Jodhka, Surinder S., 1996, 'Interpreting Attached Labour in Contemporary Haryana', *Economic and Political Weekly*, Vol. 41, No. 21, May 25

Jose, A.V., 1988, 'Agricultural Wages in India', *Economic and Political Weekly*, Vol. 32, No. 26, June 25

Kabeer, Naila, 1995, *Reversed Realities: Gender Hierarchies in Development Thought*, New Delhi, Kali for Women

Kantha, Vinay, K. (ed.), 1992, *Bihar Economy - A Reconnaissance*, ADRI Popular Series - I, Patna, Printaid Publishers

Kapadia, Karin, 1992, 'Every Blade of Green: Landless Women Labourers, Production and Reproduction in South India' in Sharma and Singh (eds.)(1992]

Kapadia, Karin, 1996, *Siva and her Sisters - Gender, Caste and Class in Rural South India*, Delhi, Oxford University Press

Kapadia, Karin and Jens Lerche, 1999, Introduction to Byres, Kapadia and Lerche (eds.)(1999]

Kelkar, Govind and Chetna Gala, 1990 'The Bodhgaya Land Struggle' in Sen (ed.)(1990]



Khan, M. Mahmud, 1987, 'A Note on Persistence and Polarisation' *Journal of Peasant Studies*, Vol. 14, No. 4

Kosambi, D.D., 1970, *The Culture and Civilisation of Ancient India in Historical Outline* (Eighth Edition), New Delhi, Vikas Publishing House

Krishnaji, N., 1985, 'The Importance of Foodgrain Prices' in A. Mitra (ed.) [1985]

Kumar, Jainendra, 1986, *Land Use Analysis: A Case Study of Nalanda District*, New Delhi, Inter-India Publications

Land Reforms Unit, 1990, *Land Reforms in India: an empirical study, 1989-90*, Report of the First Year, Vol. 1, Mussoorie, Lal Bahadur Shastri National Academy of Administration

Lenin, V.I., 1956, *The Development of Capitalism in Russia*, Moscow, Foreign Languages Publishing House

Lenin, V.I., 1965, 'Preliminary Draft Theses on the Agrarian Question for the Second Congress of the Communist International' in *Alliance of the Working Class and the Peasantry*, Moscow, Progress Publishers

Lenin, V.I., 1968, *Selected Works*, Moscow, Progress Publishers

Mamdani, Mahmood, 1972, *The Myth of Population Control*, New York, Monthly Review Press

Mao Tse-Tung, 1975, 'How to Analyse the Classes in the Rural Areas' in *Selected Works of Mao Tse-Tung*, Vol. 1, Beijing, Foreign Languages Press

Marshall, A., 1920, *Principles of Economics* (8th ed.) Macmillan, London

Marx, Karl, 1976, *Capital - a Critique of Political Economy*, Vol. 1, Harmondsworth, Penguin Books in association with New Left Review

Mathur, A.K., 1994, 'Regional Economic Development and Policy' in G.K.Chadha (ed.) [1994]

Matthew, Mammen and Hemant, 1988, 'Land-Revenue Survey Records Bogus', *The Hindustan Times*, Patna edition, September 30

Mies, Maria, 1986, *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*, London, Zed Books Ltd.

Mishra, Vinod, 1999, *Selected Works*, Delhi, Communist Party of India (Marxist-Leninist)

Mitra, Ashok, 1977, *Terms of Trade and Class Relations*, Calcutta, Rupa

Mitra, Ashok (ed.), 1985, *The Truth Unites - Essays in Tribute to Samar Sen*, Calcutta, Subarnarekha

- Mohan Rao, J., 1999, 'Agrarian Power and Unfree Labour' in Byres, Kapadia and Lerche (eds.) [1999]
- Mozoomdar, Ajit, 1990, *Bihar - Problems of Development*, New Delhi, Centre for Policy Research
- Mukherjee, Kalyan, and Rajendra Singh Yadav, 1980, *Bhojpur: Naxalism in the Plains of Bihar*, New Delhi, Radha Krishna
- Narain, Dharm, 1988, *Studies on Indian Agriculture*, Delhi, Oxford University Press
- Newbery, D.M.G., 1977, 'Risk-Sharing, Sharecropping and Uncertain Labour Markets', *Review of Economic Studies* Vol. 44, No. 3, October
- Omvedt, Gail, 1981, 'Capitalist Agriculture and Rural Classes in Agriculture', *Economic and Political Weekly*, Vol. 16, No. 51, December 19
- Omvedt, Gail and Chetna Gala, 1987, 'Discussion', *Economic and Political Weekly*, Vol. 22, No. 45, November 7
- Omvedt, Gail and Chetna Gala, 1988, 'Peasant Question is a Class Question', *Economic and Political Weekly*, Vol. 23, No. 27, July 2
- Pandey, M.P., 1980, *Land Records and Agrarian Situation in Bihar*, Calcutta, Naya Prokashan
- Pandian, M.S.S., 1987, 'On the So-called Stability of Small Landowners in Bangladesh' *Journal of Peasant Studies*, Vol. 14, No. 4
- Parikh, Kirit S. (ed.), 1997, *India Development Report 1997*, Delhi, Oxford University Press
- Parthasarathy, G., 1991, 'HYV Technology: The Polarisation and Immiserisation Controversy', *Economic and Political Weekly*, Vol. 26, No. 26, June 29
- Patnaik, B.N., 1990, *Harijans' Franchise: An Alibi of Class Conflict (a case study of Danwar-Bihra massacre)*, Patna, Harijan Study Centre, A.N.Sinha Institute of Social Studies (mimeo.)
- Patnaik, Prabhat, 1984, 'Market Question and Capitalist Development in India', *Economic and Political Weekly*, Vol. 19, Nos. 31, 32 and 33, Annual Number, August
- Patnaik, Utsa, 1971, 'Capitalist Development in Agriculture: a note', *Economic and Political Weekly*, Vol. 6, No. 39, September 25
- Patnaik, Utsa, 1972, 'Development of Capitalism in Agriculture', *Social Scientist*, Vol. 1, No. 2, September, and Vol. 1, No. 3, October

- Patnaik, Utsa, 1976, 'Class Differentiation Within the Peasantry : An Approach to the Analysis of Indian Agriculture', *Economic and Political Weekly*, Vol. 11, No. 39, September 25
- Patnaik, Utsa, 1979, 'Neo-Populism and Marxism: the Chayanovian View of the Agrarian Question and its Fundamental Fallacy', *Journal of Peasant Studies*, Vol. 6, No. 4
- Patnaik, Utsa, 1987, *Peasant Class Differentiation - a study in method with reference to Haryana*, Delhi, Oxford University Press
- Patnaik, Utsa and Zoya Hasan, 1995, 'Aspects of the Farmers' Movement in Uttar Pradesh in the Context of Uneven Capitalist Development in Indian Agriculture', in Sathyamurthy (ed.) [1995]
- Pearce, R. 1983 'Sharecropping: Towards a Marxist View' *Journal of Peasant Studies* Vol. 10, Nos. 2 and 3
- PUDR, 1997, *Agrarian Conflict in Bihar and the Ranbir Sena*, a report by the People's Union for Democratic Rights, Delhi, PUDR
- Prasad, Pradhan H., 1973 'Production Relations: Achilles Heel of Indian Planning' *Economic and Political Weekly* Vol. 8, No. 19, May 12
- Prasad, Pradhan H., 1974 'Reactionary Role of Usurers' Capital in Rural India' *Economic and Political Weekly*, Vol. 9, Nos. 32-34, Special Number, August
- Prasad, Pradhan H., 1985, 'Poverty and Agricultural Development', *Economic and Political Weekly*, Vol. 20, No. 50, December 14
- Prasad, Pradhan H., 1987 'Agrarian Violence in Bihar' *Economic and Political Weekly*, Vol. 22, No. 17, May 30
- Prasad, Pradhan H., 1988, 'Roots of Uneven Regional Growth in India', *Economic and Political Weekly*, Vol. 23, No. 33, August 13
- Prasad, Pradhan H., 1989, *Poor Peasant Movement in Central Bihar* (mimeo.)
- Prasad, Pradhan H., Gerry B. Rodgers, Shaibal Gupta, Alakh N. Sharma, B. Sharma, 1988, *The Dynamics of Employment and Poverty in Bihar*, Patna, A.N.Sinha Institute of Social Studies (mimeo.)
- Roy, Prannoy, 1981, 'Transition in Agriculture: Empirical Indicators and Results (Evidence from Punjab, India)', *Journal of Peasant Studies*, Vol. 8, No. 2
- Rudra, Ashok, 1968a, 'Farm Size and Yield Per Acre', *Economic and Political Weekly*, Vol. 3, Nos. 26-28, Special Number, July
- Rudra, Ashok, 1968b, 'More on Returns to Scale in Indian Agriculture', *Economic and Political Weekly*, Vol. 3, No. 43, October 26

Rudra, Ashok, 1971, 'Employment Patterns in Large Farms of Punjab', *Economic and Political Weekly*, Vol. 6, No. 26, June 26

Rudra, Ashok, 1987, 'Labour Relations in Agriculture - a Study in Contrasts', *Economic and Political Weekly*, Vol. 22, No. 17, April 25

Rudra, Ashok, A. Majid and B.D. Talib, 1969, 'Big Farmers of Punjab - Some Preliminary Findings of a Sample Survey', *Economic and Political Weekly*, Vol. 4, No. 39, September 27

Sarap, Kailas, 1987, 'Transactions in Rural Credit Markets in Western Orissa, India', *Journal of Peasant Studies*, Vol. 15, No. 1

Sathyamurthy, T.V., 1985, 'Piloting a Nation into the 21st Century - Changing Political Context of State Power and Class Contradictions in India', *Economic and Political Weekly*, Vol. 20, No. 29, July 20

Sathyamurthy, T.V (ed.), 1995, *Social Change and Political Discourse in India - Structures of Power, Movements of Resistance*, Vol. 2, 'Industry and Agriculture', Delhi, Oxford University Press

Sen, Abhijit, 1996, 'Economic Reforms, Employment and Poverty - Trends and Options' *Economic and Political Weekly*, Vol. 31 Nos. 35, 36 and 37, September

Sen, Abhijit, 1997, 'Structural Adjustment and Rural Poverty: Variables That Really Matter', in Chadha and Sharma (eds.)[1997]

Sen, Amartya, 1962, 'An Aspect of Indian Agriculture' *Economic Weekly*, Vol. 14, Nos. 4-6, Annual Number, February

Sen, Amartya, 1975, *Employment, Technology and Development*, Oxford, Clarendon Press

Sen, Iina (ed.),1990, *A Space Within the Struggle - Women's Participation in People's Movements*, New Delhi, Kali for Women

Sengupta, N., 1980, 'Indigeneous Irrigation Systems and Irrigation Organization in South Bihar', *Indian Economic and Social History Review*, Vol. 13, April 5

Sengupta, Nirmal, 1982, 'Agrarian Movements in Bihar' in Das (ed.)[1982]

Shah, Tushaar and Vishwa Ballabh, 1997, 'Water Markets in North Bihar: Six Village Studies in Muzaffarpur District', *Economic and Political Weekly*, Vol. 32, No. 52, December 27

Sharma, Alakh N., 1992, 'Work and Activity Pattern of Women in Rural Bihar', in Sharma and Singh (eds.)[1992]

Sharma, Alakh N., 1996, 'Development, Economic Reforms and the Poor: the Case of Bihar' paper prepared for the IDPAD Seminar on *Liberalisation and the Poor: Impact, Opportunities and Barriers*, Hyderabad, February 7-9

Sharma, Alakh N., and Seema Singh (eds.), 1992, *Women and Work*, Patna, Indian Society of Labour Economics

Sharma, I.D., 1995, 'Management of Major/Medium Irrigation in Bihar : A Case of Rising Costs, Poor Maintenance and Declining Returns', Patna, A.N. Sinha Institute of Social Studies, (mimeo).

Sharma, Rita and Thomas T. Poleman, 1994, *The New Economics of India's Green Revolution: Income and Employment Diffusion in Uttar Pradesh*, New Delhi, Vikas Publishing House

Singh, Abhimanyu and Usha Singh, 1993, 'Augmenting the Flow of Rural Credit in the State of Bihar' *The Bihar Journal of Agricultural Marketing*, Vol. 1, No. 4, October - December

Singh, Manjit, 1995, 'Capitalist Agriculture and Freedom of Labour', *Economic and Political Weekly*, Vol. 30, No. 52, December 30

Sinha, Arun, 1991, *Against the Few: Struggles of India's Rural Poor*, London, Zed Books Ltd.

Sinha, Arvind and Indu Sinha, 'State, Class and "Sena" Nexus - Bathani Tola Massacre', *Economic and Political Weekly*, Vol. 31, No. 44, November 2

Special Correspondent, 1975, 'Arrested Green Revolution', *Economic and Political Weekly*, Vol. 10, No. 25, June 26

Srinivasan, T.N. 1979 'Agricultural Backwardness Under Semi-Feudalism - A Comment', *Economic Journal*, June

Srivastava, Ravi S., 1989a 'Tenancy Contracts During Transition: A Study Based on Fieldwork in Uttar Pradesh (India)', *Journal of Peasant Studies*, Vol. 16, No. 3

Srivastava, Ravi S., 1989b 'Interlinked Modes of Exploitation in Indian Agriculture During Transition: A Case Study', *Journal of Peasant Studies*, Vol. 16, No. 4

Srivastava, Ravi S., 1989c 'Planning and Regional Disparities in India', paper presented at conference on *The State and Development Planning in India*, Centre of South Asian Studies, School of Oriental and African Studies, London, April 21-24

Stiglitz, Joseph E., 1974 'Incentives and Risk Sharing in Sharecropping', *Review of Economic Studies*, Vol. 41, No. 2, April

Stiglitz, Joseph E., 1986, 'The New Development Economics' *World Development*, Vol.14, No.2

- Stree Shakti Sanghatana, 1989, *'We Were Making History...': Life Stories of Women in the Telengana People's Struggle*, New Delhi, Kali for Women
- Thorner, Alice, 1982, 'Semi-Feudalism or Capitalism? Contemporary Debate on Classes and Modes of Production in India', *Economic and Political Weekly*, Vol. 27, Nos. 49, 50 and 51, December 4, 11 and 18
- Unni, Jeemol, 1997, 'Women Workers in Agriculture: Some Recent Trends', *Indian Journal of Labour Economics*, Vol. 40, No.3
- Vaidyanathan, A., 1986, 'Labour Use in Rural India: A Study of Spatial and Temporal Variations' *Economic and Political Weekly*, Vol. 21, No. 52, December 27
- Vaidyanathan, A., 1995 'The Political Economy of the Evolution of Anti-Poverty Programmes' in Sathyamurthy (ed.)(1995]
- Verma, B.N. and R.R. Mishra, 1984, 'Subsistence Tenancy in a Backward Agrarian Setting: A Case Study of North Bihar', *Social Scientist*, No. 135, August
- Vittal, Nalini, 1986, 'Intersectoral Terms of Trade in India', *Economic and Political Weekly*, Vol. 21, No. 52, December 27
- Wilson, Amrit, 1991, *The Challenge Road: Women and Revolution in Eritrea*, London, Earthscan
- Wood, Geoff, 1994, 'Private Provision After Public Neglect : Opting Out with Pumpsets in North Bihar', paper presented at the *International Conference on the Political Economy of Water in South Asia: Rural and Urban Action and Interaction*, Madras Institute of Development Studies, January 5-8