CHAPTER -1

THE OBJECTIVE AND THE SCOPE

The present study seeks to examine the employment pattern and correspondingly, income and consumption levels of the non-cultivating rural labour households in the selected areas of Punjab and Bihar. The basic objective is to understand on the one hand, the internal dynamics of agricultural transformation and, the impact of the newly emerging interaction between this internal dynamics and the growing rural-urban linkages on the employment structure of the non-cultivating rural labour households, on the other.

Classification of the Rural Labour Force

There are various ways of classifying the rural labour force. Broadly speaking, it may either be agricultural or non-agricultural labour or both since there is an intermixture of economic activities performed by such labour. While a substantial proportion of the rural labour force is dependent on agriculture for its livelihood, a small part of it is engaged in self-employed non-farm traditional activities such as barbers, jheor (water loading), petty shoe repair, etc. Besides, a part of the rural labour force also derives its livelihood from numerous other non-farm activities such as construction, trading, factory work, and so on. Among those engaged in agriculture, the share of wage-paid labourers is quite substantial. This category of rural labour force may be divided into two broad categories namely
hired attached labourers and casual labourers. Hired attached labourers are those who are generally employed for a year at a time and perform different agricultural, non-agricultural and quite often domestic functions for their respective employers. Casual labourers can be divided into two sub-categories. The first sub-category consists of those who are employed for a certain number of days and paid on a daily basis. Those who are employed to undertake specific agricultural operations and remunerated according to the job done are placed in the second category. Of the two broad types of attached and casual labourers, the former are generally paid a lower daily wage rate compared with the latter. The difference is partly due to the former being assured of a continuing employment over the year, and partly perhaps more importantly, due to their attachment to the employer under conditions of indebtedness. Nevertheless, the average yearly income of the attached hired labourer generally exceeds that of the casual labourer because, in most cases, the latter does not get continuous employment for the whole year, as does the former get. Further these two categories also differ from each other in terms of their job mobility. The attached labourers are heavily dependent on one particular family for work. Generally severe restrictions are imposed by their


respective employers on their right to leave the work. Compared with this, the casual workers are more independent to pursue diverse sources of employment. Nevertheless, it is important to underline that as long as total opportunities for alternative employment are small at the village level, the so-called independence enjoyed by the casual workers is nothing more than symbolic. In this regard, the available evidence clearly shows that even in the case of casual labourers, traditional ties exist with the individual landowning employer families, which get strengthened by the credit and accommodation facilities offered by the employers.  

A major factor in the dependence of agricultural labourers on their employer is the close correspondence of the economic hierarchy with the social hierarchy at the village level. Agrarian studies show that a great majority of agricultural labourers belong to lower castes, while the landlords hail from superior castes. Various social and religious institutions strengthen the economic control of the upper castes and classes over agricultural labourers, very few among whom are literate. Attempts to establish organisation of agricultural labourers or the organisation of lower castes for


improving their economic and social standing invariably face the open hostility of the landed interests, and may be successful in areas where alternative job opportunities exist.

According to another system of classification, the labour force is divided into two broad categories, viz., the free labour and the unfree labour. A striking feature of unfree labour as against free labour is that the possessor of such labour cannot refuse to work for given employer, particularly during the peak season. It may be due to a variety of bonds such as traditional attachment to a family, or an estate, indebtedness for a sum larger than that can ordinarily be repaid, allotment of a plot of land by the employer, tenancy under precarious conditions, and so on. Further, the high dependency of the unfree labour on its master almost invariably entails lower wages than the prevailing market wages, longer working hours, irregular payments, the obligation of having to perform sundry household tasks, a claim by the employer even upon the time of the labourer's wife and children, and so on.

Further depending upon the length of the period of service and its conditions, the broad categories of free and unfree labour can be further divided into sub-categories. For instance, within the group of free labour, various arrangements

5. It is worth mentioning that the problem of organising the agricultural labourers is largely due to illiteracy of labourers, absence of alternative non-farm job opportunities and organised resistance by the employers. For further details, please see, S.L.Bapna(1973), "Economic and Social Implications of Green Revolution - A Case Study of Kota District." Agro Economic Research Centre, Vallabh Vidyanagar, Sarder Patel University, Gujarat.
such as those ranging between a single day to a whole year contract, from a single crop operation to a whole crop season, etc. can be visualized\(^6\). Similarly the broad category of unfree labour covers full time service arrangements on an annual or more than annual basis in a state of precarious dependency, almost bordering on beck-and-call system; unfree labour must work for a single master whenever required and can seek other employment only when there is no work on master's fields. Under tenancy arrangements, the unfree-tenant-labourer is required to perform a certain number of days of work for his landlord at nominal or sometimes no wages at all\(^7\). The harwaha system of parts of Bihar represents another instance of beck-and-call relationship. This was in evidence in our sample households from Bihar's district of Bhojpur.

**New Farm Technology in Rural India**

Over the last two decades, especially since the mid-sixties, Indian agriculture has undergone significant changes, mainly because of the introduction of new production technology. The new production technology consists of a highly complementary


packages of biochemical as well as mechanical innovations.\textsuperscript{8}

While the former comprises irrigation-seed-fertilizer package, pest and disease control measures etc; tractor, thresher, harvester, tubewell and other mechanical equipment etc. are included in the latter. Available evidence suggests that with a given land base, the said two components of the new farm technology have a differential impact on the timeliness and scale of field crop operations, soil structure, plants, animals, labour-absorption\textsuperscript{9} composition of costs on different farm sizes, etc\textsuperscript{10}.

Under the spurt of this technological breakthrough, while on the one hand, agricultural production and productivity have registered fairly big increases, on the other, factor proportions and their relative shares have also undergone a


\textsuperscript{10} C.H. Hanumantha, Raó, (1975); Op. Cit. pp.77-79
tremendous change\textsuperscript{11}. However, depending upon the irrigation base, infra-structural facilities and institutional framework, the new technology has been adopted by different areas in varying proportions. Consequently, the impact of the new farm technology on agricultural production and productivity as also on the rural employment structure has differed from area to area.

It is now widely acknowledged that states such as the Punjab and Haryana have experienced the most profound impact of the new farm technology, whereas states such as Bihar and Orissa have generally lagged behind. This, however, should not be construed to mean that the whole of Punjab has experienced the same degree of the impact and the whole of Bihar has remained devoid of it. There are pockets of Punjab such as the sub-mountainous terrain of Districts Gurdaspur, Hoshiarpur and Ropar which are relatively much less developed than others, while in Bihar, Districts such as Nalanda, Bhojpur and Rohtas are substantially ahead of others in the matter of agricultural development.

The induction of the new farm technology has initiated a process of qualitative rural transformation. This is characterised by changes in the socio-economic outlook and attitudes of the different sections of the rural community. These changes have occurred in a manner that economic values are becoming increasingly dominant over social values. In the areas

of green revolution, caste which once used to be the most dominant institution of the rural society is losing its influence, and caste-based obligations are now given relatively less recognition in the economic life of the rural people compared to the pre-Green Revolution era. Caste rigidities are breaking. The traditional 'Jajmani' system, which had been regulating the socio-economic life of the rural people since long, is gradually being replaced by formal contractual relations\textsuperscript{12}. Consequently, caste-based occupational classification is gradually disappearing. Low caste people are moving out of their ancestral occupations in search of better economic professions. Inter-generational and intra-generational occupational mobility seems to be increasing at a faster rate\textsuperscript{13}. The people in the countryside are becoming more and more receptive to new ideas, attitudes and values. In brief, the economic, social and institutional set-up of the village economy is undergoing important changes.

Under the impact of the technological changes, the factor proportion in agriculture have changed substantially. So have changed the structure and the level of employment. While on the one hand, the relative importance of the non-farm activities partially inspired by agricultural expansion itself, seems to have grown steadily over the years, the locale of some of these

\textsuperscript{12} B.K.Agarwal, and P.C.Deb, (1971), "Inter-generational Occupational Mobility in Ludhiana", Punjab Agricultural University, Ludhiana

\textsuperscript{13} M.P.Kaushal, (1969), "Mechanisation of Agriculture and Community Relations", Paper read at 10th All India Sociological Conference, Delhi.
activities has also shifted from the rural to the nearby urban and sub-urban areas, on the other. Consequently, lots of non-farm activities are gradually disappearing from the villages. However, simultaneously some other activities are expanding fast. Besides, some new activities are also emerging as the important sources of employment and income to the non-cultivating rural labour households. Still further, some of these households are gaining employment in the nearby sub-urban and urban towns. In brief, in areas of the Green Revolution, these households have started enjoying more than one source of employment and income. In the changing conditions, some working members of such households are employed as wage labourers inside agriculture; some others are also employed in non-agricultural activities, in the rural as well as in the nearby urban areas. Employment in the nearby urban centres has been opened up to them because of expanding industrial and commercial activities and facilitated by an expanding network of village link roads. Although physical distance from the town still remains an important constraint, yet the growing network of village link roads and consequently, the increasing urban contact, coupled with the internal dynamics of rural transformation have an important bearing on the changing employment structure of the rural labour households.

**Empirical Evidence on New Farm Technology**

Recent years have witnessed a spate of research contributions by Indian as well as foreign research workers to the study of the new technology. It is, however, a pity that very
few studies regarding the impact of agricultural growth and rural transformation on rural labour households have appeared so far. Most studies on the impact of the Green Revolution have focussed on production performance, distribution of production gains between small and large farms, between surplus and deficit regions, and so on. At best, the category of the landless labour households has figured only marginally, say, in terms of the impact of tractorisation on labour employment, real wage behavior, cropwise labour use, etc. Comprehensive studies on the total household economy of this category of rural workers have been rather exceptional. Perhaps, the preoccupation of researches and policy administrators with agricultural production and problems connected with the Green Revolution was due to the fact that in the wake of the introduction of the new farm technology, a large number of economic issues have come up. These issues are of diverse variety. As the process of technological transformation of Indian agriculture was initiated with the introduction of the IADP in the early sixties, some researchers examined critically the achievements of the programme in terms of its objectives of increase in yield levels and the volume of foodgrains production. The broad finding about the programme was that it did not succeed much either as a 'path finder' or as a 'pace setter'. It did not make an immediate impact on output at the national level. It was found that the

production increase in IADP districts was non-significant and this experiment did not virtually make any perceptible dent on India's agricultural economy.\[15\].

Next, while a fiercer controversy has centred around the farm-size productivity relationship\[16\], some studies have explored extensively the input-output relationship under the old

---


and the new technology for different strata of farmers\textsuperscript{17}. Some research workers while attempting to investigate the input cost and the composition of cost for adopters and the non adopters of the new technology have highlighted its social and economic implications.\textsuperscript{18} Still others have sought to look into the possibilities of capital formation in agriculture under the impact of the new farm technology.\textsuperscript{19} Some studies also deal with the institutional finance and co-operative credit in the light of the rising requirements of the new agricultural technology.\textsuperscript{20}

Some researchers have also attempted to highlight the role of

\begin{enumerate}


\item \textsuperscript{20} Harwant Singh, and A.S. Kahlon, (1971), "A Study of Credit Requirements and Advances to Farmers in Patiala District",}
'semi-feudal' production relations and other institutional bottlenecks as a barrier to agricultural development. A lively debate on the emergence of capitalism and the mode of production in Indian agriculture has also ensued following the onset of the Green Revolution. It is, however, a different matter that it


has enmeshed itself only into an abstract conceptual controversy.

Further, empirical studies on the pattern of distribution of gains of the improved farm technology have also swelled in number. Some Indian scholars have found that the distribution of production gains of the new agricultural technology has been highly skewed. In particular, the production gains accruing from new investments following the adoption of the new agricultural technology, especially for tubewell installations and irrigation channels, the distribution of seeds and fertilizers, etc. have tilted heavily in favour of big land operators. Consequently, the weaker sections of the society of which the small farmers and the landless labourers constitute a fairly large multitude, have generally remained devoid of such gains. In a sense, they have viewed the perpetuation of rural poverty and


economic destitution as an off-shoot of the Green Revolution. Such views have gained further support from some foreign observers of India's Green Revolution who maintain that a host of social and political problems such as social polarisation, class conflict and social tensions due to growing inequality have emerged much more quickly than anticipated in the areas of the Green Revolution. On the basis of impressions gathered hastily via their talks with officials and non-officials and also during short trips to some areas of the Green Revolution, some foreign scholars feared the 'Green Revolution' turning into 'red'.

Their pessimism is based upon apprehensions arising out of deteriorating employment prospects of the weaker sections under the impact of rising mechanisation, growing regional disparities

with irrigated areas progressing steadily and the unirrigated areas lagging behind and the strengthening of socio-economic and political power of the rich peasants in the rural areas, and so on. Some scholars of this genre have anticipated the emergence of the 'generations of problems' consequent upon the arrival of the Green Revolution, perhaps basing their analysis in the vein of historical consequences of all major technological changes occurring from time to time.  

The other set of studies strike an optimistic note. Such studies concede that although the gains have been unevenly distributed, yet in absolute terms, all groups have registered some gains from the introduction of the new agricultural technology. Consequently the view that the gains of the new

---


farm technology have tilted in favour of big farmers alone does not either exist or has been exaggerated by the critics. Their main conclusion is that the advent of the new farm technology has made a perceptible dent both on the absolute poverty as well as its intensity. By implication, these studies refute the impression that the new farm technology tends to accentuate poverty and leads to immiserization of peasantry. It is held in many quarters that the new farm technology has helped to reduce the relative income inequality among the adopting sub-sets. However, some scholars while not ruling out altogether the possibility of future agricultural unrest, conclude that symptoms of the rise of dual economy were not discernible in the areas. And moreover, there is not enough empirical substance either for the growing rural tensions or to the view that such tensions have mainly originated from the introduction of the new agricultural technology. Some scholars mildly concede these problems which according to them are of minor nature only. While accepting growth as the main objective, they have advocated that resources must be placed at the disposal of large farmers to secure maximum growth. Widening inequalities in the same region can be taken care of later by appropriate fiscal and redistribution


The pattern of spatial distribution of production gains of the new farm technology also forms the subject matter of recent research. In such works, it has been observed that the pattern and the intensity of adoption of the new technology and the resultant gains are unevenly distributed among different regions of the country and also between different districts within a state. Besides, the impact of the new technology on the levels of living of adopters and non-adopters, wage rates, levels of living and poverty of agricultural labourers, the

---


participation of female labour. The employment opportunities outside agriculture, tenancy and changes in land relations, etc., has also been explored by a number of researchers. A few research workers have also investigated the impact of the new farm technology on farm employment as also productivity levels of major crops.


It needs to be pointed out here that most such studies relate to the early years of the Green Revolution. Moreover, each individual study had a limited scope of inquiry. For example, studies dealing with the production effects did not attempt to go into the question of income distribution and those concerned with the later did not generally examine the closely related but crucial aspects of household consumption, savings and so on. Similarly, the scholars dealing with problem of rural unemployment have not gone farther to examine adequately the consumption patterns of those who belong to the lower strata of the rural hierarchy. In plain words, most literature dealing with the Green Revolution and the consequent agricultural development does not attempt specification of the household economy in terms of the employment - income - consumption nexus of the non-cultivating rural labour households. Not only this, in some of the studies, the conclusions have been derived just by referring to historical parallels (as in the case of Byres). Consequently, in absence of enough empirical substance, the conclusions reached in such studies tend to be borne out of casual observations. Further, some other studies are based on

unduly small sample coverage, and some of them suffer from technical inadequacies as well.

The foregoing discussion shows that most studies on the impact of Green Revolution have generally bypassed the non-cultivating rural labour households in a manner as if most of them constitute only a fractional cost of farm operation and not an integral part of the rural economy. This neglect might have been based on the presumption that since rural agricultural sectors continues to provide employment opportunities to ensure a minimum subsistence level, most such households seek employment somewhere within the agricultural sector itself. In a sense, these households have continuously been neglected not only by the policy makers but also by the academicians, a few exceptions notwithstanding. For instance, the institutional and technological changes have been directed largely towards the cultivating households. The exclusive preoccupation of researchers as well as policy administrators with the cultivating households may have its own justification, presumably because increased agricultural production has been one of the most urgent and major concerns for the country. But keeping in view the fact that the non-cultivating rural labour households form an integral part of the rural community both in terms of the size of their population as well as their participation in various socio-economic activities, they should not have been ignored. Though some reforms are claimed to have been exclusively designed for the economic betterment of such households, yet their half-hearted implementation has rendered them almost a paper exercise.
only. Furthermore, the expansion in employment opportunities of these households has not been a prime objective of the Green Revolution. Consequently, one does not know much about the impact of the internal dynamics of rural transformation on the household economy of such households.

Further, over the last 10-15 years, a new phenomenon of great significance has emerged inside the Punjab agriculture. In seasons of wheat harvesting, rice transplantation and rice harvesting, a large number of agricultural labourers migrate into Punjab from other states. This is mainly due to certain pull and push factors, operating simultaneously in the inmigrating as well as in the outmigrating states. Moreover, during the last 8-10 years, in terms of the number of migrants, a shift has taken place heavily in favour of Bihar against eastern Uttar Pradesh. Further, regardless of the reasons for this migration and its related aspects, it needs to be pointed out that the employment of this labour force has certainly many socio-economic implications for the inmigrating as well as outmigrating areas. Unluckily, this important phenomenon has not attracted adequate attention of researchers. Consequently, issues pertaining to employment pattern of the migrant vis-a-vis local labour remain by and large unexplored.

37. So far, only two studies have appeared on the theme of migrant labour in rural Punjab. See Bipin Chandra (1982), "A Study of Migrant Agricultural Labour in Punjab" (mimeo), August; and Manmohan Sharma (1982), "Impact of Migratory Labour on the Rural Economy of Punjab State" Man and Development, Vol. IV, No.3 pp. 66-130.
THE PRESENT STUDY

The preceding discussion implies that a single systematic empirical attempt to examine the position of the non-cultivating rural labour households in the matter of employment, income and consumption as also the employment/earning pattern of the migrant labour in rural Punjab has yet to appear. Thus, there is a big research gap. The present study is a modest attempt to fill this gap. The study compares employment, income and consumption status of such households in Punjab with their counterparts in Bihar. Besides, an attempt is made to study the pattern of employment and earnings of the migrant labour in rural Punjab. The states of Punjab and Bihar, and the specific areas within the two states, have been chosen to provide both contrast and similarity. The sampling details are set out in Chapter II.

The Study Seeks to Examine:

1. The variations in the nature, composition and extent of on-farm as well as non-farm activities, in which non-cultivating rural labour households are engaged in the two states and to account for the factors that underlie such variations;

2. The quantitative significance of these activities as the source of employment and income to the households engaged in them;

3. The consumption pattern of such households in the selected areas;
4. The extent and intensity of poverty among the sample households in the two study areas;

5. Out of the year-round wage-paid on-farm employment/earnings in Punjab, the proportion that is enjoyed separately by the local labour and the migrant labour; and

6. If the migrant agricultural labour into rural Punjab outflows from the agriculturally developed/backward areas of Bihar.

The criterion adopted for the selection of the sample areas in the two states, a comparative profile of these areas, sample procedure as also the size of the sample are set out in Chapter II. Chapter III describes the concepts and the variables used in the present study. Issues pertaining to the structure of on-farm employment/earnings between the resident labour of the two study areas are examined in Chapter IV. Chapter V compares the pattern of non-farm employment/earnings between the labour households of Punjab and Bihar. While Chapter VI examines the pattern of total yearly employment/earnings, an attempt is also made here to look into the levels of net household income as also in the levels of poverty prevalent in the two study areas on the basis of per capita net household income. Chapter VII examines some issues pertaining to the migrant labour as also its employment and earnings. Chapter VIII describes, in reasonable detail, the consumption pattern of sample households in the two states. Finally, the main conclusions and a few policy recommendations are given in Chapter IX.