

# **“ATTACHED” LABOUR IN INDIAN AGRICULTURE**

DISSERTATION SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS OF  
THE DEGREE OF MASTER OF PHILOSOPHY,  
JAWAHARLAL NEHRU UNIVERSITY,  
NEW DELHI

**RAKESH BASANT**

CENTRE FOR DEVELOPMENT STUDIES  
ULLOOR, TRIVANDRUM  
KERALA  
1981

## ACKNOWLEDGEMENTS

I acknowledge my gratitude to Dr. A. Vaidyanathan, who initiated me into this study and provided encouragement and patient guidance at every stage of the work. I have freely encroached on his time and am indebted to him for important improvements in this work.

I am also grateful to Shri Chandan Mukherjee for his kind guidance at various stages of my work.

I am extremely grateful to Dr. K.N.Paj, who was kind enough to go through the earlier drafts of my dissertation in spite of his busy schedule. His comments and suggestions were very useful in giving the dissertation a coherent structure.

Shri Rajaram Dasgupta was always there to help me with the computer work. I am deeply grateful to him for helping me in finishing my computations in quick time.

Many of my ideas took concrete shape through my discussions with Ashoka Wody, D. Narayana and N. Chandramohan. I am thankful to them for their constructive suggestions and useful comments on the earlier drafts of my dissertation.

I am also thankful to Dr.(Mrs.) R. Thamarajakshi, Miss S. Ragu (Director, Labour Bureau) and Shri R.S.Deshpande (Labour Bureau) for helping me in getting the Labour Bureau Reports on Intensive Type Studies in India.

I am particularly thankful to Shri T.A. Varghese for typing my dissertation at such a short notice and it is evident that he has done a very good job.

## CONTENTS

	<u>Pages</u>
	0 - 5
Chapter 1	6 - 16
Chapter 2	17 - 35
Chapter 3	36 - 58
Chapter 4	59 - 89
	90 - 93
	94 - 103

## INTRODUCTION

The literature on labour use in Indian agriculture and on rural labour market in India generally distinguishes between three categories of labour, viz., family labour, casual labour and attached labour — the latter two being hired labour categories. Conventionally, an attached labour contract has been identified as "unfree" and of a longer duration.<sup>1/</sup> Attached labourers have been associated sometimes with labourers who are "unfree" or "bonded" and at others with those employed on a seasonal or annual basis. The concern regarding the lack of freedom was prominent in a number of studies immediately before Independence,<sup>2/</sup> and in the First Agricultural Labour Enquiry (1950-51). Subsequently, the focus shifted towards the duration aspect of attached labour employment.<sup>3/</sup>

Analytical studies of rural labour market during 1960s and 1970s have generally neglected the category of attached labour. Most studies focussed on the family labour-wage labour relationship and on exploring the wage labour market without distinguishing between different categories of wage labour. For instance, the dual-labour market theory is concerned with explaining the reasons for the existence of unemployment at the going wage rates, and of the apparent difference between the wage rates paid to hired labour and those imputed to family labour. Models of the wage labour market have mostly concentrated on casual labour. This is irrespective of whether the analysis concerns comparisons of trends in money wage rates and real wage rates; relationship of wage rates (seasonal or otherwise) with unemployment; factors affecting inter-regional variations

in wage rates; or relative wage rates of pure wage earners and of wage earners-cum-small farmers.<sup>4/</sup>

Thorner did some pioneering work on the categorisation of workers so that various kinds of "attachments" can be captured. We shall be referring to this work in detail in the next chapter.<sup>5/</sup> But after that surprisingly little work (mostly micro-level studies and studies on the effect of mechanisation on attached labour employment) was done on attached labour. In one or two studies, the relationship between casual and attached labour has been analysed, but very cursorily.<sup>6/</sup> Recently, however, interest in attached labour has revived in the context of the debate on semi-feudalism and inter-linking of markets. Bardhan and Rudra<sup>7/</sup> in a recent article have dealt with attached labour at a conceptual level and have provided some information in line with their analysis on attached labour contracts in West Bengal. Ghose<sup>8/</sup> and Chattopadhyaya<sup>9/</sup> examined the relative wage rates of attached and casual labour.

Part of the reason for this neglect of attached labour is the considerable confusion about the basis for categorisation of wage labour and the difficulties of interpreting the meagre information available. The only source of data on attached labour on any significant scale are ~~the reports of~~ the Agricultural Labour Enquiry Reports conducted in 1950-1 and 1956-57 and the reports on Intensive Type Studies on Rural Labour in India conducted by the Labour Bureau in 1966-69. Some information about "attached" workers is also available in NSS employment-unemployment survey of 1972-73 (where they are called "regular" workers) and in NSS Landholding survey of 1971-72 (where they are called "attached" workers). Very little analysis has been done using this body of information.

Another reason might be the complexity arising from the heterogeneity in the nature of the wage contracts for attached labour (ranging from feudal or semi-feudal relations, through bondage arising from indebtedness to a more or less voluntary agreement).<sup>10/</sup>

The fact remains however that ignoring attached labour in the analysis of rural labour market, particularly its interactions with the casual labour category, cannot but limit the usefulness of such analysis. A satisfactory framework for studying the rural labour market must grapple with the heterogeneity of labour contracts -- at least recognize the basic distinction between "attached" and casual labour -- and of the interactions and inter-relationships between them. Such a framework is essential for a better understanding of the processes of the rural labour market leading to determination of wage rates, intensities of employment, modes of wage payment and the like. In other words, even while analysing wages and employment of casual labour, it is necessary to identify the nature of other labour categories and their interrelationships in terms of the differential impact the existence of the latter categories (attached, family labour etc.) has on the supply of and demand for casual labour and hence on wage and employment intensities.

We can identify two kinds of gaps (not mutually exclusive in the existing literature on rural labour market with regard to attached labour:

- (a) gaps arising from not studying attached labour as a category and from not analysing the working of the attached labour market taken by itself; and
- (b) gaps arising from not studying attached labour explicitly as a part of the rural labour market and how the market for attached labour is related to the overall market for agricultural labourers.

This dissertation is a preliminary effort to extend the analysis of the Indian rural labour market in this direction. We shall discuss the limitations of the available categorisation of wage labour and suggest the ingredients of a more satisfactory classification, before examining the characteristics of "attached labour," the variations in its magnitudes across regions, and the relative position of the casual and attached labour categories in terms of employment, wage rates and income.

The first chapter briefly reviews some historical studies on forms of labour utilisation in agriculture. On the basis of this historical review the second chapter examines critically the existing attached labour concepts in India. An attempt is made here to explore what kinds of "attachments" are captured by the existing concepts and what are left untouched. On the basis of the analysis of existing concepts a part of this chapter is also devoted to the discussion on alternative ways of classifying agricultural labourers so that all kinds of employer-employee attachments or arrangements can be captured. The scope of our analysis in the next two chapters is, however, limited by the fact that the existing data of attached labour relate only to workers employed for a season or a year continuously by an employer.

Chapter three, therefore, discusses the conditions which encourage the employment of wage labourers on relatively long duration contracts and is primarily related with the first kind of gap.

Chapter four deals with the inter-relationships and interactions between attached and casual labour in the rural labour market and is an attempt at partly filling the second kind of gap. Since the available

data preclude a definitive analysis, we confine ourselves to analysing certain plausible hypotheses regarding these inter-relationships and to see how these fit the available data.

#### Notes and References

- 1/ How the official concepts have tried to capture these characteristics and to what extent they have been successful is discussed in detail in the second chapter.
- 2/ See, for example, the discussion on agricultural labour in Indian Journal of Agricultural Economics, April 1948 and also the descriptions of attached labour contracts in First Agricultural Labour Enquiry Reports.
- 3/ See, Reports on Intensive Type Studies on Rural Labour in India, Labour Bureau, Simla, 1967-69 and discussions in Indian Journal of Agricultural Economics, April-June, 1957.
- 4/ These facts are very evident when one looks at the survey of literature done by Kalpana Bardhan, see Kalpana Bardhan (1977), "Rural Employment, Wages and Labour Markets in India: A Survey of Research," Economic and Political Weekly, June 25, July 2 & 9,
- 5/ Daniel Thorner and Alice Thorner (1962), "Employer-Labourer Relationships in Agriculture," Indian Journal of Agricultural Economics, Vol. XII, (April-June), 1957, reproduced in Land and Labour in India, Asia Publishing House, by the same authors (ch.3).
- 6/ For details, see K. Bardhan (1977), op.cit.
- 7/ Pranab Bardhan and Ashok Iudra (1980), "Types of Labour Attachments in Agriculture", Results of a Survey in West Bengal - 1979," Economic and Political Weekly, August 30.
- 8/ Ajit K. Ghose (1980), "Wages and Employment in Indian Agriculture," World Development, May/June, vol.8, nos.5/6.
- 9/ M.Chattopadhyay (1977), "Wage Rates of Two Groups of Agricultural Labourers," Economic and Political Weekly, March, Review of Agriculture.
- 10/ See, Kalpana Bardhan (1970), "Wage and Employment of Agricultural Labour in India, Some Cross-Sectional Analysis," Agricultural Economics Research Centre, University of Delhi, Mimeo, ch.1, p.5.



## Chapter I

### HISTORICAL BACKGROUND

The use of wage labour always involves an employer-employee relationship. There are two main facets to this relationship: (1) conditions which led the worker to enter into the contract of employment with the particular employer which we shall hereafter refer to as "entry conditions"; and (2) the terms and conditions of work under the contract which may be termed as "working conditions."

An agricultural labourer may enter into a contract with the particular employer (a) due to certain pre-existing obligations arising from customary social relations or on account of credit and/or land relations; or (b) he may accept the contract with the employer out of his own free will. The latter implies that the labourer has the freedom to choose any employer and/or contract, while the former relates to situations in which the labourer is not free to choose any employer or contract.<sup>1/</sup> This distinction based on freedom of choice is important and has received much attention both in the literature dealing with the evolution of the modes of production and labour utilisation in agriculture and in the early Indian surveys relating to agricultural labour.

<sup>2/</sup> Historical studies relating to the presently developed countries have discerned a general trend towards a progressive replacement of social relations and obligations arising from indebtedness which tend to "bind" the worker to particular employers in varying degree of servitude by contracts governed by impersonal economic considerations.<sup>3/</sup>

This shift, which generally coincides with the commercialisation and growth of agrarian economy, also gives to the class of wage labourers, a greater freedom of choice.

Thus broadly speaking, two kinds of labour arrangements existed in England, Russia and Japan in their early phases of commercialised agriculture: labour service provided by the tenants with their own implements; and the employment of farm servants. While the latter were whole time workers and stayed at the farm, for the former it was not the case. One feature peculiar to both these arrangements, however, was the bondage, either through land or through usurious loans. The tenants, for example, were bound to the landlord generally through land but at times also through usurious loans; this was true of the tenants of the "corvee" economy in Russia, of "Nagos" in Japan and of tenants and cottagers in early 18th century England.<sup>4/</sup> Similarly, farm servants were generally drawn from tenant families providing labour service,<sup>5/</sup> either in return for a loan or on account of any other obligation incurred by the worker's family with that of the employer,<sup>6/</sup> or for mere subsistence as the labourer used to get food, clothing and other necessities at the farm. These farm servants tended to be hereditary in Japan, though not so much in England. But the tinge of servitude was evident in all the three countries.

Another feature common to both the labour arrangements was the personal character of the employer-employee relationships. The landlord was customarily responsible for the general welfare of his tenants and farm servants. In Japan, for example, the master was deemed responsible not only for his farm servants' food and clothing but also their upbringing and conduct in the village. It was also his duty to support his tenants

during crop failures and help them in other problems. Moreover, there did not exist any determinant relationship between size of the tenant allotments and the amount of labour service provided by them.<sup>7/</sup>

In other words, the basis of the entry condition and the exchange of labour between workers and employers in the early days of commercialisation of these countries was quite unlike the exchange familiar to ~~the~~ modern economies: "it was an economic exchange in the guise of social relationship, not a direct exchange of economic values defined by an impersonal market ... The governing factor was the reciprocal obligations of kinship and kinlike relations."<sup>8/</sup>

Gradually over time "labour service" not only declined in magnitude but its character also changed. At places it got transformed into the form of rent as in Japan,<sup>9/</sup> or to other kinds of labour services as in Russia. Lenin wrote:

"... (labour service) now occupied a sub-ordinate position as compared ~~z~~ with free hire and secondly the labour service underwent a change; it was mainly the second type of labour service which remained, that implying the labour not of peasant farmers, but of regular labourers and agricultural day labourers."<sup>10/</sup>

Though, advances of money or grain, and allotment of land continued to be the basis for "tying" labourers to particular employers,<sup>11/</sup> an important qualitative change had taken place, towards greater "freedom" of contract for workers. Discussing the Japanese situation in late eighteenth and early nineteenth century, Smith points out:

"... We can no longer properly speak of labour services. For labour services had now lost their social meaning and became mere substitutes for payments in money or kind. This of course was much more than a change in character of labour services, it bespoke as well a transformation of the relations of the persons who received and gave them. No longer were these persons bound to one another by powerful mutual obligations ... and the two parties now stood in relationship impersonal to such a degree that one would no longer give the other so much as a day's labour without specific compensation... the Ningo (who provided labour service) had become economically and socially an autonomous agent ... no more the "Oyakata's" (employer's) ward." <sup>12/</sup>

Not only was there a shift from labour service, <sup>13/</sup> towards regular and day workers, there was also a change in the character of farm servant class itself. Over time, the farm servants were getting more and more free and their employment period was declining. This can be clearly seen from Lenin's <sup>14/</sup> and Smith's <sup>15/</sup> accounts. Smith in fact provides a fascinating account of how hereditary farm servants ("genin" or "fudai") got transformed to regular farm servants (Hokonin) bound by debt. He distinguishes between three kinds of "Hokonin" which evolved over time each being characterised by significantly different degrees of freedom. <sup>16/</sup>

Type 1: Those who are given to an employer by his family for an indefinite period in return for a loan, as a kind of security for the same. No compensation for working was provided but only an upkeep till the loan was repaid. Repayment of course used to take a lot of time because of the poverty of the family. In principle the "hokonin" of such kind bound by debt could redeem his freedom. In this respect they differed from the hereditary servant, who were wholly at the mercy of the master.

Type 2: Identical to the first but his labour received some compensation. A certain agreed value was assigned in advance to his labour during the term of the loan and an agreed sum (less than the loan) was then

deducted from the debt outstanding at the end of the loan period. This type became more common with time.

Type 3: "Hokonin" bound by debt for the duration of the loan, but his labour during that period constituted repayment of it in full. At the end of the stipulated period the worker was therefore free to enter into a fresh contract with anyone he liked.

Significantly, the various degrees of freedom associated with the different types of "Hokonin" are reflected in differences in the "working conditions": In the latter two types the "Hokonin's" labour was considered as partial or full repayment of a debt. Once the debt was repaid, they were free to change their employer. In the case of type-3, even though the employment contract was linked to, and based on, credit, the entry condition may be free since a labourer could take a loan of his own free will, and agree to repay it through labour.<sup>17/</sup> Smith comments on these changes in the status of farm-servants thus:

"...labour was being slowly lifted out of the context of social group and recognised as having an economic value independent of social relations. The farm worker who as hereditary servant had once been compensated chiefly by assimilation to the family was now increasingly regarded merely as a hired hand to be employed only so long as he was needed: the valuation of his labour was more economic less social." <sup>18/</sup>

It should be noted, however, that not only did these transformations occur over a very long period, but there were also infinite regional varieties. There was a lot of overlapping and many hybrid types of arrangements existed. At places some aspects of the old arrangements persisted for a long time, but everywhere they were becoming less important,<sup>19/</sup> and their

character changed gradually towards greater freedom.

We noted how the workers freedom of choice is influenced not only by the "entry" conditions but also by "working" conditions. While "working" conditions are indeed influenced by "entry" condition, they also influence the extent of freedom the worker has over time. In the historical studies cited above, these interrelations have not received sufficient attention. They have generally focussed on the freedom aspect than on the question of duration and the terms of the contract. Changes in duration are mentioned by both Smith and Lenin, but they are not systematically analysed. Changes in wage rates, mode of payment and other terms are hardly discussed. Lenin does provide some interesting clues when he relates employment of workers on long duration contracts with seasonality and land distribution:

"In the bottom group of landholdings the number of farms hiring day labourers always exceeds many times over the number employing regular farm labourers. In the top groups on the contrary, the number of farms employing regular farm labourers is sometimes even larger than the number hiring day labourers. This fact clearly points to the formation of the top groups of the peasantry of farms employing labourers, farms based on regular employment of wage labour; wage labour is more distributed over the seasons of the year, and it becomes possible to dispense with the more costly and more troublesome hiring of day labourers." 20/

Lenin's analysis however is not very exhaustive with regard to the duration question.

In the Indian context also questions relating to modes of labour utilisation generally and that of wage labour in particular have attracted attention for several decades. Like the historical studies on developed

countries discussed earlier, some studies of agricultural labour in different parts of India bring out the diversity in terms of varying degrees of freedom and gradations of duration. Dharma Kumar's<sup>21/</sup> account of "panniyals" and "padiyals" in late nineteenth century and early twentieth century Tamilnad are very much similar to Smith's account of "genin" and "fudai" in 17th century Japan.<sup>22/</sup> She cites sociological factors, in particular the unique position of the untouchables, as partial explanation of the existence of a class of landless wage labourers long before the advent of commercialisation, and for the prevalence and survival of agrestic slavery:

"Indeed it is difficult to see what purely economic justification there was for the 18th or 19th century South Indian serfdom. This was not an economy of large-scale cash crop farming nor one where a labour force had to be raised by compulsion. Whatever the origin of the system its durability must be explained in social rather than economic terms, in terms of caste system rather than market needs."<sup>23/</sup>

In a similar historical study of some South Gujarat villages, Brennan<sup>24/</sup> brings out the significance of the caste system. He traces historically the changes in the caste system and the corresponding transformation of the forms of labour employment which came about with commercialisation. The conclusions drawn by him also correspond to the conclusions drawn by us earlier.

"The changing structure of exchange was accompanied by changes in the norms and values on which the intercaste relationships had been founded. The element of patronage within the framework of the village gradually receded in to the background. In other words the process of instrumentalisation contributed to a decline of the traditional rights and obligations on either side. Transactions were increasingly concluded on money basis. Jajmans and kemins came to regard each other as employers and employees rather than as patrons and clients, and felt themselves bound more by contract than by status."<sup>25/</sup>

Breman does refer to certain economic factors which affect the duration of labour contracts, which we shall be referring to later in our dissertation.

Atohi Reddy's<sup>26/</sup> work also traces the gradual transformation in the nature of wage labour contracts in Nellore district over the period of 1893-1974, showing a progressive rise in the use of casual wage labour as distinct from "seasonal and annual" farm servants and transformations within each category.

Besides, empirical evidence about the wages of agricultural labour is available from late nineteenth century onwards.<sup>27/</sup>

More recently, several detailed, though descriptive surveys on the conditions of agricultural labour and the factors responsible for their low socio-economic status have been conducted in different parts of the country.<sup>28/</sup> The Agricultural Labour Enquiry of 1950-51 was the first major nation wide sample-survey to find out the magnitude of wage labour, the terms and conditions of their employment, wage rates, incomes, indebtedness and living standards. There have been at least four nation wide sample surveys since, besides a number of village studies and regional enquiries.

In these enquiries two-kinds of hired agricultural labourers have been identified: casual and attached. In the next chapter we shall focus on the limitations of these two categories in capturing the nuances of a multitude of heterogeneous labour contracts.



Notes and References

- 1/ It should be understood, at the outset, however, that the entry condition signifying freedom for the employee does not mean that the employer-labour relationship will not be assymetric; in a situation of severe unemployment and underemployment and unequal distribution of resources the fact of dependence of the employee on the employers cannot be ignored. The employee has to work in order to earn his livelihood and for that he will be dependent on the employer. A labourer can be free only in the sense that he can accept or reject the conditions and wages offered by a particular employer and choose that contract which he finds most favourable among the available.
- 2/ The discussion on the history of agricultural labour is parimarily based on the following publications:
- a) V.I. Lenin (1972), "Development of Capitalism in Russia," Collected Works, Vol.3, Progress Publishers, Moscow.
- b) Thomas C. Smith (1959), "The Agrarian Origins of Modern Japan," Stanford University Press, Stanford, California.
- c) W. Hasbach (1966), "A History of the English Agricultural Labour," Frank Cass and Co. Ltd.
- d) J.L. Hammond and Barbara Hammond (1967), "The Village Labourer, 1860-1832," Augustus M. Kelly Publishers, New York.
- 3/ This trend is put forward as a general tendency and there might be exceptions, e.g., the classic case of second serfdom in Europe. These transformations not only come about over a very long period, there are also infinite regional variations. The development involving less free contracts giving way to the free ones is generally not a very neat one and there is a lot of overlapping and many hybrid ~~varieties~~ types of arrangements emerge. But these broad fundamental changes can still be discerned.
- 4/ See descriptions of the "Corvee Economy" by Lenin (1972), op.cit., Ch.III, particularly pp.197-200, and description of "Nagos" by Smith (1959) op.cit., particularly pp.9-10 and 24-27. See also Hasbach (1966), op.cit. pp.6-8.
- 5/ Evidence to this effect is given in Smith (1959), op.cit. ch.2. and pp.9-10, and in Hammond and Hammond (1967), op.cit., pp.30-31.
- 6/ They were even at times sold by families whose size had outrun

....

the resources of their small holdings. See description of Fudai and Genin in Smith (1959), op.cit., ch.2, particularly p.12.

- 7/ See Smith (1959), op.cit., particularly the description of the relationships of "Oyakata" with "fudai" and "genin" (pp.8-12), and with "nagos" (pp.26-27).
- 8/ Smith (1959), op.cit., p.27. A statement of similar kind is made by Hasbach: "(that) agricultural labour in the modern sense was not existent ... Most of them were personally unfree and were therefore incapable of concluding a labour contract as understood in modern law;" Hasbach (1966), op.cit., p.10.]
- 9/ See Smith (1959), op.cit., ch.9, "The Transformation of Nago"; particularly pp.138-139.
- 10/ Lenin, (1972), op.cit., p.218.
- 11/ See for details, description of Englehardt's farm by Lenin (1972), op.cit., particularly pp.217-18, also pp.199-200.
- 12/ Smith (1959), op.cit., p.139.
- 13/ Lenin (1972), op.cit., p.209.
- 14/ Lenin (1972), op.cit., ch.3, particularly Lenin's description of Engelhardt's farm and his description of the transformation of the Corvee system to the capitalist system.
- 15/ See Smith (1959), op.cit., ch.8. Particularly his descriptions of transformation of "genin" and "fudai" into "Hokonin" and several types of "Hokonin".
- 16/ For a more detailed description, see Smith (1959), op.cit., ch.8 pp.112-114.
- 17/ "Hokonin" employed for shorter periods also emerged over time, see Smith (1959), op.cit., p.109, particularly.
- 18/ Smith (1959), op.cit., p.116.
- 19/ See conclusions to similar effect in:
  - Smith (1959), op.cit., pp.109-110 and
  - Lenin (1972), op.cit., ch.3.
- 20/ Lenin (1972), op.cit., p.109.

- 21/ Dharma Kumar (1965), Land and Caste in South India - Agricultural Labour in the Madras Presidency During 19th Century, Cambridge University Press.
- 22/ Dharma Kumar herself wrote:
- "... the South Indian agrarian economy was not so different from the economies of other Asian societies in similar stages of development. The "pammiyal" and "padiyal" of Tamilnad, for example, can be compared with the "fudai" and "genin" of seventeenth century Japan." ibid, p.190.
- 23/ Ibid., pp.75-76.
- 24/ Jan Breman (1974), Patronage and Exploitation, Changing Agrarian Relations in South Gujarat, India, University of California Press.
- 25/ Ibid., p.22.
- 26/ M.Atchi Reddy (1979), "Wages Data from the Private Agricultural Accounts, Nellore District, 1893-1974," Indian Economic and Social History Review, Vol.XVI, July-Sept, No.3, pp.301-21.
- 27/ See Atchi Reddy (1978), "Official Data on Agricultural Wages in Madras Presidency from 1873," Indian Economic and Social History Review, Vol. XV, No.4, October-Dec. pp.451-66.
- 28/ For example, the surveys discussed in Indian Journal of Agricultural Economics symposium on agricultural labour. See, Indian Journal of Agricultural Economics (1948), March-April; and Indian Journal of Agricultural Economics (1957), April-June.
-

## Chapter 2

### THE CONCEPT OF ATTACHED LABOUR

The First (1950-51) and the Second (1956-56) Agricultural Labour Enquiries explicitly distinguished between two categories of hired agricultural labour: "casual" and "attached". Attached labour in the First Labour Enquiry was defined in one place as those "who whenever required by their master have to work for him and are not ordinarily free to seek employment elsewhere."<sup>2/</sup> This was supplemented elsewhere by another statement whereby attached labourers were said to cover those who were "more or less in continuous employment and are under some sort of a contract with employers during the period of employment." Casual workers were simply workers "other than attached" and employed "from time to time according to exigencies of work."<sup>2/</sup> In many other places difference between "casual" and attached workers was stated initially in terms of the period for which the man was engaged, and periodicity of wage payments. Attached labour was associated with longer periods of employment and "non-daily" wages.<sup>3/</sup>

(ALE)

In the Second Agricultural Labour Enquiry these different criteria were put together in a single definition but the "freedom" aspect was missing. Attached labour in the second ALE is defined as:

"Agricultural workers under continuous employment under contract for the last agricultural year, working irregularly, seasonally or annually with or without debt bondage or with or without tie-in allotment."<sup>4/</sup>

That the emphasis was on the duration of employment contract is clear from another statement made in the report:

"The classification (casual/attached) is based on the basis of exigencies of farm work. Two types of labourers are required for farm operations - those who are employed for rush work to cope with Nature's time schedule for completing agricultural operations well within the season and those who attend to continuous farm operations all the year round. The first category of workers is broadly known as "casual" workers and the second category as "attached" workers. Casual workers are employed on daily wages for specific operations which last for a short duration while attached workers are often employed on contract, oral or written, extending over a period of a quarter, half year or year as the case may be." 5/ (emphasis ours).

One can see from these statements that a major difference between the First and Second labour enquiries' concepts of attached labour is that the former tended to be more preoccupied with the aspect of bondedness and the latter more with the duration aspect. A definition based on "duration of contract" is likely to classify a much larger number as attached than one which focusses not only on duration but on the extent of "unfreedom." This was perhaps one of the reasons why the proportion of attached labour households according to the Second ALE was much higher than the proportions reported in the First ALE<sup>6/</sup> (see Table 1 below).

The resulting controversy and confusion over the interpretation of the results led to the dropping of the "casual-attached" distinction in the latter enquiries and only a category of "agricultural labour" was retained. The scope of the subsequent surveys (conducted in 1964-65 and 1974-75) were however broadened to cover all rural wage labour instead of only agricultural wage labour.

Table 1Percentage Distribution of Attached Labour Households  
in 1950-51 and 1956-57

States	Percentage of Attached labour households in total Agricultural Labour Households	
	1950-51	1956-57
Uttar Pradesh	10.2	36.03
Madhya Pradesh	24.5	38.31
Bihar	1.0	41.52
West Bengal	8.7	21.31
Orissa	14.2	15.65
Assam	11.9	70.12
Andhra Pradesh	12.5	17.06
Madras	1.4	15.68
Kerala	0.3	12.52
Bombay	17.7	16.88
Mysore	5.2	10.16
Rajasthan	17.8	22.56
Punjab	54.3	46.59
ALL INDIA	9.7	26.63

Note: Assam includes, Manipur and Tripura and Punjab includes Delhi and Himachal Pradesh.

Source: Agricultural Labour in India - Report on the Second Agricultural Labour Enquiry - 1956-57, Vol. I, All India, Labour Bureau, Ministry of Labour and Employment, Government of India, Statement 4.2, p.53.

The National Sample Survey of employment-unemployment has attempted to reintroduce a classification which distinguishes between "casual" workers and those working for "regular wage and salary employment," and also provides for a separate category of "bonded labour." "Bonded labour" is defined as:

"Working with an employer under obligation but work, not specifically compensated by any wage/salary;" //

and the Regular Wage/Salaried employees as:

"Persons working in other's farm or non-farm enterprise (both household and non-household) and getting in return salary or wages on regular basis and not on the basis of daily or periodic renewal of work contract." 8/

All these definitions, be it of the ALE or the NSS, are unsatisfactory in capturing the differences in degrees of freedom or of working conditions (in terms of duration and in terms of rate and modes of wage payment). As mentioned earlier, "freedom" was the prime concern in the earlier writings on attached labour. The description in the First Labour Enquiry reports also showed similar concern. Thorner, who initiated the debate on the classification of agricultural workers, also seems to have seen "attached labour" primarily from the viewpoint of bondedness. He wrote: "...in the context of Indian agriculture, attached labour has a connotation of unfreedom." 9/ The same spirit is reflected in his criticism of the concepts of attached and casual labour in the First ALE. He argued that freedom aspect cannot be captured by conditions like "freedom to seek employment elsewhere," length and continuity of employment etc. In other words, the thrust of his argument is that characteristics like existence of a contract, period and continuity of employment and freedom to seek

employment elsewhere do not distinguish between those attached labourers who enter into the contract under entry conditions of kind (a) and those who accept the contracts under entry conditions of kind (b), (refer to "entry conditions" enumerated in the first chapter. The mere fact that a labourer commits his labour for a season or a year does not mean that he is unfree even as a worker engaged on a daily basis or for particular operations is not necessarily "free" to choose his employer or the form of the contract. Thorner's point made in the context of the First ALE remain apposite for the later definitions also:

"The fact that a labourer is under a contract, whether formal or informal, oral or written does not tell us whether <sup>he</sup> is free or unfree. There are contracts which signify bondage and contracts which state the terms of free agreement arrived at freely. In effect the contract is merely one form of acknowledgement of whatever relationship exist between the employer and the employee. A free labourer who enters into a contract to work for certain employer does not thereby surrender his freedom; he is merely exercising it in a particular fashion. The crucial question is whether he can leave unconditionally at the end of the specified period. If so, will he be able to negotiate again with the same employer or to open negotiations with other employers on the basis of unimpaired bargaining power." 10/

Nor is the attempt of the NSS to take care of this freedom aspect under "bonded labour" satisfactory:

"In classifying a person under this category (Bonded labour), the two most important aspects of this kind of work contract the bondedness of their labour to their master are to be considered. The first one is whether the person is free to work for others and the second is whether the wage/salary paid for the work fully compensates the work performed. If the answer is negative to anyone or both of the questions, the person is to be categorised as bonded labour." 11/ (emphasis ours).

The first condition is ambiguous: For it is not clear whether "freedom to work for others" refers to the freedom to choose the employer or the

DISS  
331.7630954  
B2904 At



TH907



TH-907



freedom to change employers at the end of a contract or the freedom to work for others during the period of the contract. The second condition is also difficult to interpret objectively since many labourers may be paid less because of considerations other than bondedness, like security of employment etc.

"Freedom to choose any employer" may not necessarily mean "freedom to leave unconditionally at the end of the specified period." While it is very likely that freedom of entry will in general also determine the freedom to leave, one can have situations where the labourers freely agree to work for an employer whenever called, for an unstipulated number of days over an indefinite period, while he is free to work for others when this employer does not have work at the farm.<sup>12/</sup>

Alternatively something might happen within the contract period (e.g., the labourer might take some loan), which might affect his bargaining power for the next contract with the same employer or might lead to an extension of the contract. Consumption loans called "Dadan" in West Bengal are examples of this kind, which even lead to extension of the contract period.<sup>13/</sup> Significantly, interest free loans and advance payments are very common among attached labourers elsewhere also (See table-2),<sup>14/</sup> and can in principle hamper the freedom of the employee to leave at the end of the contract if they are not repaid. The "freedom to quit during the contract," as mentioned in the table, was also found to be very much conditioned by whether the labourer had taken loans, advance payments, etc. In villages where such kind of freedom existed, the labourer concerned was not allowed to quit if he was indebted in any way.<sup>15/</sup>

Table 2

Conditions of Attached Labour Employment

Chara- cteris- tics	System of ad- vance payment and in- terest free loans?	Debt Bond- age?	Freedom to quit the job during contract period?	Freedom to work elsewhere when free at the farm dur- ing the contract period?	Caste speci- ficity of atta- ched labour employ- ment? (SC/ST/ Backward Castes)	All kinds of work done at the farm (agri- cultural, non- agricultural and Domestic)	Working hours greater than the working hours of casual labour?	Tie-in allot- ment?
Exi- stence in no. of villa- ges								
YES	24	7	16**	4	24	33	39	4
NO	6	7	21	28	-	4*	1	7

\*For few attached workers only, others were employed for all kinds of jobs.

\*\* Conditional (see text).

Source: Reports on the Intensive Type Studies on Rural Labour in India (1967-69), Labour Bureau, Simla, 1979-80.

It is also possible that a labourer is not free at the time of entering a contract but he may be able to quit at the end of the specified period. For instance, a labourer who is repaying his old debt by working for a particular employer and his labour is adjusted against the debt, he is free to leave at the end of the contract. The working conditions here become very important since they determine at what rate the loan is being repaid by the workers' labour. That such variations in "working conditions" are important is brought out by the varying conditions of loan repayments in "bonded" labour contracts: In some cases the wages paid by the master are fully adjusted against the debt, in some partly, and in some cases not at all (Table 3).

Thus the "freedom" aspect of attached labour had not been taken care of adequately in the existing concepts; partly because there are gradations of freedom and unfreedom and also because they fail to recognize that factors curtailing freedom of the labourers may be found both in the "entry conditions" and in the "working conditions" and that both are important for any proper characterisation of the nature of labour-employer relationship.

Let us now look at the "duration" aspect of these concepts. It seems that except in the first AIE "attached" workers have tended to be identified with farm workers who work in the farm for relatively longer periods. As is stated "attached workers are those "who attend to routine farm operations all the year round"; as distinct from casual workers who are employed for rush work." If one is only trying to capture the extent to which labourers work continuously for relatively long durations for the same employer, the duration of the contract of employment should

Table 3

Are the Wages Paid by the Master Adjusted  
Against the Debt

	A.P.	Bihar	Guj- rat	Karna- taka	M.P.	Maha- rash- tra	Ori- ssa	Raja- sthan	Tamil Nadu	U.P.	ALL India
a) Yes, Fully Adjusted	15.5	0.0	0.0	27.5	46.8	2.4	12.7	4.7	8.8	28.5	20.2
b) Yes, Partly Adjusted	49.3	11.8	98.3	15.6	16.2	56.9	13.3	43.9	34.1	25.8	26.8
c) No, not Adjusted	24.9	83.2	1.7	15.0	29.7	39.7	7.0	51.4	45.6	24.7	20.3
d) Unknown	10.3	4.9	0.0	41.9	7.3	0.0	67.0	0.0	11.5	21.1	26.7

Source: Sarma B. Marla - Bonded Labour in India, Biblia Impex Private Limited, New Delhi, 1981, Table 19, p.172.

suffice as the basis for classifying a labourer as "attached", though the problem presented by different durations of contract will remain. But if one is concerned with "arrangements" which tie workers to particular employers and ensure the latter a stable, assured labour supply, a classification based on duration will not suffice.

For a labourer committed to a particular employer by reason of debt or land allotment may be employed only "from time to time according to exigencies of work." And hence attachments other than those of regular kind may not be captured. "Daily wages", "specific operations" and "short duration" may not be specific to casual labourers. A typical example is provided by Bardhan and Mitra through a kind of "attachment" which they refer to as "semi-attachment" of type 1. These kinds of labourers are attached to an employer for part of the year but for the major part of the year they have the freedom to work for other employers.<sup>16/</sup> Explaining this type of agricultural labourers they write:

"Such labourers are employed for a month or few months at a time or for a period required for completing an important operation for a certain crop. It is important to note that such labourers are usually paid everyday." (Emphasis ours). <sup>17/</sup>

labourers who are at the "beck and call" of the employer and hence are attached to him in the sense that they have to work for him whenever he needs them are also generally paid on the daily basis and typically are used most during the peak seasons for "specific operations." <sup>18/</sup>

Thus we see that the "duration" dimension of the existing concepts described above can only capture the longer term regular workers but cannot capture the various kinds of restrictions on freedom of the labourers.

To sum up we can say that non-freedom and long-duration are not necessarily coterminous categories; Just as long duration does not necessarily mean that the labour relationship is unfree, short duration does not imply that the relationship is free.

Various permutations and combinations of durations and degrees of freedom exist: Periods of employment range from a day to several years and the conditions of employment reflect varying degrees of freedom for the employee (from full freedom to near slavery.) Wages are paid in kind, in cash, as crop shares, as perquisites and as combinations thereof. Formal written contracts exist side by side with the oral understandings with debt bondage and tie in allotments thrown in between.<sup>19/</sup> A detailed information on entry and working conditions is thus necessary to permit a proper analysis of the rich and varying diversity of arrangements found in the real world.

Thorner was aware of the inadequacies of "attached"- "casual" distinction in this context. He realised that the complexity of labour relations cannot be captured in a dichotomous classification of casual and attached labour and that a more disaggregated multi-dimensional classification is necessary.

#### Thorner's Classification<sup>20/</sup>

He suggested that a basic distinction be made between "free" and "unfree" labour. In defining freedom/non-freedom he referred to freedom of choice of employer [i.e., our "entry condition"] and also to 'freedom to leave at the end of the contract.' These two conditions of freedom may be mutually consistent or they might not be. As pointed out earlier a loan during the contract for instance might hamper the workers' freedom to leave at the end of the contract period. Therefore both the conditions of entry and of exit should be considered indetermining whether the situation is "free" or "unfree."

Within the group of "free" labour relationships, he suggested a further distinction between four subgroups according to the length of the period of service:

- i) arrangements which continue for a year or more;
- ii) employment for a single crop season;
- iii) short term jobs, lasting either for a few days or for a single operation; and
- iv) daily employment where workers are hired for one day at a time.

Within the group of "unfree" labour relationships, he suggests three additional sub-groups:

- v) full-time service on annual or more than annual basis;
- vi) "back-and-call" relationships, under which labourers must work for a single master whenever the latter so requires though on days when the master has no work for them, they may seek other employment; and
- vii) types of forced labour in which tenants have to perform a certain number of days of work each year for their landlords at low, nominal or even no wages.

Thorner did not systematically discuss (and also did not include in his categorisation) the precise basis<sup>21/</sup> of these relationships. For example, he did not mention the basis on which a particular employer has a "first claim" on the services of a worker as in category (vi) above. For category (vii) however, it is clear that the land relation or tenancy is the basis of the labour relation. It is interesting to note that there can also be an element of a "first claim" on the services of a

tenant by the landlord in category (vii). Thus the sixth and seventh categories may not really be mutually exclusive.

Thorner assumed that the "beck and call" kind of relationships can only be "unfree" and, therefore, did not include them under "free" labour relationships. Bardhan and Rudra, however, have shown that "beck and call" relationships need not only be based on hereditary or outstanding loans but it can also be associated with current loans taken freely.<sup>22/</sup>

#### Bardhan-Rudra Classification<sup>23/</sup>

Bardhan-Rudra, unlike Thorner, retain the conventional distinction of "casual" and "attached" with modifications to take care of some important nuances. Their classification seems to be based essentially on duration of contract; it does not make any basic distinction between "free" and "unfree" labour with respect to the entry condition. They do, however, refer, at places, to the freedom to work for different employers within the contract period and accordingly distinguish five categories of labourers:

- (1) Totally unattached labourers (or 'casual labourers') - a labourer who enters into a contract with a particular employer for just a single day at a time, different contracts being negotiated on different days, in principle with possibly different employers, the contract for one day with one employer not having any influence on contract with another employer on another day;
- (2) Totally attached labourers (or farm servants) - Labourers with contract duration of around a year, and almost the whole



year they have to work full-time exclusively for their employers;

(3) Semi-attached labourers (Type 1) - they are attached to an employer for part of the year, but for the major part of the year they have the freedom to work for other employers;

(4) Semi-attached labourers (Type - 2) -

They are obliged to work for the employer, whenever called for a stipulated number of days in a stipulated period;

(5) Semi-attached labourers (Type - 3) -

They are obliged to work for the employer whenever called for an unstipulated number of days over an indefinite period.

For all these categories they also have information regarding the basis of the labour relation (credit, patron-client relation, land allotment) and other working conditions like rate, mode and periodicity of wage payment, interest free loans etc.

The major dimension missing in their classification, as pointed out earlier, is that of "freedom" of the labourers with respect to entry condition. While it is possible that in the region surveyed by them, the incidence of "unfreedom" for workers to choose employers may be small (and this is the impression gathered from their papers on the subject), this dimension must be an integral part of any scheme of classification which is meant to be of general application. Thorne rightly stressed this aspect but his classification would become more meaningful and useful by bringing in, besides freedom and duration of contract, the nature of the land, credit and other social relations between worker and employer.

Elements of a modified classification scheme on this basis are presented below:

The basic distinction is in terms of the Entry condition: viz., the freedom to choose an employer. This points to a division of labourers between two broad classes viz, "free" and "unfree".

Within these two classes a further distinction should be made in terms of duration of contract, i.e., the period for which the worker commits his labour supply to a particular employer.

- i) a year or more;
- ii) a season;
- iii) a few days or for an operation;
- iv) for stipulated number of days in a stipulated period, whenever called;
- v) for unstipulated number of days over an indefinite period, whenever called; and
- vi) a day at a time.

The last category may not be necessary for an "unfree" labourer.

A third dimension of classification is intended to capture the basis, if any, of the labour contract in the worker's relation with his employer in the land and credit markets as well as on the social plane:

- i) land relation as a basis of labour relation:
  - a) Tenancy Relation;
  - b) tie-in allotment - small plot of rent free land for cultivation;
  - c) rent free homstead land; and
  - d) combinations of (a), (b) and (c).

- ii) Credit Relations as a basis of labour relation:- through loans current, hereditary or others;
- iii) Traditional, social or customary ties, as the basis of labour relation - by birth and/or custom and/or caste.
- iv) Land and credit relations and various combinations of the three aspects mentioned above.

This categorisation is <sup>operationally</sup> / difficult for, while it is relatively easy to find out the existence of relations outside the labour contract, it is not easy to establish how far they affect the latter.

Finally information regarding various aspects of working conditions should / also be collected and classified for each of these categories of ~~the~~ labour. Under working conditions the following information is relevant:

- i) Rate, mode and periodicity of wage payments;
- ii) Whether, and in what manner, wages under the employment contract are adjusted against the debt, etc. if that is the basis of the employment;
- iii) Nature of work and working hours of various categories of labour;
- iv) Existence/~~non-existence~~ of advance payments, interest free or other consumption loans. In what way these systems affect the freedom of the employee to quit during the contract or even at the end of it;
- v) Freedom to work for others during the contract period, when no work at the employer's farm, particularly for those employees who are on relatively long term regular contracts;

- vi) Relationship between each category of employer-employee arrangement and the employment of the family members of the employee and the like.

This classification is put forward as a tentative one and only indicates directions on which a more satisfactory scheme of classification for collecting data would seem necessary for better understanding of the working of the rural wage labour market.

Since this kind of classification is not presently available, the focus of our subsequent discussion is per force limited: we shall be largely concerned with exploring the reasons for the wide variations in the incidence of "attached" labour defined in terms of long duration of employment, and the manner in which they interact with the "casual" labour market. Such an effort, though of limited value, seems nevertheless useful because "long duration" wage labour contracts are quantitatively significant and have received little attention in the literature on rural labour markets.

#### Notes and References

- 1/ Agricultural Wages in India, Vol.I, p.400, quoted in Daniel Thorner and Alice Thorner (1962), Land and Labour in India, Asia Publishing House, p.177.
- 2/ Agricultural Labour Enquiry (1950-51), Report on Intensive Survey of Agricultural Labour, Vol.I (All India), Ministry of Labour, Government of India (1954), p.21.
- 3/ See Thorner and Thorner (1962), op.cit., p.177-178.
- 4/ Agricultural labour in India, Report on the Second Agricultural

Labour Enquiry, 1956-57, Vol. I (All India); Labour Bureau, Ministry of Labour and Employment, Government of India (1960), p.408.

5/ Ibid., p.38.

6/ Interestingly, this does not at all figure in the attempt to explain the differences in the percentage of attached labour between the two Enquiries. The reason mentioned in the Second ALE report was the decrease in tenancy and ~~some~~ resumption of cultivation by big landholders with the help of permanent farm hands because of the enactment of tenancy laws which provided for conferment of occupancy rights. See, Second ALE Report (1960), op.cit., p.62.

7/ Sarvekshana (1978), Vol.II, No.2, October, p.35.

8/ Ibid., p.43.

9/ Thorne and Thorne (1962), op.cit., p.179.

10/ Thorne and Thorne (1962), op.cit., pp.21-22.  
These arguments have been re-emphasised in Pranab Bardhan and Ashok Rudra (1980), "Types of Labour Attachments in Agriculture, Results of a Survey in West Bengal - 1979," Economic and Political Weekly, August 30,

11/ Sarvekshana (1978), op.cit., p.43.

12/ These kinds of labourers are found by Bardhan and Rudra (1980), whom they called semi-attached labourers of type 3, op.cit.

13/ Bardhan and Rudra (1980), op.cit., pp.1479.

14/ The Table was compiled from the Reports on the Intensive Type Studies on Rural Labour in India (1967-69), Labour Bureau, Simla, 1979-80. These studies were conducted by the labour Bureau at the village level. Twenty two districts were selected all over the country and from each district three villages were selected. The selection of villages was purposive - there were three kinds of villages which were selected from each district:

- i) villages which were near an industrial town;
- ii) villages where community development programmes have been extensively used; and
- iii) villages for which neither of the above two conditions was satisfied.

For the agricultural and nonagricultural labourers of these villages information was collected about wages, employment, alternative employment opportunities, migration etc.

Chapter 7 of each of these district reports are devoted to attached labourers in the villages studied. The definition used is the same as in the Second ALE. A lot of information about attached labourers is provided in these chapters. We compiled the above table on the basis of this information. Only 17 of the 22 reports were available to us. In compilation the absence of information on a particular characteristic <sup>this characteristic did not exist in that village;</sup> was not taken to mean that ~~only~~ when the report specifically stated the absence or presence of some characteristic, it was included in the table.

- 15/ This statement is based on the information given in Intensive Type Studies on Rural Labour in India, Ibid, Ch.7.
- 16/ Bardhan-Rudra (1980), op.cit., p.1478.
- 17/ Bardhan-Rudra, (1980), op.cit., p.1479.
- 18/ Semi-attached labour type 2 & 3 of Bardhan-Rudra study also come in this category.
- 19/ Information regarding infinite varieties of contracts are contained in:
- i) Thorner and Thorner (1962), op.cit., ch.3, pp.31-39.
  - ii) First ALE Report (1954), op.cit.;
  - iii) Second ALE Report (1960), op.cit.;
  - iv) Indian Journal of Agricultural Economics (1957), April-June; IJAE (1948) March/April.
  - v) Reports on Intensive Type Studies on Rural Labour (1979-80) and other micro studies.
- 20/ Thorner and Thorner (1962), op.cit.,
- 21/ By "basis" of employment we mean, whether employer-employee relations is based on certain other relations, or it is an independent relation. We are here primarily referring to land, credit and other customary or caste relations.
- 22/ The existence of land and/or credit relations, as a basis of employment does not necessarily mean that the employee is unfree - he may of his own free will take a loan or tie-in-allotment and agree to work for the employer in return. Customary or traditional relationships as a basis will however, always signify unfreedom for the employee.
- 23/ Bardhan and Rudra (1980), op.cit.

## Chapter 3

### DETERMINANTS OF "ATTACHED" LABOUR USE

We have seen in the earlier chapter that the concept of "attached" labour has two connotations - namely, the extent to which the worker is free to choose his employer and the duration for which he commits his labour to a particular employer. It is apparent that the various surveys fail to capture both these dimensions in a satisfactory manner. Many of the enquiries (notably the ALE, NSS and the Labour Bureau studies) seem to capture the second aspect - namely duration of commitment. Given the nature of the data our subsequent discussion is concerned primarily with this aspect and we shall use the term "attached" labour to denote labourers who are employed on relatively long term (seasonal or annual) contracts.

In this chapter we explore the economic factors influencing the employment of "attached" labourers in the above restricted sense and examine how far they can explain observed inter-regional variations in the use of such labour. We are aware of the fact that in certain regions the use of "attached" labourers is also a part of a socio-cultural tradition. In so far as customs and traditions embodied in the social structure govern the form of labour utilisation, explanatory hypotheses in terms of purely economic variables may be somewhat misplaced. It is arguable, however, that customs and tradition cannot for long be out of line with the dictates of economic necessity. Even if one does not accept this view, it is legitimate to examine how strongly economic factors influence employment of "attached" labour.

### The Demand Dimension

On the demand side, there are two distinct factors affecting the use of "attached" labour: (a) The level and seasonal pattern of total labour requirements and (b) the extent of dependence on wage labour. The former is primarily a function of cropping pattern and cropping intensity. Some crops are more labour intensive than others: paddy for instance requires much more labour input than say millet or oilseeds. The mix of crops, which in turn depends in large measure on agro-climatic conditions as well as on the extent and quality of irrigation, thus affects total labour requirements. For a given crop pattern, however, labour input can vary widely depending on the level of fertiliser use, the care with which the crops are cultivated and also on the techniques used in the cultivation operations.

Cropping intensity - which is a measure of how many crops are raised on a piece of land in a year - affects both total labour requirements, and, more importantly its seasonal distribution. The higher the cropping intensity, the more evenly distributed the labour requirements will be over the year. The relationship is however complex. Though a perennial crop occupies the land throughout the year, it may not involve a higher total labour input, even if its labour requirements are spread out more evenly across the year. Thus in Kerala, a hectare of coconut is estimated to need 82 mandays (mostly for plucking the nuts which is done five-six times a year), compared to 260/days for paddy cultivation in an agricultural year. <sup>man-</sup> <sup>1/</sup> Brennan, reports that in South Gujarat villages a shift from sugar cane (a 12-18 month crop), to perennials like mangoes led to a drastic



decrease in the employment of "attached" labour particularly on annual contracts; and such "attached" labour employment which persisted was dominated by short term contracts.<sup>2/</sup>

Cropping pattern and cropping intensity, moreover, are not mutually independent; a cropping pattern characterised by a large number of shorter duration crops is likely to have a different level and seasonal pattern of labour input compared to a system of perennial crops. Irrigation and cultivation techniques in turn may also affect cropping pattern and intensity of cropping apart from affecting the labour requirements on their own. The effect of these latter factors however are also felt partly through the role they play in determining the cropping pattern and intensity.

The seasonal distribution of labour requirements can range from a pattern marked by a high peak of demand concentrated in a short time to a relatively flat profile characterising more or less constant level of labour use over the year. Typically, the period of employment of the attached labourers will be much shorter in the former case. In situations where cropping intensity and pattern require a steady supply of labour throughout the year (with no sharp decline or prolonged lull in the farm work) one can expect that, other things being equal, the farmers ~~would be~~ <sup>are</sup> more likely to be interested in attached labour contracts.<sup>3/</sup>

The seasonality in labour requirements is particularly important in determining the use of attached labour in so far as one of the main reasons for hiring labour on seasonal/annual contracts, even when there is sizeable rural unemployment, is the desire to secure labour supply for peak seasons. Thus Bardhan suggests that the time-bound nature of peak

season operations and the fact that production (yields) depend on being able to complete them on time, makes assured and timely supply of workers at peak seasons crucial. It becomes important for the employer, ~~whose~~ ~~family labour is inadequate to meet the requirements~~ to "attach" a minimum number of workers even if they are not fully utilized throughout the year. From the employer's point of view, these regular or annual farm servants besides guaranteeing labour supply during the critical peak periods, "cut down on training, supervision and recruitment costs", and also take care of the tasks of perennial nature, the importance of which increases with the development of intensive year-round agriculture.<sup>4/</sup>

Given the total labour requirements, the demand for hired labour will depend on the supply of family labour. The adequacy or inadequacy of family labour supply relative to total labour needs is, to an important degree, a function of farm size. The larger the farm, the higher the probability that family labour supply will be relatively less compared to the total labour requirements. The greater this difference, the more important it is for the cultivator to make sure of his labour supply for peak seasons; and in so far as relatively larger farmers are also among the highest income groups in rural areas, their requirements for labour for a variety of services (other than related to production) is also high. It is therefore, to be expected that the employment of "attached" labour will be predominantly a large farm phenomenon. There is ~~much~~ ample evidence to corroborate this: The average number of "attached" labourers employed per farm and the proportion of farms employing "attached" labour increase with the size of the farm. (See Table 1).<sup>5/</sup> Stray evidences of even small landholders employing permanent workers, (when they themselves are not fully employed)

Table 1Holding Size and Employment of "Attached" Labour

/All India/

Size class (code)	Number of Holdings ('000)	Percentage of Holdings Reporting Attached Farm Worker(FW)	Average number of FW per Reporting Holding
(1)	(2)	(3)	(4)
1	6723	6.81	1.30
2	5404	11.15	1.41
3	3221	10.75	1.46
4	10768	16.17	1.51
5	12773	19.63	1.68
6	6716	20.84	1.83
7	3361	25.13	2.19
8	2399	27.63	2.19
9	1297	31.86	2.23
10	1689	33.85	2.19
11	960	38.14	2.36
12	553	41.59	2.32
13	881	55.76	2.72
14	325	62.36	3.42
<b>All</b>	<b>57070</b>	<b>18.96</b>	

Source: NSS, 26th Round, Tables on Landholdings, All India, NSSO, Department of Statistics, Ministry of Planning, Government of India, Table 21, p.90.

might be due to their peculiar family size or composition (e.g., small size relative to area cultivated or high female-male ratio etc.). It is also probable that small farmers pay a lower wage to the regular worker in return for less work and he is allowed to work for others whenever there is no work on the employer's farm.<sup>6/</sup> This kind of hiring, however, is not common.

The size of holding, however, is not always a reliable basis for judging the likely demand for annual or seasonal wage labourers. Even within the same area the quality of land (and to some extent production techniques) are systematically correlated to the size of holdings. If we want to understand the variations in the forms of labour use across regions, the average size of holding is even less reliable. For one thing the differences in soil, climate and irrigation are much greater across regions. Another reason is that the number of large holdings (who are most likely to use wage labour on seasonal or annual contracts) depends both on the average size of holdings and the distribution of land. A more unequal distribution of land implies that a larger proportion of land is being operated by relatively big farmers and that the supply of family labour relative to total labour requirements will be less. Consequently, it should lead to a higher demand for hired labour in general and attached labour in particular.

In general, it can be said that in areas with larger average size of farms, more unequal land distribution, higher cropping intensity and more labour intensive cropping patterns, are likely to have a relatively high incidence of "attached" labour. But "attached" labour is itself a heterogeneous category comprising as it does of labourers employed on a continuous basis for a year or more and those employed for short durations of upto

even a month.

Different types of "attached" labour

The process of agricultural production gives rise to two kinds of labour requirements: One that is needed for doing a miscellany of tasks throughout the period of production and the other which is required for peak period operations. The latter generally tends to be relatively specialised. While this distinction is generally valid, the ~~int~~ magnitudes of these two kinds of labour-needs vary depending on the nature of crops grown and the intensity of land use. Typically, "attached" labour on annual contracts will be primarily employed for the jobs of perennial nature and the short term ones for the peak period requirements.<sup>7/</sup>

If the employer does not have work for the labourer throughout the year he would naturally prefer arrangements which assure him of labour supply during critical periods without having to pay for the labourer's throughout the year or season. This is accomplished in a variety of ways: In so far as the employment of regular "attached" workers assures the supply of labour of their family members and relatives for casual work during peak seasons the two purposes are synchronised. The employers can and do seek to bind the family members of their "attached" workers through advance payments, consumption loans and tie-in allotments.<sup>8/</sup> This can also be done by providing work of a casual nature to these family members during the lean season with an implicit or explicit understanding that they will work for the same employer during peak seasons.<sup>9/</sup>

"Attached" workers unlike casual labourers, are used to do a varieties of tasks during their period of contract. For instance in 33 of 37 reporting villages, covered by the Labour Bureau's Intensive Type Studies, "attached" workers were employed on a blanket basis for all kinds of domestic and agricultural work. In fact it is not even specifically mentioned that their employment is only for agricultural work. (see Table 2 below).

Table 2

Conditions of "Attached" Labour Employment

Chara- acteri- stics	Only SC/ST/Backward Castes employed	All kinds of work done at the farm (agricul- tural/non-agricultural/ domestic)
Exist- ence of the Characte- ristics	Number of villages	
YES	24	33
NO	*	4**

\*No information was available in the district reports regarding the caste specificity of "attached" labour employment for the remaining eleven villages which reported the existence of "attached" labourers: (Also see end note 14, chapter 2, for details regarding the compilation of these tables).

\*\*In these four villages "attached" workers ~~are~~ specifically for agricultural work were very few, most of them were employed for all kinds of jobs.

Source: District Reports in Intensive Type Studies on Rural Labour in India. (Information collected from chapter 7 of these reports.)

Labour Bureau, Simla, 1967-69.

Even in the remaining four villages, only few attached workers were employed specifically for agricultural work, the rest being used for all kinds of jobs like in other villages. When we juxtapose this information with the fact that a large number of villages reported both short term and long term attached workers (Table 3 below), it is clear that neither the annual nor the seasonal "attached" workers are specifically employed for particular kinds of jobs.<sup>10/</sup> The distinction between the short term and long term 'attached' workers is nevertheless useful in the sense that the needs of the employer which determine the primary purpose of attachments may get reflected in the nature of attachment in terms of duration and other characteristics.

Table 3

Duration of "Attached" Labour Contracts

<u>Duration</u>	<u>Number of villages</u>
Yearly or more	19
Monthly/short <del>time</del> term	4
Yearly and short term	18
Total villages reporting attached labourers	41

Source: Same as Table 2.

The demand for "attached" labour can also be influenced by the nature and extent of tenancy as well as certain social customs. Given the farm size, land distribution and cropping intensity, etc., tenancy relations might affect adversely the hiring of "attached" workers. For the more widespread tenancy is, the less will be the hired labour demand in general and demand for "attached" workers in particular. A tenant cultivator usually faces the alternative of being an agricultural labourer and often being a sharecropper can retain only a stipulated crop share and hence is generally constrained to use more family labour and less hired labour than an owner cultivator under otherwise comparable conditions. But here again the size of the farm of the tenant is very important because the extent of substitutability between family and hired labour is strongly influenced by the total labour need determined partly by farm size and partly by cropping pattern.<sup>11/</sup> The larger the size of tenant farms the more are the possibilities of the tenants hiring "attached" workers. The importance of crop pattern is highlighted by Kalpana Bardhan who found a positive correlation between area under tenancy and proportion of hired labour to total labour in tobacco zone while a negative one for the paddy zone: The tenant cultivator in the tobacco zone also used more hired labour than an owner cultivator with similar sized farm. The reasons given by her are: higher average size of tenant farms under tobacco cultivation than under paddy cultivation; higher labour intensity of tobacco than paddy cultivation; and the particularly high labour intensity of tobacco (virginia) grown on tenant farms.<sup>12/</sup>



It should also be mentioned that in many areas certain land owning castes traditionally do not do manual labour at all or do not work in certain operations. Such customs not only effectively reduce the supply of family labour but also the substitutability between hired and family labour. Both would tend to increase the use of hired labour generally. Most of the Intensive Type Studies Reports on Rural Labour mention that it is a common feature for people belonging to such castes and communities to employ permanent hands for supervisory as well as other manual requirements.<sup>13/</sup>

#### The supply dimension

We have so far considered factors influencing the demand for "attached" labour. On the supply side a wage labourer has the option of working either as "attached" worker or as a "casual" labour. And provided the market is integrated and competitive there is no particular reason why supply factors should exert any influence. In so far as "attached" workers get more work and greater assurance of work, one might simply expect the relative wage rates of the different categories of labour to get so adjusted that there is no significant difference in the total incomes which a worker can earn in an year.<sup>14/</sup>

this

However, reasoning automatically becomes irrelevant if the worker is under any kind of bondage since in that case the worker has no choice but to become an "attached" worker. Given the poverty and unemployment among agricultural labourers, their availability for "attached" labour employment will not be a problem, as it implies a relatively more secure employment and guaranteed income. Those agricultural labourers may be

particularly interested in this kind of employment who are landless and who do not have other resources to fall back on. We have already mentioned that "attached" labour employment helps in getting employment of casual nature for other family members and in getting loans etc. - these may provide added incentives.

One important point, however, is the caste specificity of "attached" labour employment in certain areas. Of the 41 villages reporting "attached" labour in the reports of Intensive Type Studies 24, reportedly have scheduled caste, sub-castes, or other backward castes people as "attached" labourers (see Table 1 above). In these areas labourers belonging to other castes were not available for attached labour employment. Thus in those areas where only labourers belonging to particular caste/castes are available for "attached" labour contracts, the supply will also be restricted to labourers belonging to those castes.

The land distribution should also operate on the supply side. The more equal ~~the~~ distribution of operational holdings will dampen not only the demand for "attached" labour but also the supply of hired labour since the cultivators will be spending more of their time on their ~~own~~ own farms. The supply of regular farm servants will be particularly curbed because under the above conditions cultivators will not be available for a continuous stretch of time to work on others' farms. However, the supply of wage labour depends not only on the land distribution but on the incidence of landlessness and the average size of cultivated holdings. Where a large number of landless workers exist the supply for wage employment will be larger; Similarly where the population pressure on land has reduced the average size of holdings to a low level

the supply of wage labour could be large even if land were equitably distributed among cultivators. In any case, it is not so much the supply of wage labour per se, but the adequacy of this supply relative to the requirements, especially in peak period, which is likely to have an influence on the use of "attached" labour. This influence operates essentially via demand in that where there is ample supply of wage labour in the peak season relative to the needs of the large farms, these farms do not need to have workers on seasonal or annual contracts, in order to safeguard their peak period requirements.

In the light of the foregoing discussion it is possible to formulate certain concrete hypotheses on the determinants of "attached" labour use. We have argued that demand conditions are far more important than supply factors. The major aspects of demand relevant in this context are total requirements of labour, the seasonal distribution of these requirements and the extent of dependence on wage labour, especially in peak seasons.

At the outset, before we spell out our formulations regarding the determinants of "attached" labour use for empirical testing, the limitations of our exercise should be briefly stated. The non-availability of data on "attached" labour use proved to be very constraining. For data on "attached" labour use we have used three sets of data: Agricultural Labour Enquiry data (1956-57); NSS 26th Round Land Holdings data (1971-72) and NSS 27th Round Unemployment-Employment data (1972-73). <sup>15/</sup> The nature of the available data also conditioned, as we shall see later, the specification of various independent variables. The available data are often from different sources, using categories not always appropriate and relating to different years

(e.g., the Census data is, in principle, not compatible with sample-survey data). These problems combined with the small number of observations in two of our data sets ~~may~~ further condition our empirical exercise. The details of the data sets and of the various problems associated with them are discussed in the appendix to the chapter. These factors are likely to weaken the relationship between "attached" labour use and explanatory variables. Last, but not the least, the use of simple linear regression equations may not conform to reality. The complexity of ways in which the various relevant variables are interlinked with each other may be beyond the scope of a simple linear equation. However, there is no a priori basis for choosing a specific functional form for capturing this complexity. All these limitations should be kept in mind while interpreting the results of our empirical exercise.

With these qualifications let us now discuss our formulations to capture the determinants of "attached" labour use. Ideally, to capture the total requirements of labour one would have used various factors, like irrigation, rainfall and its distribution, fertiliser use etc. which affect the total labour demand. But due to low number of observations in our data sets and non-availability of data we have used productivity, i.e., gross value of output per unit of gross cropped area to capture the total labour requirements.

It would be ideal if one could study the seasonality in demand and even its level by crops and seasons but in the absence of the relevant information we have used cropping intensity to capture the seasonality of labour requirements. Moreover, cropping intensity also affects the

total labour requirements as we have discussed earlier.

To take care of the dimension of wage labour dependence land distribution has been used as a proxy. We have argued earlier that a more skewed land distribution implies that the likelihood of family labour supply being inadequate with regard to total labour needs would be more, and hence the dependence on wage labour would be relatively more. Here again the problems arising from not capturing the inter-size class productivity differences and hence inter-size class aggregate demand differentials remains. Since we are concerned with operational holdings, whether the holding is operated by a tenant or by an owner cultivator will also make a difference. This aspect is also not captured. Three indices of land distribution, however, have been used: Lorenz ratio excluding landless households; proportion of total area operated by top ten per cent households; and proportion of total area operated by top 5% households. The formulations arrived at thus is:

$$\frac{AL}{A} = a_1 + a_2 CI + a_3 ID + a_4 P \dots (1)$$

where

AL: "Attached" labour (number)

A: Total area operated

CI: Cropping Intensity

ID: Land Distribution

P: Productivity, Gross value of Output per unit of Gross Cropped Area.

But one thing which is not captured in the above specification (eq.1) is the supply aspect of agricultural labour which might affect the demand

for "attached" labour. In other words, if the supply of agricultural labour in a region is very high relative to the family labour supply in a region of the big landholders, whom we have already identified as the major source of "attached" labour demand, then ceteris paribus, the demand for "attached" labour will get reduced. Thus to capture the relative abundance of agricultural labour supply with respect to the family labour supply of the top land-holders some variable had to be included in the specifications. The ratio of agricultural labourers to the family labour supply in farm of the households operating top 40 to 50 per cent of the area cultivated would be appropriate for this purpose. But since such data for family labour supply was not available we had to be content with "agricultural labour as a ratio of the total number of households at the top end of the distribution operating 40% of land in each region." The specification (1) was correspondingly extended thus:

$$\frac{AL}{A} = a_1 + a_2 CI + a_3 LD + a_4 P + a_5 S \quad \dots \quad (2)$$

where, S is the total number of agricultural labourers as a ratio of the total number of households operating top 40% of the cultivated land, the other variables being the same as in equation (1).

Since the relevant data was available for all the data sets, equation (1) was put to test using all the three data sets, Equation (2), however was put to test only for the data set III (NSS-1971-72), because the required information was available for this set and also because other data sets had far too few observations to run a regression with four independent variables.

The regression results (table 4) show that the explanatory power of both the equations is not high - the  $R^2$  being fairly low. It is noteworthy though, that given the high number of observations in data

Table 4

Regression Results - Linear Equations

Regression Number	Data Set	Number of Observations	Dependent Variable	Constant Term	Cropping Intensity
(1)	(2)	(3)	(4)	(5)	(6)
1	Data set-I (ALE-1956-57)	11	$\frac{\Delta L}{M} \left( \frac{AL}{A/M} \right)$	-0.0067 (1.2245)	0.001* (2.1962)
2	"	"	"	-0.0020 (0.3927)	0.0001** (1.7808)
3	"	"	$\left( \frac{AL}{A/T} \right)$	-0.0117 (1.4297)	0.0002* (2.1736)
4	"	"	"	-0.0051 (0.6742)	0.0002** (1.7845)
5	Data Set II (NSS-1972-73)	"	$\left( \frac{AL}{A/T} \right)$	-0.3092 (0.8096)	0.0024 (1.0369)
6	"	"	"	-0.2138 (0.6988)	0.0025 (0.9986)
7	"	"	"	-0.1830 (0.7402)	0.0020 (0.9382)
8	"	"	$\left( \frac{AL}{A/M} \right)$	-0.2359 (0.8289)	0.0019 (1.0825)
9	"	"	"	-0.1724 (0.7602)	0.0020 (1.0757)
10	"	"	"	-0.1594 (0.8803)	0.0016 (1.0431)
11	Data Set III (NSS - 1971-72)	39	$\left( \frac{AL}{A/T} \right)$	-0.1310 (0.7895)	0.0033* (2.0155)
12	"	"	"	-0.1040 (0.8389)	0.0033* (2.0442)
13	"	"	"	-0.1627 (0.8661)	0.0033** (2.0140)
14	"	"	"	-0.1277 (0.9277)	0.0033* (2.0442)

contd...53

Table 4 contd..

Regression Number	Coefficients of Independent Variables				No. of Agri. Labourers as a ratio total No. of Households operating top 40% of the cultivated land	R <sup>2</sup>
	Area Lorenz Ratio (Excluding Landless Households)	Land Distribution Indices Proportion of Area Operated by top 10% households	Proportion of Area Operated by top 5% households	Productivity Index (Gross value of output per unit of GCA)		
(1)	(7)	(8)	(9)	(10)	(11)	(12)
1	0.0112 (1.2927)			0.0000 (0.4977)		0.2969
2		0.0001 (0.4443)		-0.0000 (0.1151)		0.1529
3	0.0198** (1.5296)			0.0000 (0.7896)		0.3251
4		0.0001 (0.7659)		-0.0000 (0.0290)		0.1691
5	0.5627 (0.8773)			0.0001 (0.6699)		0.0500
6	<del>0.0025</del>	0.5569 (0.7873)		0.0000 (0.4945)		0.0313
7			0.6877 (0.8580)	0.0001 (0.7935)		0.0459
8	0.4360 (0.9130)			0.0000 (0.6939)		0.0642
9	<del>0.0025</del>	0.4559 (0.8696)		0.0000 (0.4894)		0.0549
10			0.6043 (1.0294)	0.0000 (0.8505)		0.0905
11		0.0041 (0.9247)		0.0001** (1.3230)		0.2295
12			0.0054 (1.0456)	0.0001 (1.1931)		0.2346
13		0.0053 (0.9632)		0.0001** (1.3416)	-0.0018 (0.3771)	0.2108
14			0.0071 (1.1083)	0.0001 (1.2017)	-0.0021 (0.4570)	0.2175

- NOTE 1. In parentheses under the coefficients are t values.  
 2. \* & \*\* respectively mean significant at 5 and 10 per cent level.  
 3.  $\left(\frac{AL}{A}\right)_M$  and  $\left(\frac{AL}{A}\right)_T$  respectively signify male and total attached labour per unit of area.



set III, it compares well with other data sets so far as the explanatory power of the equation is concerned. But bearing in mind the limitations of the data we cannot consider it to be a satisfying test of our hypothesis. The results (Table 4) are presented in the spirit of preliminary attempt to see whether the explanatory variables are associated with the use of "attached" labour in the way our hypothesis would imply. Looking at the regression for individual data sets, we find that sets I and III provide results which are more in accord with our hypothesis than set II. It is noteworthy that the coefficients have the expected signs (see Table 4) in most cases. The only exceptions are regressions (2) and (4), where the productivity coefficients have negative signs.

Looking at the individual variables, we find that cropping intensity not only has the expected sign in all the three sets, but also turns out to be statistically significant in data sets I and III. (See Table 4, regressions 5 to 10, columns 6). Therefore, cropping intensity, other things given, does seem to be a significant variable affecting the employment of "attached" labour positively.

As mentioned earlier, for land distribution three indices were used: Lorenz Ratio (without landless households); area operated by top ten percent of the holdings and area operated by top five percent of the holdings. The latter two should seem more relevant in as much as top landholders are the ones who primarily employ "attached" labourers. But in the regressions the Lorenz Ratio as a variable, does much better for data set I, while for data set II, there is not much to choose between the three indices. (See Columns Nos. 7, 8 and 9). In all the cases the sign of the coefficient conforms to expectations: With more skew land distribution, other things being given, the employment of "attached" labour would tend to increase.

The coefficients of productivity also have the expected positive sign, except in the two cases mentioned above. The t-values are also quite high for the data set III (see regressions 11 to 14, column 10). It would seem that in more productive areas, other things being equal, the hiring of "attached" labour will be relatively more prevalent.

Equation 2, which according to us provides a relatively more complete picture of the reality, also provides results which are similar to the results of equation 1. All the coefficients have the expected signs; the new variable 'S' also has the expected negative sign, signifying that a relative abundance of agricultural labour with respect to the top land holders will have a depressing effect on the attached labour employment.

Besides we also find that with the inclusion of the new variable that t-values of the productivity and the land distribution variables improve (see regressions 11, 12 and 13, 14 columns 8, 9 and 10), while cropping intensity continues to be significant.

Thus, in general, a higher cropping intensity, more skewed land distribution and higher productivity seem to have a positive effect on employment of "attached" labour while a higher labour supply relative to the needs of the top land holders has a negative effect. The relations, however, do not seem to be very strong - whether this reflects the imperfections in data (due to inaccuracies or due to inappropriate categories) is a matter which cannot be settled without further careful investigation.

Notes and References

- 1/ These figures were computed by Jemal Unni for her M.phil. dissertation from the primary schedules of "The Comprehensive Scheme to Study the Cost of Cultivation of Principal Crops in Kerala," Ministry of Agriculture, Government of India, for the years 1973-74 for paddy and 1974-75 for coconut. I am thankful to her for making them available to me.
- 2/ Breman, Jan (1974), Patronage and Exploitation. Changing Agrarian Relations in South Gujarat, India, University of California Press. Breman has a very interesting discussion on how the cropping pattern can affect the hiring of attached labour. He traces the changes in the cropping pattern of two South Gujarat villages after the First World War and finds that in the village where cropping pattern shifted in favour of mangoes from labour intensive crops like sugar cane, ginger, spices etc. the proportion of permanent servants declined. The comparison of the two villages also provides an interesting picture: the village which required labour throughout the year retained a larger proportion of attached labour while in the other the proportion declined. This was essentially, Breman argues, because of the differences in cropping pattern. (See, especially pp.42-43, pp.74-75, and p.176).
- 3/ Lenin wrote, as we had mentioned in the first chapter also, that with commercialisation and development of agriculture more and more "top groups of farms (are) based on regular employment of wage labour; wage labour is more evenly distributed over the seasons of the year, and it becomes possible to dispense with the more costly and more troublesome hiring of day labourers."  
Lenin V.I., Development of Capitalism in Russia. Collected Works, Vol.3, (Progress Publishers, Moscow, 1972) p.109.
- 4/ The hypothesis is contained in many of the Bardhan's articles. See for example, Bardhan P (1979), "Wages and Unemployment in a Poor Agrarian Economy: A theoretical and Empirical Analysis", Journal of Political Economy, June.
- 5/ See also, Rudra A and R. Biswas (1973), "Seasonality and Employment in Agriculture", Economic and Political Weekly, Review of Agriculture, September 29.
- 6/ It has been argued that these kinds of arrangements are in favour of both the employers and employees. Krishna Bharadwaj, for example, contends:  
 "...Part of the explanation may be that the semi-attached servants ensure an adequate supply of labour during the peak periods when labour ~~input~~ input is crucial and when wages for casual labour tend to be high. Also the small operator may himself want to take advantage of outside employment in the busy season earning a higher casual

wage while reducing his work load on his own farm during that period. Employment of permanent servants thus appears to minimise risks for both. The permanent farm servant is assured of some stable minimum income while the farm operator ensures adequate labour supply (or can achieve some flexibility in his own labour input during peak periods). The latter factor would be more important if small farms were characterised by small number of family members." (pp.25-26). Krishna Bharadwaj (1974), Production Conditions in Indian Agriculture (Hatsuzettypusf (Cambride University Press).

- 7/ These statements are based on information contained in "Intensive Type Studies on Rural Labour in India," Labour Bureau (1967-69), ch.7 of district reports, For similar conclusions see also Pranab Bardhan and Ashok Rudra (1980), "Types of Labour Attachment in Agriculture", Economic and Political Weekly, August 30, p.1479.
- 8/ See for evidence, Sheela Bhalla (1976), "New relations in Production in Haryana Agriculture," Economic and Political Weekly, Review of Agriculture, March and Brennan (1974), op.cit. An excerpt from Brennan:
- "Employing one or two servants (attached) means having a cheap, fixed nucleus of labour and a claim to temporary extra hands, from although the agreement covers the servant alone, the latter is expected to mobilise his relatives for the benefit of his master when they are needed. Thus, while reducing the responsibility the landlord can enlarge and contract his stock of labour at short notice." (p.192). Also see, p.54.
- 9/ Bardhan-Rudra evidence shows that "relatives of attached workers are given priority in hiring by the employer when the lean season agricultural work opportunities are scarce. This is clearly of some advantage to the labourer; at the same time the entire family's dependence on a single employer for employment increases its vulnerability" Bardhan-Rudra, op.cit., End note 7, p.1484.
- 10/ For supporting evidence, see also Government of India, Labour Bureau, Agricultural Labour in India: Report on Second Enquiry 1956-57, All India, Vol. I, (1960), pp.75-87, particularly p.76.
- 11/ See ~~also~~ a detailed and insightful discussion on the substitutability of labour between family labour and hired labour in Krishna Bharadwaj, op.cit.
- 12/ Kalpana Bardhan (1970), "Wage and Employment of Agricultural Labourers in India - Some cross-sectional Analysis," (Mimeo.) Agricultural Economic Research Centre, University of Delhi, pp.13-14 and p.19.
- 13/ Reports on Intensive Type Studies on Rural Labour (1967-69), op.cit., ch.7. Brennan also provides information regarding landlords who

belong to certain specific castes and consider using a plough or other physical work defiling. He writes regarding Anavil Brahmin landlords:

"A landlord's need of the services of a hali<sup>s</sup> (attached labour) was largely inspired by his desire to work on the land as little as he could, to be exempt from the activities, which he thought disagreeable and in any case indignified. In other words, a "hali" was taken primarily to replace the labour of the master and the members of his household, not to enlarge the total effect of his contribution." (p.46).

This was in early 20th century. According to him this kind of reasoning gave way to economic reasoning and "when the economic tide turned, however, the number of halis declined and the masters were compelled once more to put their hand to the plow." (p.52).

See for details Berman (1974), op.cit., especially pp.14-15, p.46, p.53 and p.178.

- 14/ This statement about the supply would be correct only if the total demand for hired labour is inadequate in relation to supply. If it is not, then attached labour will obviously be given a higher wage.
- 15/ Definitions used in AIE and NSS 27th round have already been discussed in chapter 2, in NSS Landholding Survey (26th Round—1971-72) Reports "attached" labour has been defined as those workers who are more or less in continuous employment of the management of the operational holding and are under some kind of a contract during the period of employment. For other details of the data, see tables 1, 2 & 3 in the Appendix to this chapter. The limitations of the data are also discussed there.

## Chapter 4

### "ATTACHED" AND "CASUAL" LABOUR: INTERRELATIONS

"Attached" labourers, being part of the general class of hired labour, their role cannot be properly understood except as a part of the market for wage labour as a whole. Let us assume for a moment that we have only two broad categories of hired labour -- "attached" labourers and casual labourers, that the two categories of labour are freely substitutable both on the demand and on the supply side, and that the market is competitive. Under these conditions the wage labourer has a choice of offering to work as an "attached" worker with a particular employer or to work on a casual basis. If the wage rates are the same for both categories, a worker stands to get a higher, and in any case a more assured, annual income by opting for the "attached" (i.e., seasonal/annual) labour contracts than for the casual labour. Since "attached" workers, as a rule, are employed for more days than casual labour, this situation should lead to a competition among labourers whereby the wage rates of the "attached" labourers are pushed down so that the total income which can be earned by entering into "attached" labour contracts is brought closer to the income level under casual labour contracts. The prospects of such competition are greater if, as is the case over most of rural India, the available work is inadequate to furnish full employment to all labourers.

From the employer's view point, the choice is more complicated and depends, among other things, on his family labour supply relative to total requirements, the seasonal distribution of the requirements of wage labour

and the magnitude of the gains from getting more assured labour supply during the peak season and from having a set of workers who can be depended on to do their tasks efficiently without close supervision. As pointed out in the previous chapter, it is the relatively large farmers who find employment of "attached" labour worthwhile. Since their number is typically small relative to the total <sup>rural wage</sup> labour force, and given a situation of excess supply of wage labour relative to demand, factors on the demand side would seem far more crucial in determining the relative importance of the two modes of employing wage labour.

The above reasoning rests critically on different categories of wage labour being freely substitutable for one another and on the existence of a competitive environment. These conditions, however, may not — and in fact are not — fulfilled in reality. We have already noted that "attached" labourers are hired on annual and seasonal contracts and that labourers employed on casual basis are meant to perform different tasks at different terms and are therefore not ~~very~~ freely substitutable.

The "attached" labourers with a contract period of a year or more are generally employed by relatively large cultivators for doing a wide assortment of farm work<sup>1/</sup> such as bunding, irrigation, preparing compost, tending cattle and even domestic work. Some of these tasks are of a regular nature while others in the nature of odd jobs to be done occasionally. The labourers who can be relied upon to do the above mentioned tasks to a satisfactory standard, at the appropriate time and without close supervision are very useful to the farmers ~~and~~ with a relatively high level of wage labour requirements during the year. There may also be situations ~~xxxxxx~~ when such a labourer is relied upon to supervise the jobs done by

casual workers. Neither casual labour nor short term (seasonal) "attached" labour can meet these requirements as well as an "attached" labourer on an annual contract.

"Attached" labour on a seasonal contract and casual labour may be somewhat more substitutable in that both categories of workers are generally hired for specific tasks during the peak seasons.<sup>2/</sup> But here again there exists a qualitative difference between the two categories: One of the main purposes of hiring seasonal "attached" workers being to assure certain amount of labour supply for peak seasons and to avoid labour hiring problems during these periods. Hiring of casual workers instead of short term "attached" workers may not, therefore, quite serve the purpose.

Clearly, from the employers' view point the extent of flexibility in the type of wage labour used is partly a function of the extent of dependence on wage labour; The greater this dependence the more critical it is for the employer to use annual and seasonal contracts to ensure his labour supply especially in peak seasons. Since the degree of dependence on wage labour increases with the size of the farm, the larger farms will find it advantageous to depend more on workers hired on seasonal/annual contracts. At the other end of the scale, a small farmer has little choice but to use casual labour. He does not need and cannot afford to hire a seasonal not to speak of annual servant. It is noteworthy that casual labour employment on large farms is liable to wide fluctuations unlike on medium sized farms where it remains quite high throughout the year. The reason, it has been argued, may be that the latter employ much less of permanent labour compared to large farms.<sup>3/</sup>



There are also several factors on the supply side limiting substitutability between "attached" and casual wage labour: The preferences of wage labour for casual as distinct from seasonal and annual contracts is to some extent linked with the asset base of the labourers. For instance, workers from families with little or no land (or other productive resource) are more likely to be willing to commit their labour to others on a seasonal or annual basis than workers whose families cultivate some land. The latter may be reluctant to enter into seasonal and annual wage labour contracts because it may cut into the supply of family labour for cultivation of own land during the peak season and thereby reduce the income from family enterprise. The same will be true for a labourer who is self-employed in occupations other than cultivation unless the family size of the household permits one or more family members to go in for such kind of employment. The landed and self-employed (or employed elsewhere) will however be available more freely for casual labour employment.

This is not to say, however, that landed labourers will not accept "attached" labour contracts. They will, particularly if the number of able-bodied in the family are more than adequate to look after the family farm. A lot will also depend on the kinds of contracts which are available, the freedom they entail, and also the timing. What is being suggested is only that, relatively speaking, the supply of wage labour from cultivating and other self-employed households for "attached" labour employment will be less.

Another important factor affecting the supply dimension is the caste specificity of "attached" labour in many parts of the country. We have already seen in Chapter 3 that in many villages the "attached" labourers were drawn from the lowest castes people from higher castes being not

available for such employment even when they have little or no productive resources. Thus social customs can restrict the supply of "attached" labour to persons from specific castes. For casual labour employment on the other hand labourers of all castes form the total supply of labour.

That there are in fact strong preferences on the part of wage labourers as between different type of contracts is suggested by the Bardhan-Rudra survey of West Bengal cited earlier. It is found that most labourers do not want any change in the type of labour contract on which they are presently working:

"... most labourers of different categories in our sample seem not to desire any change from the existing contract duration to any other. More than 90 per cent of the fully-attached workers in our sample report their preference for their present yearly contracts over other types of contracts. Similarly more than 90 per cent of labourers on daily contract (casual or semi-attached) prefer their present daily contracts over other types of contract." 4/

Interestingly most casual labourers, whether with or without land, also expressed no desire to change to other forms of wage contract.<sup>5/</sup>

The labourers' choice between "attached" and casual contracts may also be restricted for other reasons. If the labourer is under some obligation of debt, etc. his mobility from an "attached" labour employment to casual labour employment or to "attached" labour employment with another employer may be directly curtailed. Even otherwise, since the longer term contracts provide more security and continuity of employment they tend to lower mobility as compared to short term ones. The Labour Bureau's intensive studies report that in a majority of cases the long term contracts are renewed while the same is not the case x for short term contracts (see table 1). Similar evidence is

Table 1

Duration of Contracts and Continuity of Employment  
of "Attached" Labourers

Conti- nuity	Number of villages	
	Answered	Not Answered
Dura- tion		
A year or More	24	-
Short term	3	12

Note: See for details about the compilation of the Table, end note 14 Chapter 2.

Source: Intensive Type Studies of Rural Labour in India, Labour Bureau (1966-69), District Reports - information collected from chapter 7 of each report. p.

provided by Bardhan and Iydra also.<sup>6/</sup> This suggests that short term "attached" workers are somewhat more mobile and rotate among employers more as compared to the long term ones. Similarly the degree of freedom the "attached" worker has to work for others during the contract period may also affect his availability for casual employment.

All these factors result in considerable heterogeneity in the rural wage labour market: Limited scope for substitution between different types of contracts and the unwillingness of caste Hindus to work as "attached" labourers in effect means that the predictions on the relative wage rates, employment and incomes of different categories of wage labour as derived from the assumptions of a well integrated and competitive market may not hold.

One might nevertheless expect casual labour wage rates relative to wage rates for "attached" labour to be higher for at least two reasons:<sup>7/</sup>

(a) Since casual labour is used mostly in peak seasons, when labour is relatively scarce, wage rates for casual labour will on an average be higher; and

(b) In so far as the socially and economically handicapped scheduled castes, scheduled tribes and other backward castes acquire the bulk of the "attached" labour contracts, and their employers are large farmers, the latter may be in a position to pay them lower wage rates and/or depress the effective wage rates for this category of workers by extracting longer hours or more arduous work.

The employment of "attached" labour could, however, adversely affect the wages of the casual workers by reducing their bargaining power. The already weak bargaining power of wage labour can be further eroded when they get divided into those having security of employment and those without. The effect is reinforced when family members and close associates of the "attached" labourer get employment of casual nature in the same farm in which he works — a fact which we have already noted.<sup>8/</sup> It has been found that most of the "attached" workers (particularly annual farm servants) do not participate in labour agitations for wage-increases.<sup>9/</sup> "Attached" labour employment can also perpetuate caste divisions within the agricultural labourers if only labourers of a particular caste are available for such employment. It is a fact, as mentioned in chapter 3, that in many places only scheduled castes and other backward castes are available for such employment.<sup>10/</sup>

On the basis of the second ALE data, Ghose<sup>11/</sup> estimated that the wage rates for "attached" labour are lower than those for casual labour in all but one State, namely Bihar. (Table 2). In making these estimates he assumed one female earner to be equivalent to 0.8 male earner and

Table 2

Wage Rates of Casual and "Attached" Male Labour: 1956-57

GHOSE'S ESTIMATES

State	Wage Rates	
	Casual Labour	"Attached" Labour
Andhra Pradesh	0.81	0.46
Assam	1.25	1.11
Bihar	0.39	1.02
Kerala	1.17	0.75
Mysore	0.91	0.81
Madhya Pradesh	0.73	0.55
Orissa	0.87	0.61
Punjab*	1.25	1.29
Rajasthan	0.98	0.45
Madras	0.76	0.46
Uttar Pradesh	1.03	0.70
West Bengal	1.12	0.99
Bombay	-	-

\*Includes Haryana.

Source: Ajit Kumar Ghose, "Wages and Employment in Indian Agriculture," World Development, May/June 1980, Vol.8, No.5/6, p.423.

one child earner to 0.5 male earner. On this basis he computed the adult equivalents to all earners in "attached" labour households and used the total wage income of the household and number of days of wage employment of "attached" labour to arrive at the wage rates.<sup>12/</sup> His claim that the equivalence ratios are in conformity with prevailing relative wage rates is, however, not quite correct: This can be seen from Table 3 below, which represents the female and child wage rates as a proportion of male wage rates. His procedure overestimates the wage incomes of females and underestimates that of children. Besides, by using wage employment of "attached" labourers and not all male wage earners in "attached" labour households, he underestimates "attached" labour wage rates since the former is higher than the latter.

To correct for this bias we estimated the "attached" labour wage rates from the same data using the average daily wage rate of casual labour by sex, as well as the number of male, female and child earners per "attached" labour household in different States, the average number of days, of wage employment for different categories of earners and the total wage income of households. We have further assumed that all adult male earners in the "attached" labour households are "attached" labourers and all female and child earners are casual agricultural labourers. Following steps are involved in the calculation:

$$\begin{array}{l} \text{Estimated wage} \\ \text{income of females} \\ \text{in "attached"} \\ \text{labour households} \end{array} \quad (WY_f) = \begin{array}{l} \text{Number} \\ \text{of fe-} \\ \text{male} \\ \text{earners} \end{array} \quad \times \quad \begin{array}{l} \text{Number} \\ \text{of days} \\ \text{of wage} \\ \text{employ-} \\ \text{ment} \end{array} \quad \times \quad \begin{array}{l} \text{Wage rate} \\ \text{of casual} \\ \text{female labour} \end{array}$$

Estimated wage income of children in "attached" labour households  $(WY_c) =$  Number of child earners  $\times$  Number of days of wage employment  $\times$  Wage rate of casual child labour

Estimated wage income of adult male earners in "attached" labour households  $(WY_M) =$  Total wage income of "attached" labour households  $- WY_f - WY_c$

Wage Rate of adult male earners in "attached" labour households  $(WR_M) = \frac{WY_M}{\text{Number of adult male earners} \times \text{Number of days of wage employment for an adult male earner in "attached" labour households}}$

Note that unlike Ghose we have used the 'number of days of wage employment of an adult male earner in "attached" labour households' instead of 'number of days of wage employment of "attached" labourers.' This is so because of our assumption that all wage employment of male earners in "attached" labour households is under "attached" labour status. We are aware that all adult male earners may not be "attached" labourers. Also female and child earners may not all be casual labourers: Some of them may be working for the same employer as the male earner under the "attached" labour contract. Or they may be working for the same employer on a casual basis but on wage rates lower (or at least different) than the market wage rates. But these problems cannot be taken care of with the available information.

Table 3Proportion of female and child casual Labour Wage Rates to the Wage Rates of Male casual labour (Agricultural)

State	$\frac{\text{Female Wage Rate}}{\text{Male Wage Rate}}$	$\frac{\text{Child Wage Rate}}{\text{Male Wage Rate}}$
Andhra Pradesh	0.63	0.55
Assam	0.75	0.65
Bihar	0.81	0.77
Kerala	0.55	0.49
Mysore	0.65	0.56
Madhya Pradesh	0.78	0.73
Orissa	0.69	0.64
Punjab	0.62	0.35
Rajasthan	0.62	0.45
Madras	0.57	0.46
Uttar Pradesh	0.71	0.60
West Bengal	0.69	0.62
Bombay	0.63	0.57
ALL INDIA	0.61	0.55

Source: Report on the Second ALE (1956-57), Vol. II, All India, Labour Bureau, Ministry of Labour and Employment, Government of India, 1966. Statement 11.9, p.272-273.

The estimates of "attached" labour wage rates so derived are presented in Table 4, along with the wage rates of casual agricultural labourers. It can be seen from the table that 10 out of the 13 States the wage rates of "attached" labourers are lower than those of casual labourers. In 3 States (Bihar, Mysore and Bombay) contrary to expectation, "attached" labour wage rates are higher. In Ghose's estimates



it will be recalled, Bihar was the only State <sup>in</sup> which "attached" labour wage rates were higher. This might be due to the differences in the methods of estimation. We have not, like Ghose deflated the wage rates by appropriate price indices but it will not affect the relative situation because wage rates of both the categories in each State will be deflated by the same price index.<sup>13/</sup>

Our estimates (as well as Ghose's) do not take into account differences in the number of hours per day for which the two categories of workers are expected to work and the terms and conditions on which members of the "attached" labour families are given casual work. "Attached" labourers are almost universally required to work longer hours.<sup>14/</sup> Our estimates would, therefore, tend to overstate the "attached" labour wage rates per working hour relative to casual labour wage rates per working hour. Moreover, the practice of using members of "attached" worker families for casual work is not uncommon. We do not have information on the working conditions of these family members. If the services of family members of "attached" labour households are extracted at conditions worse than those for casual labourers, ~~our~~ our estimates would further overstate the "attached" labour wage rates relative to casual labour wage rates. Without detailed information on the working conditions of "attached" workers and their family members it is not possible to assess whether the higher wage rates of "attached" labourers in Bihar, Mysore and Bombay do in fact reflect superior remuneration.

Chattopadhyay<sup>15/</sup> came to a very different finding on the basis of Farm Management Survey data. His estimates (see Table 5) showed that in 9 out of 11 districts whose data he examined, the "attached" labour was paid at a higher daily wage rate than casual labour. He seeks to explain

Table 4

Wage Rates of Attached and Casual Labourers

State	Female				Children			Total	
	Earner/ attach- ed lab- our HH	No. of days of wage employment	Agricul- tural Wage Rate	Total Wage Income	Earner/ attached labour Households	No. of days of wage employ- ment	Agri- cultural Wage Rate	Total Wage Income	Wage Income of female & child earners
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh	0.94	149	0.55	77.03	0.30	214	0.48	30.82	107.85
Assam	0.66	230	1.15	174.57	0.18	253	1.00	45.54	220.11
Bihar	0.56	124	0.74	51.39	0.11	162	0.70	12.47	63.86
Kerala	1.21	130	0.70	110.11	0.09	174	0.63	9.87	119.98
Mysore	0.90	157	0.55	77.72	0.24	193	0.47	21.77	99.49
Madhya Pradesh	0.93	145	0.59	79.56	0.24	177	0.57	24.21	103.77
Orissa	0.61	91	0.55	30.53	0.25	171	0.51	21.80	52.33
Punjab	0.22	158	1.22	42.41	0.19	227	0.69	29.76	72.17
Rajasthan	0.69	139	0.61	58.51	0.16	152	0.44	10.70	69.21
Madras	0.90	142	0.48	61.34	0.22	199	0.39	17.07	78.41
Uttar Pradesh	0.74	104	0.65	50.02	0.19	145	0.55	15.15	65.17
West Bengal	0.32	168	0.98	52.68	0.08	213	0.89	15.17	67.85
Bombay	0.89	168	0.55	82.24	0.30	193	0.50	28.95	111.19
<b>All India</b>	<b>0.71</b>	<b>141</b>	<b>0.59</b>	<b>59.06</b>	<b>0.21</b>	<b>187</b>	<b>0.53</b>	<b>20.81</b>	<b>79.87</b>

Table 4 (contd..)

States	Total Wage Income of attached labour Households	Male Wage Income in Attached Labour Households	No. of male earners per Attached Labour Households	No. of days of employment for wages per adult male wage earner in Attached Labour Household	Attached Labour Wage Rate	Male Casual Labour Wage Rate (Agrl.)
	(11)	(12)	(13)	(14)	(15)	(16)
Andhra Pradesh	373.85	266.00	1.27	330.95	0.63	0.87
Assam	706.27	486.16	1.12	296.53	1.46	1.54
Bihar	403.56	339.70	1.23	221.06	1.25	0.91
Kerala	351.88	231.90	1.07	206.52	1.05	1.28
Mysore	398.37	298.88	1.12	263.54	1.01	0.84
Madhya Pradesh	346.30	242.53	1.24	300.60	0.65	0.76
Orissa	313.97	251.64	1.22	299.79	0.69	0.80
Punjab	726.86	654.69	1.36	301.66	1.60	1.98
Rajasthan	234.92	165.71	1.14	300.84	0.48	0.98
Madras	292.27	213.86	1.20	275.50	0.65	0.84
Uttar Pradesh	318.34	253.17	1.29	258.84	0.76	0.92
West Bengal	646.93	579.08	1.38	295.60	1.42	1.43
Bombay	481.79	370.60	1.29	304.50	0.94	0.87
All India	423.31	343.44	1.27	271.05	1.00	0.96

Source: Report on the Second Agricultural Labour Enquiry (1956-57), Vol. I - All India - Labour Bureau, Ministry of Labour and Employment, Government of India, 1960.

Columns 2, 6 and 13 Appendix iv.

Column 7 - Statement 11.3, p.262.

Column 3 - Statement 5.6, p.89

Columns 4, 8 & 16 - Statement 11.9, p.272, 273.

Column 14 - Statement 5.3, p.71.

Table 5Daily Wage Rates of Casual Agricultural Labour (Male)  
and Annual Farm Servant in Different Regions of India

States	Agricultural Year	Casual Labour	Farm Servant
<u>Punjab</u>			
Amritsar & Ferozepur	1954-55	2.46	3.55
	1955-56	2.56	3.89
	1956-57	2.79	5.25
Ferozepur only	1967-68	4.64	5.76
	1968-69	4.80	5.68
	1969-70	5.68	6.16
<u>Uttar Pradesh</u>			
Meerut & Muzaffarnagar	1954-55 to 1956-57	1.44	1.82
Muzaffarnagar only	1966-67	2.66	3.32
	1967-68	2.89	3.56
	1968-69	2.93	3.91
<u>West Bengal</u>			
Hooghly & 24 Parganas	1954-55 to 1956-57	1.52	1.56*
<u>Orissa</u>			
Sambalpur	1958-59	0.92	0.69*
	1959-60	0.92	0.81*
Cuttack	1967-68	2.44	2.30
	1968-69	2.59	2.02
	1969-70	2.72	2.08
<u>Andhra Pradesh</u>			
West Godavari	1957-58	0.42	0.98*
	1958-59	0.41	1.28*
Cudappah	1967-68	2.04	3.19
	1968-69	2.00	3.02
	1969-70	2.01	2.79
<u>Assam</u>			
Nowgong	1968-69	3.69	3.59
	1969-70	3.70	3.83
	1970-71	4.05	3.97
<u>Kerala</u>			
Alleppey & Quilon	1962-63 to 1964-65	2.43	3.22

Source: M. Chattopadhyaya, Economic and Political Weekly, March 1977, Review of Agriculture, Tables 1 & 2.

\*This represents the wage rate both for casual labour and farm servant. If this value is greater than the value under column (3), then it can be said that the

wage rate differences between "attached" and casual labour in terms of spatial variations in agricultural development: In those areas which are agriculturally better endowed (in terms of intensive cultivation, cropping pattern and use of farm machinery etc.), the wage rates are higher for "attached" workers; otherwise they are lower. This is so, argues Chattopadhyay, because in more developed regions the employer has the work for "attached" workers throughout the period of employment and hence pays more. This is not true for the less developed regions. The regions of Punjab, Kerala, Uttar Pradesh and Andhra Pradesh where he finds wage rates for "attached" labourers to be higher than <sup>for</sup> casual labourers, come in the category of better endowed areas in his classification. (See Table 5 below).

A closer examination however raises some doubt about the reliability of Chattopadhyay's estimates of wage rates: His procedure consists in dividing the total annual wage income by the number of days of employment for "attached" labour and comparing it with adult male casual labour wage rates. We computed the wage rates by the same procedure for Ferozepur (1967-70) using the combined report. Our estimates of wage rates of "attached" labourers as well as the male casual agricultural wage rates differ widely from Chattopadhyay (See Tables 5 and 6). And the wage rates of "attached" labour in our estimate turn out to be lower for 1968-69 and 1969-70 but slightly higher for 1967-68. But unlike 1968-69 and 1969-70, the number of days of "attached" labour employment in 1967-68 include only days spent on crop production and tending of cattle; days

---

Note (contd..) of Table 5:

wage rate of an annual farm servant is higher than a casual labour and vice-versa. We have followed this procedure where the data on total payment to an annual farm servant is not available separately.

Table 6Estimate of Wage Rates Based on FMS data for Ferozepur District  
(Punjab)

Year	Total Number of days of employment	Total Income (Rs.)	Wage Rate	Wage rate for Agri- cultural Casual Labour (Male) (Rs.)
(1)	(2)	(3)	(4)	(5)
1954-57	411.59	632	1.54	2.80
1967-68	266.92 <sup>a</sup>	1520	5.69	5.55
1968-69	301.59	1608	5.33	6.39
1969-70	243.59	1877	5.46	6.43

Note: Days of employment in FMS reports are 8 hourly standardized days and hence a working day of both casual and "attached" labourer are comparable.

<sup>a</sup>Relates only to annual input on crop production, and does not include non-farm employment. See, Studies in the Economics of Farm Management in Ferozepur District (Punjab), Report for the year 1967-68 (Mimeo), Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, 1973.

Source: Studies in Economics of Farm Management, Ferozepur District (Punjab), Three year Consolidated Report (1967-68 - 1969-70), Directorate of Economics and Statistics, Ministry of Agriculture, 1974.

Column 2 - p.45

Column 3 - p.47

Column 5 - p.20

spent on non-farm employment are not included. Presumably, if the latter were included the wage rate for "attached" labour would be lower. Estimates of wage rates in Ferozpur during 1954-57 derived from the consolidated Report also show them to be lower for "attached" labourers than for casual labourers (Table 3).

Unfortunately, we could not find all the relevant data to compute "attached" labour wage rates for other districts. Nor is it possible to pin down the source of difference for Ferozpur since Chattopadhyay's paper does not give detailed reference about the sources of his numbers. In any case, since <sup>a careful check using the same concept gives</sup> such divergent results, Chattopadhyay's estimates and the conclusion based thereon are open to doubt. Unfortunately, apart from the two sources mentioned, there is no data which would permit estimation of wage rates for "attached" and casual labour separately. <sup>16/</sup>

Thus on balance the available data seems to corroborate our hypothesis that "attached" labour wage rates should be lower than casual labour wage rates. Wage rate comparisons may, however, be misleading in providing an adequate picture of the relative economic positions of "attached" and casual labourers, because of differences in employment intensities etc. Relative incomes of these two categories of labour may be a better indication in this respect.

#### Relative Incomes

Since the "attached" and casual labour markets are differentiated both on the demand and on the supply side, the tendency for equalisation of the relative incomes of the two categories of labour,

which might be expected to operate in an integrated competitive wage labour market, may not be realised. The fact that households belonging to the two categories also differ markedly in their size, composition, participation rate, and other characteristics makes the outcome less certain.

For instance, the average size of the "attached" labour households and the number of earners per household are consistently higher than in casual labour households (Table 7). The participation rates, also, in general, are higher for "attached" labour households: In other words, a larger proportion of the members of these households are working compared to casual labour households.

We also find that the "attached" labour households are better off in terms of the days for which their members are employed over the year. This is not only true for "attached" labourers as such, but also for all adult male wage labourers in the "attached" labour households. The employment intensities are, however, less for the latter. (See Table 8 below). There is also evidence to suggest as mentioned in chapter 3 that "attached" labourers are able to get employment for <sup>their</sup> ~~his~~ family members more easily as compared to casual labourers.

But there are important differences in the type of work done by workers belonging to the two categories of households: Both in absolute terms and as a proportion of total days worked, employment for wages is far more important for workers from "attached" labour households than those coming from casual labour households. Self-employment is much more important in the case of the latter (See Table 8 below).



Table 7Farmers and Participation Rates in Casual and Attached Labour Households

State	Farmers per Household		Average Size of households		Participation Rate	
	Casual (2)	Attached (3)	Casual (4)	Attached (5)	(2/4) Casual (6)	(3/5) Attached (7)
Uttar Pradesh	1.79	2.22	4.30	5.22	41.63	42.53
Madhya Pradesh	2.28	2.41	4.01	4.40	56.86	54.77
Bihar	1.81	1.90	4.58	5.01	39.52	37.92
West Bengal	1.47	1.73	4.24	4.36	34.67	40.83
Orissa	1.97	2.08	4.22	3.95	46.68	52.66
Assam	1.50	1.96	4.03	4.08	37.22	48.04
Andhra Pradesh	2.17	2.57	4.03	4.36	53.85	58.94
Madras	1.97	2.32	4.08	4.11	48.28	56.45
Kerala	1.93	2.37	5.05	5.37	38.22	44.13
Bombay	2.24	2.48	4.48	4.30	50.00	57.67
Mysore	2.17	2.26	4.43	5.10	48.98	44.31
Rajasthan	1.95	1.99	4.24	4.91	45.99	40.53
Punjab	1.70	1.77	4.68	5.70	36.32	31.05

Source: Agricultural Labour Enquiry, 2nd Agriculture Labour Enquiry Report (All India) Appendix IV.

Table 8

Employment and Unemployment of Adult Male Workers in Casual and Attached Labour Households  
(Average Number of Days)

State	Employment for wages*						Self Employment**		
	I			II			CL	AL	SD
	Of Male Wage Earners in Labour Households			Of Casual & Attached Labourers					
CL Hhs	AL Hhs	SD*	CL	AL	SD				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Uttar Pradesh	180.65	258.84	43.28	178.	270	46.63	63	26	-58.73
Madhya Pradesh	194.97	300.60	54.18	187	308	64.71	60	12	-80.00
Bihar	219.83	221.06	0.56	218	224	2.75	28	22	-21.43
West Bengal	230.44	295.60	28.28	227	304	33.92	25	14	-44.00
Orissa	182.55	299.79	64.22	177	308	74.01	53	14	-73.58
Assam	261.41	296.53	13.43	261	296	13.41	10	2	-80.00
Andhra Pradesh	203.50	330.95	62.63	198	346	74.75	42	7	-83.33
Madras	175.62	275.50	56.87	170	285	67.65	33	12	-63.64
Kerala	164.93	206.52	25.22	165	207	25.45	29	13	-55.17
Bombay	222.76	304.50	36.69	217	319	47.00	35	8	-77.14
Mysore	210.64	263.54	25.11	208	269	29.33	39	17	-56.41
Rajasthan	195.87	300.84	53.69	192	296	54.17	36	30	-16.67
Punjab	183.23	301.66	64.63	172	321	86.63	44	12	-72.73
All India	201.23	271.05	34.70	197	281	42.64	40	16	-60.00

\*Percentage Difference - (SD) refers to:

$$\frac{E_A - E_C}{E_C} \times 100$$

(for wages

$E_A$  - Employment/Self employment/Unemploy-  
for Attached Labourers

$E_C$  - Employment for wages/Self employment/  
Unemployed for Casual Labourers

~~Source: Census of India, 1951~~

Table 8 (contd..)

States	Unemployment**			Availability for Employment	
	CL	AL	RD	Casual Labourers	Attached Labourers
(1)	(11)	(12)	(13)	(14)	(15)
Uttar Pradesh	48	69	43.75	289	365
Madhya Pradesh	40	45	12.50	287	365
Bihar	69	119	72.46	315	365
West Bengal	85	47	-44.71	337	365
Orissa	58	43	-25.86	238	365
Assam	13	67	415.38	284	365
Andhra Pradesh	71	12	-83.10	311	365
Madras	107	68	-36.45	310	365
Kerala	116	145	25.00	310	365
Bombay	48	38	-20.83	300	365
Mysore	52	79	51.92	299	365
Rajasthan	64	39	-39.06	292	365
Punjab	72	32	-55.56	288	365
All India	68	68	0.00	305	365

\*\*Due to want of work.

Source: ALE, 2nd Enquiry Report.

Columns 2 & 3 - Statement 5.3, p.71

Columns 5 & 6 - Statement 5.4, p.72

Columns 8 & 9 - Statement 5.5, p.87

Columns 11 & 12 - Statements 5.10 & 5.11, pp.97-99

More significantly, "attached" labourers are not only employed for a greater part of the year, but nearly half the States also report more days of unemployment due to lack of work. (Table 8 above). This may be because more of the "attached" labourers in these regions are on "short-term" contracts and/or because they are less tied to the employer's farm during the contract and are allowed to seek work elsewhere when their employer does not need them.

The data presented in Table 8 also brings out more starkly the near total dependence of "attached" labourers on wage employment and their relative inability to diversify their activities into occupations other than wage employment. If one adds up number of days of employment (wage and self-employment) and unemployment (due to want of work) for both casual and "attached" labourers, (columns 14 & 15), one finds that the latter is available for work for all the 365 days of the year. That is, an "attached" labourer is either working or is available for work throughout the year as his total number of days of employment and unemployment (involuntary) add up to 365 for all the States. The same is not true for casual labourers who not only face a more diversified pattern of work, but also have the capacity to be voluntarily unemployed - whether to attend to family affairs or on account of sickness or merely for the sake of leisure. "Attached" workers it would seem cannot afford to be without work even if they are ill! Where unemployment of "attached" workers is higher than that of casual workers (as is the case in several States), the possibilities of diversification of employment for the former are particularly bleak.

Total wage earnings of male "attached" labourers are higher than those of casual labourers (Table 9). Clearly lower wage rates are more than compensated by the number of days for which they are employed for wages.

Table 9

Wage Earnings of Male Attached and Casual Labour  
(1956-57)

State	Estimate A			Estimate B		
	Casual Labour	Attached Labour	Percentage Difference	Casual Labour	Attached Labour	Percentage Difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	174.44	209.45	20.07	163	160	-1.84
Assam	409.77	434.07	5.93	316	329	4.11
Bihar	206.01	276.18	34.06	181	229	26.52
Kerala	212.36	216.73	2.06	155	156	0.64
Mysore	178.88	266.86	49.18	211	219	3.79
Madhya Pradesh	145.86	195.59	34.09	142	170	19.72
Orissa	145.14	206.26	42.11	146	187	28.08
Punjab	325.08	481.39	48.68	318	414	30.19
Rajasthan	196.99	145.36	-26.21	175	133	-24.00
Madras	144.33	178.22	23.48	175	130	-25.71
Uttar Pradesh	166.43	196.26	17.92	194	188	-3.09
West Bengal	315.08	419.62	33.18	233	301	29.18
Bombay	159.82	287.29	79.76	-	-	-
ALL INDIA	192.47	270.43	40.51			

Source: Estimate A derived from Table 4.

Estimate B, A.K. Ghose, op.cit., Table 3, p.416.

Percentage Difference is defined as  $\frac{AL_{WE} - CL_{WE}}{CL_{WE}} \times 100$

where, AL = Attached Labour  
CL = Casual Labour  
WE = Wage Earnings

Comparison of total wage earnings for the two categories of agricultural labour households also provide a similar picture (Table 10). Wage incomes of "attached" labour households are generally higher (in 12 out of 13 cases) than those of casual labour households. This is true irrespective of whether they own land or not, though the percentage difference being somewhat lower for labour households with land as compared to labour households without land (columns 4 and 10, Table 10).

As with employment, "attached" labour households are also more heavily dependent on wage labour generally, and on agricultural wage labour in particular, as a source of income. In most States they derive a larger proportion of income from agricultural wage labour, and a smaller proportion from non-agricultural wage labour, cultivation and other pursuits compared to casual labour households. The latter's income sources are considerably more diversified, and this helps to narrow down the differences in incomes from wage labour; In most States, differences in total earnings are less than the differences in wage earnings. (Table 11).

On the whole, however, "attached" labour households seem to get a larger total annual income as compared to casual labour households. This is true in 10 out of 13 States for labour households with and without land taken separately and in combination. The picture changes materially when one compares the average annual income per earner and per capita incomes: Since casual labour households have fewer earners on the average, the differences in per earner incomes are much less than in household incomes; in fact income per earner is higher for casual labour households in 7 out of the 13 States (See Table 12 below). Thus the "attached" labour households are able to get higher incomes than casual labour households because they put in more both in terms of the number of people working and also of working hours.

Table 10

Average Annual Incomes of Attached and Casual Labour Households (Rs.)

State	Labour Households with Land						Labour Households without Land					
	From Agricultural Labour			Total			From Agricultural Labour			Total		
	Casual	Attached	% Diff- erence*	Casual	Attached	% Dif- ference	Casual	Attached	% Difference	Casual	Attached	% Diff- erence
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Uttar Pradesh	207	244	17.87	342	411	20.18	251	377	50.20	354	427	20.62
Madhya Pradesh	213	261	22.54	311	345	10.93	274	380	38.69	312	396	26.92
Bihar	255	289	13.33	401	401	0.00	266	464	74.44	358	580	62.01
West Bengal	298	556	86.58	716	724	1.12	300	630	110.00	556	832	49.64
Orissa	180	322	78.89	310	374	20.65	207	270	30.43	317	333	5.05
Assam	332	778	134.34	486	815	67.70	599	640	6.84	820	745	-9.15
Andhra Pradesh	290	310	6.90	497	428	-13.88	313	386	23.32	390	412	5.64
Madras	423	249	-41.13	507	298	-41.22	253	300	18.58	309	338	9.39
Kerala	229	230	0.44	424	616	45.28	348	364	4.60	428	475	10.98
Bombay	311	399	28.30	439	557	26.88	363	481	32.51	427	535	25.29
Mysore	343	389	13.41	496	568	14.52	343	356	3.79	482	449	-6.85
Rajasthan	260	299	15.00	356	531	49.16	258	214	-17.05	345	246	-28.70
Punjab	269	1159	330.86	626	1559	149.04	499	617	23.65	656	777	18.45
All India	279	328	17.56	439	451	2.73	303	446	47.19	402	525	30.60

\*Percentage Difference refers to:  $(Y_A - Y_C) / Y_C \times 100$ .

$Y_A$  = Attached Labour Households Income

$Y_C$  = Casual Labour Households Income

Source: ALE, Report on Second Enquiry 1956-57 -  
All India, Vol.1, Labour Bureau, Government of  
India, 1960, Statement 7.7, pp.157-58.

Table 11

Percentage Distribution of Average Annual Income of Casual  
and Attached Labour households by sources - 1956-57

State	Cultivation of land		Agricultural Labour		Non-Agricultural Labour		Others	
	CL	AL	CL	AL	CL	AL	CL	AL
Uttar Pradesh	8.36	10.85	66.29	68.11	10.96	8.45	14.39	12.59
Madhya Pradesh	4.86	4.51	79.69	88.77	8.37	3.34	7.08	3.38
Bihar	10.98	6.71	67.39	75.85	11.48	9.93	10.15	7.51
West Bengal	12.23	3.37	48.44	75.96	19.60	4.73	19.73	15.94
Orissa	10.48	-	61.83	82.78	13.55	7.85	14.14	9.37
Assam	4.32	0.64	71.99	89.88	4.86	1.58	18.83	7.90
Andhra Pradesh	7.12	5.33	71.30	87.52	5.41	2.29	16.17	4.86
Madras	3.28	0.14	82.69	87.21	5.42	2.65	8.61	10.00
Kerala	11.85	17.95	66.33	63.16	4.44	5.09	17.38	13.80
Bombay	6.04	7.00	80.10	84.32	4.42	4.65	9.44	4.03
Mysore	5.99	0.34	70.44	76.48	5.72	7.46	17.85	15.72
Rajasthan	6.49	8.61	74.09	78.22	11.65	2.73	7.77	10.44
Punjab	2.22	0.73	72.24	78.99	10.19	9.57	15.35	10.81
ALL INDIA	7.61	5.16	70.12	79.87	8.79	6.11	13.48	8.86



Table 12

Average Annual Income per Earning Member and Per Capita  
Incomes of Casual and Attached Labour Households (Rs.)

State	Average Annual Income per Earning Member of Labour Households			Average Per Capita Income of Labour Households		
	Casual	Attached	Difference	Casual	Attached	Difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh	194.46	187.30	-3.68	81.0	79.70	-1.60
Madhya Prad.	136.77	156.00	14.06	77.8	85.50	9.90
Bihar	212.51	247.60	16.51	84.0	95.50	13.69
West Bengal	420.50	450.47	7.13	145.8	183.90	26.13
Orissa	159.24	166.56	4.60	74.3	87.7	18.03
Assam	475.66	393.98	-17.17	177.0	189.3	6.95
Andhra Prad.	157.20	161.97	-17.87	106.2	95.5	-10.08
Madras	195.20	140.19	-28.18	94.3	79.1	-16.11
Kerala	220.66	217.52	-1.42	84.3	96.0	13.88
Bombay	192.39	218.36	13.50	96.2	125.9	39.87
Mysore	224.47	210.00	-6.45	110.0	93.1	-15.36
Rajasthan	179.17	145.81	-18.62	82.4	59.1	-28.28
Punjab	383.74	464.21	20.97	139.4	144.2	3.44

Source: Columns 2 & 3 computed from Tables 7 and 10.

Columns 5 & 6 - Statement 7.10 p.162-63, ALE, 2nd Enquiry Report.

The fact remains, nevertheless, that the conjunction of higher family incomes and higher participation rates in "attached" labour families results in their per capita incomes being higher than that of casual labour households. This is the case in 8 out of the 13 States for which we have data (see Table 12 above), the differences exceeding 25 per cent in some cases. The implication is that a class of labourers belonging to the lowest rungs of the society and open to various forms of exploitation are "better off" than upper caste wage labourers with a stronger social position and wider range of options. It could well be that the differences are statistical rather than real, in the sense that they lie within the margins of error in the estimates. It could also be that the "attached" -casual distinction is much too broad, and that a more careful disaggregated view of different categories of labourers - by type of contract and social background - may give a different picture. But we ~~can~~ cannot say much more with the available information except to suggest that the finding that scheduled castes "attached" labourers are "better off" in terms of per capita income than other wage labourers is at odds with the widely held picture of rural society.

#### Notes and References

- 1/ The short term "attached" workers are also do all kinds of work but the predominant objective of hiring them is to assure adequate labour supply for peak season jobs.
- 2/ Casual workers are also employed during off season, but the bulk of their employment is concentrated in peak seasons. It is particularly dependent on the distribution of agricultural activity over the year.

- 3/ It may also be due to differences in the cropping pattern and intensity since the medium sized farms have also been found to have moderate peaks. See Ashok Rudra and R. Biswas (1973), "Seasonality and Employment in Agriculture", Economic and Political Weekly, Review of Agriculture, September 29. For similar evidence on Africa see, Ivanov Y.M. (1979) "Agrarian Reforms and Hired labour in Africa," Edited by P.P. Moiseyar, Progress Publishers, Moscow, pp.120-134.
- 4/ Pranab Bardhan and Ashok Rudra (1980), "Types of Labour Attachment in Agriculture - Results of a Survey in West Bengal - 1979", Economic and Political Weekly, August 30, p.1483.
- 5/ Ibid., Table 6.
- 6/ Ibid., p.1483.
- 7/ The level of "attached" and casual labour wage rates in a region may depend on the overall demand and supply of labour relative to the total requirements - and these levels may be correlated. It has been suggested, for example, that given the seasonal pattern of use of hired labour in an area, labour tying with long term contracts tends to reduce the amplitude of seasonal and casual wage fluctuations that would have prevailed otherwise. For a somewhat detailed discussion on this issue see, K. Bardhan (1977), "Rural Employment, Wages and Labour Markets in India - A Survey of Research, EPW, June 24, July 2 & 9, p.1108, where she quotes Raj K.N. (1959) "Employment and Unemployment in the Indian Economy: Problems of Classification, Measurement and Policy" in Economic Development and Cultural Change, and Pranab Bardhan (1977), "Wages and Unemployment in a Poor Agrarian Economy: A Theoretical and Empirical Analysis," (Mimeo). We are, however, not concerned here with the absolute levels of these wage rates but with the relative levels.
- 8/ Some evidence to this effect has already been cited in ch.3.
- 9/ Bardhan-Rudra (1980), op.cit.
- 10/ Within the lower castes also a further division may emerge as we have evidence to show that in some regions only higher castes among the low castes are employed as attached labourers since they are expected to do domestic tasks also. This is based on information provided in chapter 7 of district Reports of "Intensive Type Studies on Rural Labour in India," Labour Bureau, Simla, 1967-69.
- 11/ Ajit K. Ghose (1980), "Wages and Employment in Indian Agriculture," World Development, Vol.8, No.5/6, May-June.  
has
- 12/ Ghose/also deflated the wage earnings by the appropriate price indices.
- 13/ The biases of our and Ghose's estimates will also depend on many other factors including the differences in casual and "attached" wage rates. If some of the earning members are casual labourers, the bias will depend whether casual wage rates is higher or not, if it is then wage rates will be overestimates. On the other hand, if some earnings members are self-employed the wage rates will be underestimated and so on.

- 14/ According to the Reports on Intensive Type Studies the working hours for "attached" labour were found to be consistently higher than for casual labourers in 39 out of 40 reporting villages.
- See table 2, chapter 2, p.23.  
Similar information regarding working hours is also given in Agricultural Labour in India, Report on the Second Enquiry, 1956-57, All India (Vol.I), Labour Bureau, Ministry of Labour and Employment (Government of India, 1969). Particularly p.76 and 84.
- 15/ Manabendu Chattopadhyay (1977), "Wage Rates of Two Groups of Agricultural Labourers," Economic and Political Weekly, March, Review of Agriculture. One may argue here also that wage rates computed from FMS data may have an upward bias since the data is collected from cultivators and they may tend to overstate wage costs.
- 16/ Even the reports on Intensive Type Studies on Rural Labour in India do not give average income and number of days of employment for "attached" labourers. In some cases a range of incomes is given but since the distribution of "attached" labourers was not available no averaging could be done.

## SUMMARY AND CONCLUSIONS

This essay attempts an analysis of attached labour as a category of agricultural wage labour and its role in the functioning of the overall market for agricultural labourers.

Several historical studies show that as agriculture develops and becomes more commercialised there is a general tendency to move from labour contracts signifying relatively little freedom for the workers to freer, more impersonal forms of contracts. Freedom gets reflected both in the "entry" and the working conditions of the labour contracts. In India too the extent of "freedom" enjoyed by workers has been a subject which has attracted attention of scholars for many decades. This is reflected in a rather extensive literature on "attached" labour.

Close scrutiny however shows that in actual practice the "freedom" dimension has got mixed up with the "duration" dimension in the Indian studies. Not only are "freedom" and "duration" of contract not coterminous, but there are many gradations of both; also freedom is affected by both the conditions which force the worker to accept a particular contract and by the terms of the contract itself. A simple dichotomous classification of agricultural labourers into "attached" and "casual" workers is therefore inadequate to capture the complexity of the labour market: This calls for a more disaggregated and multidimensional classification.

As early as in 1956 Thorner realised the problems associated with the conventional classification of agricultural labour into two mutually exclusive categories of "attached" and "casual" and suggested a more disaggregated categorisation. Besides reiterating Thorner's main points, we suggest some modifications in the classification suggested by him with a view to adequately capture the dimensions of freedom, duration, and basis of the contract as well as other working conditions.

Due to lack of data our analysis is perforce limited to one of these dimensions, namely the duration of the labour contract. An attempt has been made to identify socio-economic variables affecting the use of "attached" labour on long duration (season/year) contracts. An analysis of the relationships between the casual labour and "attached" labour (on long duration contracts), in terms of their wage rates and income differentials has also been attempted.

Regarding the determinants of "attached" labour use, it has been argued that the use of such labour is a demand determined phenomenon influenced primarily by the level and seasonality in the wage-labour requirements. An attempt is also made to see how well this hypothesis does in explaining the observed variations in the use of "attached" labour across regions. Higher cropping ~~practices~~ intensity, more skewed land distribution and higher productivity were found to encourage the use of labour on long duration contracts; while larger supply of labour relative to the requirements of big landholders in a region tended to discourage such

employment. While in terms of usual statistical tests, the data cannot be said to provide a strong corroboration of the hypothesis, there are objective grounds to show that the data used here has numerous limitations. Further work has to wait more detailed and better quality data.

Regarding the interrelationships between casual and "attached" labourers, it has been argued that, given the nature of the demand and supply of "attached" labour and their working conditions, one would expect their wage rates to be lower than those of casual labourers. This expectation is found to be corroborated by available data in most cases. There are, however, significant exceptions, which cannot be satisfactorily explained with the available information. We have pointed out the reasons why on an apriori basis relative incomes (total or per capita) of these two categories of labourers cannot be predicted confidently. These reasons include the incomplete integration of the market for the two categories and marked differences in the size and composition of the households falling in these categories. Nevertheless, the fact that the socially "worse-off" (generally low caste) "attached" labour families are "better-off" in terms of per capita incomes as compared to upper caste casual labour families in some regions, is somewhat unexpected and remains a puzzle.

In sum our essay serves to emphasize the point that a more meaningful and complete analysis of the functioning of the rural labour market in India must explicitly recognize the distinction between "attached" and casual labour categories as well as the nature and extent of interrelations between the two. Our empirical results are not definitive because we believe, the data available for analysis are inadequate both in terms of the number and the quality of the observation. Also we need to go beyond the two-fold classification of wage labour contracts. Ours, therefore, is only a preliminary effort in this direction. A more adequate study of duration aspect of "attachment" has to wait more and better information as well as a finer classification than is available at present.



## APPENDIX - I

The available data on "attached" labour is very inadequate, for the empirical exercise in Section II of this chapter.<sup>1</sup> We have put together whatever fragmentary data is available. The data used for the regressions has many limitations but since the purpose of this section is simply to provide some tentative empirical substantiation to the hypotheses put forward, this data has been used for want of anything else. To set the record straight, here we briefly discuss the various problems involved with the data used.

### The Data

Three sets of data have been used in the statistical exercise done in section II of this chapter. We first briefly describe each of them before going into the limitations of each set.

Data Set I - This data set is primarily derived from the Report of the Second Agricultural Labour Enquiry (All-India - 1956-57). As can be seen in Table 1, the first six columns of the data set are from the same report. Data referring to land distribution (columns 8 and 9) are and productivity, however is calculated from other sources and refers to the year 1960-61.

Now to arrive at the total number of attached workers from this data set, two alternative assumptions were used:

- i) All male earners in attached labour households are "attached" labourers; and
- ii) All earners (male and female) in attached labour households are attached labourers.

Correspondingly two estimates of the number of attached labourers were arrived at by respectively multiplying columns 3, 4 and 5 and 3, 4 and 6. In other words,

$$\begin{array}{rcl} \text{Number of} & & \\ \text{Attached} & = & \text{Estimated number} \\ \text{Labourers} & & \text{of Agricultural} \\ & & \text{Labour Households} \end{array} \quad \times \quad \begin{array}{l} \text{Percentage of} \\ \text{Attached Labour} \\ \text{Households in} \\ \text{Total Labour} \\ \text{Households} \end{array}$$

$$\times \quad \begin{array}{l} \text{number of male} \\ \text{earners per} \\ \text{attached households} \end{array} \quad \begin{array}{l} \text{Under assumption} \\ \text{number one} \end{array}$$

Multiplication of columns 3, 4 & 6, similarly gives the estimate of attached workers under assumption two.

These estimates divided by the area operated (column 2) gives the use of attached workers per unit area.

Data Set II - The data on the proportion of regular salaried workers or wage earners in farm in total rural population (columns 2&3, Table 2) was taken from the State reports of the NSS 27th round, Employment-Unemployment Survey data. The data on these proportions was based on the results derived from the first two subrounds and was not available for all the States. The estimates of total rural population on the other hand were based on the results of all the four subrounds. The multiplication of columns 3 & 5 and 2 & 4 gives estimates of total and male regular workers in farm respectively. These estimates divided by the area in column 6, provides the per unit area use of regular farm workers. References to other data sources are given in the table.

Data Set III - The number of "attached" workers in the data set were calculated from the region-wise information provided in the 26th round NSS Landholdings Survey Reports. The Survey Reports give for all regions, the number of operational holdings, proportion of operational

holdings reporting "attached" workers and the average number of "attached" workers per reporting holding for all seasons. The multiplication of these three gives the total number of "attached" workers (column 2). Dividing this estimate by the estimate of total operated area (column 4), also given in the reports, provides us with an estimate of "attached" labourers used per unit of area (column 2/column 3). The land distribution indices were also calculated from the same reports through interpolation (columns 4 & 5).

The data on cropping intensity, productivity and wage labour (columns 6,7 & 8) were derived from the district wise figures taken from various sources as mentioned below the table. Estimates of all the districts falling under each region were clubbed together to arrive at an estimate for the region as a whole. For productivity figures, a weighted average of district wise productivities was taken the weight used being the gross cropped area. This kind of clubbing was not possible in some cases because some districts fell in two or more regions. These regions had to be dropped.

Kerala region also had to be dropped in the final regression exercise because plantation and other crops important for Kerala were not included while calculating the productivity index. Similarly all the regions of J & K and the Himalayan region of West Bengal had to be dropped because the productivity data for all the districts in these regions were not available.

#### Data Limitations

The available data on "attached" labour is very fragmentary. Here we shall briefly discuss the limitations of each of the data set used in our empirical exercise.

Data Set I - The Agricultural Labour Enquiry Report, as we know, provides data about the number of "attached" labour households" and not for the number of "attached" labourers. The estimates for the number of attached labourers were derived by using the information on earners of these households. As mentioned earlier, we used two assumptions alternatively to arrive at these estimates. Now, while in general one knows that only males are employed as "attached" labourers, it is very difficult to generalise this for all households and regions saying all male earners in "attached" labour households are attached labourers. Some of them may be casual labourers while some female earners may be "attached" labourers. To the extent this is the case our estimates of variations in the number of attached workers across regions as well as across households within the same region is subject to an additional source of error, (besides those internal to the survey data).

Similarly the alternative assumption also has its limitations since what proportion of the family earners are bound by the contract will depend on the nature of the contract, which again will differ across regions.

Thus the estimates of the number of "attached" labourers arrived at using these assumptions might not be as reliable as one would like them to be but for want of anything else these estimates have been used.

The other limitation of this data set may be that land distribution and productivity estimates refer to 1961 instead of 1956-57, the year of the labour enquiry. These figures, therefore, may not be strictly comparable with the estimates derived from the ALE report.

Data Set II - The major limitation of this data set is that the "proportion estimates" used for calculating the number of regular workers in farm is based on the results of the first two subrounds of the survey, and not on

the results of all the four subrounds. The estimate of "rural population" used for the same calculation on the other hand, was based on the results of all the four subrounds. These two estimates may not be comparable to an extent because of the differences in coverage. The problem could have been minimised by using the average for all subrounds but unfortunately the State reports based on all the four subrounds were not all available at the time of doing this work.

Data Set III - The main limitation of this data set is the mixing up of census and NSS data for the regressions. Strictly speaking, the sample survey data should not be used with the Census data. The number of "attached" workers and land distribution figures in this data set are taken from NSS reports but we had to use Census figures for the number of agricultural labourers. This limitation, however, only refers to the last two regressions, where we use the "number of agricultural labourers as a proportion of the number of households operating top forty per cent of the land" as an independent variable.

There are some other minor problems also. The productivity figures refer to the period 1972-73 and the cropping intensity data 1969-70, while all the other figures refer to 1971-72.

#### Notes and References

1/ This ~~reference~~ refers to the section on the supply dimension in Chapter 3.

APPENDIX I  
CHAPTER 3

TABLE I  
DATA SET I

State	Net Sown Area (000 Acres)	Estimated No. of Agril. Labour H.Hs. (Million)	Percentage of Attached Labour H.Hs	Earners per Labour Male	Attached Households Total	Cropping Intensity (% of area cropped more than once)	Lorenz Ratio	Area operated by top 10% of households	Productivity Gross value of outputs per acre (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Uttar Pradesh	41813	2.0	36.03	1.29	2.22	26.2	0.504	36.28	199.88
Madhya Pradesh	38352	1.3	38.31	1.24	2.41	13.6	0.539	37.66	125.29
Bihar	19190	2.6	41.52	1.23	1.90	30.3	0.615	41.51	186.83
West Bengal	12825	1.2	21.31	1.38	1.78	16.8	0.436	33.20	348.84
Orissa	13854	1.0	15.65	1.22	2.08	8.0	0.502	38.44	208.21
Andhra Pradesh	28106	2.1	17.06	1.27	2.57	9.4	0.591	47.54	188.23
Madras	14414	1.9	15.68	1.20	2.32	19.0	0.495	37.20	338.92
Kerala	4525	0.5	12.52	1.07	2.37	20.8	0.504	48.83	521.56
Mysore	24898	0.9	10.16	1.12	2.26	3.2	0.674	39.22	167.41
Rajasthan	30702	0.2	22.56	1.14	1.99	10.4	0.525	42.04	84.41
Punjab	19004	0.3	46.59	1.36	1.77	32.4	0.481	33.27	175.83

Source: Columns 2,3,4,5,6,7 - Agricultural Labour in India - report on the Second Agricultural Labour Enquiry, 1956, Vol.I - All India, Labour Bureau, Ministry of Labour and Employment, Government of India, 1960.

Column 2, Statement 2.6, pp.15-16, ALE Report.

Column 3, Statement 4.1 p.47

Column 7, Statement 2.5, p.14

~~Columns 8,9,10~~

-do-

-do-

Column 4 - Statement 4.2, p.53 - ALE Report

Column 5 & 6, Appendix IV, pp.422-478 -do-

Column 10, Agricultural & Income by States, Occasional Paper No.7, NCAER,

New Delhi, Aug. 1963, Tables 2 & 3, pp.30-31.

State	Working as Regular Salaried Employee/Wage Labour in Farm (Proportion to Total Rural Population)		Total Rural Population (in '000)		Net Sown Area ('000 hecta.)	Cropping Intensity (Percentage Area Cropped more than once)	Lorenz Ratio	Proportion of area operated by		Value of output per hectare (Rs.)
	M	T	M	T				Top 10% of HHs.	Top 5% of HHs.	
Andhra Pradesh	6.21	3.32	14661	29021	11078	11.60	0.6062	0.4704	0.3170	1093
Bihar	7.42	5.00	22368	44982	8053	28.93	0.5569	0.4012	0.2680	978
Gujarat	4.54	3.24	8725	17006	9062	6.25	0.5383	0.3845	0.2368	937
Haryana	4.67	2.61	3964	7389	3555	45.94	0.4624	0.3151	0.2008	1150
Karnataka	4.91	2.84	10080	19829	9808	6.14	0.5272	0.3897	0.2557	940
Madhya Pradesh	5.85	3.83	15797	30834	18497	12.14	0.5305	0.3823	0.2481	695
Maharashtra	4.05	2.54	15577	30840	16382	6.04	0.5361	0.3881	0.2451	494
Orissa	5.47	2.95	9103	18174	5622	23.37	0.5048	0.3708	0.2443	1026
Rajasthan	1.48	0.91	9840	18836	14858	8.34	0.6249	0.4581	0.3048	518
Tamil Nadu	4.17	2.85	13048	25921	6332	21.59	0.5237	0.3922	0.2118	1770
Uttar Pradesh	3.18	2.00	35957	67801	17194	33.34	0.4993	0.3652	0.2385	1079

Source: Columns 2&3, NSS 27th Round, October, 1972-September 1973, Selected Tables on the Survey of Employment and Unemployment, State Reports, Tables 20 (Rural-usual activity code 13), NSSO, Department of Statistics - Ministry of Planning, Government of India, 1975.

Columns 4 & 5, Appendix, Sarvekshana pp.89-91. Notes - Employment Unemployment Situation at a Glance (NSS 27th Round Survey on Empt. & Unempt. All the four subrounds)

Columns 6&7, Statistical Abstract, India, 1975, CSO.

Columns 8, 9 & 10 - Computed from NSS Landholdings Survey.

Column 11 - Achok Mitra and Sdhar Mukerji (1971) 'Population Food and Land Inequality in India, A Geography of Hunger and Insecurity', Allied Publishers, Bombay.

G. S. Bhalla and Y.K. Alagh (1979), Performance of Indian Agriculture, A District-wise Study, Sterling Publishers PVT. LTD, New Delhi, Table-1, PP 10-11.

Table - 3  
Data Set - III

State/Region	No. of Attached Workers	Estima- ted Area Operated (hectares)	Percentage of Area operated by		Cropping Inten- sity	Total Produc- tion per Gross Cro- pped Area (kg.)	Agricul- tural labre Labour	Number of Households operating top 40% of the land
			Top 10% holdings	Top 5% holdings				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>1. Andhra Pradesh</u>								
1. Coastal	458292	2656100	42.52	28.76	24.59	1529	3153771	162261
2. Inland northern	456091	5375600	43.82	30.01	9.54	657	2137332	153263
3. Inland Southern	68043	2146700	47.06	32.50	7.39	1137	1278156	58278
<u>2. Bihar:</u>								
4. Southern	264327	2017600	35.15	22.81	10.99	862	1068362	195764
5. Northern	1583837	3088200	40.44	26.66	40.83	964	3378081	283138
6. Central	678575	2970400	41.80	28.48	43.95	1082	2190212	111665
<u>Haryana</u>								
7. Eastern	78279	1160900	30.77	19.29	39.70	1362	264044*	48881
8. Western	32392	1124100	31.65	18.64	38.81	908	166268*	37162
<u>Madhya Pradesh</u>								
9. Eastern	861961	4018200	38.80	25.61	18.96	888	1365504	174020
10. Inland East.	503498	3245100	39.03	25.80	15.70	635	846850	91370
11. -do- Western	426187	9475500	35.88	21.33	3.50	682	749234	88694
12. Western	363132	4324000	35.34	22.08	7.54	625	716398	114290



Table 3  
Data Set III (contd..)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	<del>(9)</del>	(9)
13. Northern	57912	2209200	31.17	18.77	7.91	674	275893		93560
14. <u>Maharashtra</u> Coastal	702332	830000	39.12	27.81	3.02	1329	331244		54174
15. Inland West	274465	5251200	42.35	28.37	5.07	628	910011		143666
16. -do- North	98919	1942900	31.59	18.90	6.52	499	825430		70630
17. -do- Central	220385	4964300	29.67	17.46	6.00	291	1092740		119930
18. -do- Eastern	258939	3913000	34.02	20.94	1.50	395	1538014		97465
19. Eastern	143633	1064000	31.38	20.56	16.24	662	412334		78774
<u>Karnataka</u>									
20. Coastal Ghats	162700	380100	32.58	20.31	31.10	1663	227876		31948
21. Inland Eastern	84342	827900	35.81	22.25	10.05	1561	237986		39591
22. -do- Southern	661321	2330200	34.91	22.73	8.09	1411	532903		154074
23. -do- Northern	233011	6181400	34.85	21.45	3.65	718	1535983		161331
<u>Rajasthan</u>									
24. Western	107132	7965100	39.42	22.01	1.99	225	148206		111581
25. North-Eastern	41600	3282000	41.65	27.17	13.53	688	362699		120807
26. Southern	1581	1114200	30.19	18.62	20.42	772	90793		107586
27. South-Eastern	26704	1129900	34.18	22.21	14.08	705	129310		33640
<u>Tamil Nadu</u>									
28. Coastal North	138923	1103300	35.86	24.21	27.24	2033	1149592		120078
29. Coastal South.	186601	1183100	40.46	26.94	20.81	1803	1213995		90513
30. Inland	407974	2191600	39.20	26.41	11.81	1563	1817148		152424

Table 3  
Data Set III (contd..)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Uttar Pradesh</u>								
31. Western	1174638	5594900	37.09	39.46	40.50	1355	1296861	459146
32. Central	1368292	3794500	32.04	20.88	26.32	1010	689090	440443
33. Eastern	1229052	5488600	37.39	25.46	34.62	933	2812798	536666
34. Southern	117043	1898300	33.10	20.02	9.61	721	335059	75490
<u>West Bengal</u>								
35. Eastern Plains	453375	1472400	32.82	20.21	44.12	1367	899937	156346
36. Central Plains	272119	1091500	35.36	22.45	26.96	1603	1250029	138440
37. Western Plains	521508	1109000	36.29	24.00	17.12	1431	996115	119099
<u>Punjab</u>								
38. Northern	143608	1288200	31.12	19.66	41.97	1798	410714	57989
39. Southern	162592	1429800	29.05	18.21	50.13	1734	375991	51671

\*Rural-urban combined.

Source: Columns 2,3,4,5 & 9 - NSS Land Holdings Survey, 26th Round 1971-72 (Regional Reports-Rural)  
 Column 6 - Agricultural Statistics of India, Vol. II, Ministry of Agriculture, Government of India.  
 Column 7 - Ashok Mitra, and Sekhar Mukerji (1971) 'Population, Food and Land Inequality in India, A Geography of Hunger and Insecurity, Allied Publishers, Bombay.  
 Column 8 - <sup>or India,</sup> Census/1971, State Reports,