For discussing the occupational structure of the region, an understanding of the size and characteristics of its working force becomes essential at the outset.

Out of a total population of about 0.96 million, 59.2% (0.68 million) were workers in 1961 in the whole region. The proportion of male and female workers came to 61.8 and 38.2 per cent respectively. The male workers formed 64% of rural and 60% of urban population, but unlike the villages where female workers were 60% of their total population, their proportion was hardly 11% in towns.

Correspondingly, the proportion of workers in rural areas was close to the regional average of 59% in Himachal Pradesh, outer hill districts of Uttar Pradesh in the west and Nagaland in the east. Along south north directional cross-section, the ratio changes from 30-40% to nearly 70% of total population in all Himalayan areas, the rural female workers constituting as low as 12% of their population in the adjoining plains to as high as 60% in the inner mountains. By such comparisons of working force and the proportion of female workers, most of the study area gets intermediately placed between low-ratio areas in the far south and high-ratio tracts in the far north.

As for the urban tracts, the proportion of working population is within 30-40% range as in other Himalayan towns. But the female workers form about 10 to 15% of their urban population as noticed also in Himachal Pradesh and Uttar Pradesh hill towns. It rises to 30% only in the towns of inner Jammu
districts in the neighbourhood of this region and 53% in the small urban tract of Ladakh.

Table 36
The Size of Working Force 1961

<table>
<thead>
<tr>
<th>Tahsils</th>
<th>Male Workers (As % of Total Male and Female Population respectively)</th>
<th>Female Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Areas</td>
<td>URBAN AREAS</td>
<td></td>
</tr>
<tr>
<td>Lahaul</td>
<td>71.4</td>
<td>68.9</td>
</tr>
<tr>
<td>Brahmir</td>
<td>69.2</td>
<td>60.5</td>
</tr>
<tr>
<td>Chaurah</td>
<td>69.0</td>
<td>59.4</td>
</tr>
<tr>
<td>Chamba</td>
<td>66.3</td>
<td>59.2</td>
</tr>
<tr>
<td>Pangi</td>
<td>67.4</td>
<td>64.8</td>
</tr>
<tr>
<td>Bhatiyat</td>
<td>63.8</td>
<td>41.6</td>
</tr>
<tr>
<td>Kulu</td>
<td>68.6</td>
<td>68.6</td>
</tr>
<tr>
<td>Chichiot</td>
<td>67.8</td>
<td>66.4</td>
</tr>
<tr>
<td>Karsog</td>
<td>66.3</td>
<td>59.5</td>
</tr>
<tr>
<td>Mandi</td>
<td>58.7</td>
<td>59.3</td>
</tr>
<tr>
<td>Jogindernagar</td>
<td>54.0</td>
<td>56.3</td>
</tr>
<tr>
<td>Kangra</td>
<td>61.2</td>
<td>57.0</td>
</tr>
<tr>
<td>Palaupur</td>
<td>51.7</td>
<td>47.9</td>
</tr>
<tr>
<td>Region as a Whole</td>
<td>62.0</td>
<td>60.0</td>
</tr>
</tbody>
</table>

SOURCE: Computed from tahsail data included in District Census Handbooks of Kangra, Mandi, Chamba and Lahaul-Spiti districts.

Intra-regionally, a reference to the above tabular data as put in figure 30 and to the map (Fig.31) showing spatial distribution of working population confirms the contrasting ratios in three zones of this region.
While it is not more than 50% in a larger part of the outer zone, it generally rises to 50-60% in the middle zone and in hill interiors and 60-70% of rural population consists of workers in the inner zone to the north of Pir Panjal range.

By way of explanation, there is relatively easier living in the outer valleys and a greater need to combine allied jobs with arduous cultivation in mid-zone and hill interiors. In the northern inner zone, there is a greater compulsion for its larger manpower to engage itself in onerous duties not only of cultivation but of transportation, storage of necessary commodities for long snowbound winters, of completing the construction of spacious and strong houses and the frequent repairs of snow-damaged structures within short summers. These circumstances are responsible for a rapid increase in the proportion of working population on proceeding towards this part of the region.

The higher participation ratio of workers to total population particularly in the hill interior does not denote a really higher level of economic activity. Apparently it goes to reflect a state of underemployment in rural areas in view of the sole dependence of such a large number of people on unremunerative agriculture. Still, at the same time, the large working force with a considerable participation by females reminds of the difficulties of hill-cultivation and need for a large number of manual workers struggling to eke out a bare living from it.

1 In 1971, 30-40% workers in outer, 40-50% in middle and 50-60% in inner zone were recorded.
While there is a general predominance of male workers except in rural areas of Mandi-Joginder nagar in outer zone, its Bhattiyat-Palampur belt shows relatively the lowest proportion of female workers in the region. According to general reports, the latter is ascribed to a distinction in employment pattern of women belonging to different socio-economic strata of rural sector and to the concept of social status determined by economic situation, caste traditions and taboos prevailing among different classes. On the basis of interviews conducted with the families of different castes in villages of these outer valleys, it was found that women belonging to landless agricultural labourers' class, scheduled castes or to socially low strata sought employment either out of sheer economic necessity or felt free to share work in cultivating fields and in rendering traditional services to the village community. By and large among marginal cultivators, caste prestige disliking their women folk to work for earning a living in traditional way no longer holds good. But in southern part of Palampur tahsil which is the stronghold of high-caste Rajput cultivators, their women do not partake work in the fields because of the age-old caste taboo associating it with a low social status. Among other Rajputs specially in Bhattiyat and partly in other areas I found their women working in the fields but nobody was ready to accept it openly to maintain the old caste prestige. Curiously such
Caste taboos turning out low proportion of female workers do not stand in the way of educated rural girls joining suitable service jobs and staying on in their own villages.

Unlike the large scope and traditional need both for self-employment and wage-paid labour for rural women in cultivation and household industry, their urban counterparts have either lesser education for state services or limited opportunities to work except in certain chosen fields. Lesser need and greater prosperity among urban dwellers also keeps away most of the women from joining active economic pursuits.

### Table 26

**Primary Occupational Classification 1961**

<table>
<thead>
<tr>
<th>Occupational Class</th>
<th>As per cent of total...</th>
<th>Rural Areas</th>
<th>Urban Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivators</td>
<td>Workers</td>
<td>36.9</td>
<td>10.5</td>
</tr>
<tr>
<td>Landless Agri.Labour(Cultivators)</td>
<td>1.4</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>Forestry Grazing (Workers)</td>
<td>1.1</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Mining etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Industry (Workers)</td>
<td>4.3</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Other Manufacturing(Workers)</td>
<td>0.9</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>Construction (Workers)</td>
<td>2.0</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Trade (Workers)</td>
<td>0.4</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Transport (Workers)</td>
<td>0.2</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous (Workers)</td>
<td>4.3</td>
<td>63.1</td>
<td></td>
</tr>
<tr>
<td>Total non- Agriculture (Workers)</td>
<td>13.1</td>
<td>89.6</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: Computed from District Census Handbooks of included areas, Census of India, 1961.
It is an uneasy surprise that such a large proportion of workers manages to eke out its living only from 8% of region's cultivated area spread unevenly in intensively cultivated irrigated valleys as well as on sterile mountain slopes.

Next to the overall dominance of agriculture, more than one third of the rural non-farm workers are engaged in some sort of manufacturing activity. It is not simple to understand that the number of people engaged as primary workers in forestry-grazing and quarrying etc. (all lumped together under third industrial category of primary census abstract) is very small. Only about 7000 workers are reported to be drawing sustenance from them as independent occupations, low enough in proportion to about 50% of region's total area covered by various types of wooded forests and important pastures.

The under-estimation of occupational strength of graziers arises from various grounds. Even the 'Gaddis', the very word associated with shepherding the year round, state 'agriculture' as their occupation during usual enquiries. It lacks objectivity as the statement is not free of the bias of concept of social-status associated with caste-ridden hill society. Normally a Gaddi is an alpine grazier only by economic necessity as hardly one out of ten members expressed his interest in migratory grazing as an independent occupation. He does not have a locus standi in socio-economic structure of region's rural community without possibly owning a parcel
of land in the village. Such notions and practices make most of the non-farm pursuits in rural areas so much allied and overpowered by the single occupation of cultivation that they prove elusive for a sound practicable classification. This lacuna and the need for availability of exclusive manpower for employment on forest works and forest-based industries made the recent National Labour Commission Report to recommend for raising a permanent labour corps divorced from agriculture for planned development of these resources in future.

The changing criterion of the terms 'worker', 'working period' and 'major and minor work' has proved to be a handicap especially in case of migratory graziers and the forest labour. They had, in many instances, left their census villages and camps as far away as Kumaon-Garhwal for forest jobs by the time they were to be enumerated in final returns.

For the reasons given above and on the basis of all secondary sources of information and field observations, it will be useful to develop this account by discussing the place of (i) cultivators, (ii) graziers, (iii) forest dwellers and (iv) industrial workers in occupational structure of this region. It will be concluded by attempting an overview of all non-agricultural occupations together.

(i) CULTIVATORS

Agriculture is the most primary economic activity and cultivators make a major occupational group of the region.
At the outset a cross-reference of proportion of agricultural workers in individual areas to 87% of regional average brings out a noteworthy contrast. The outer belt of Kangra-Bhattiyat-Palampur as well as the middle-inner areas of Brahmour-Lahaul both have slightly less than the regional average proportion of cultivators. The main cause is attributed to the availability of additional opportunities of earning in miscellaneous jobs available in nearby Punjab and the group of Kangra-Palampur towns and cantonments in first category of areas and to a greater unremunerativeness of agriculture in second one. In the rest of this region, their proportion ranges between 87 and 93% of working population. Even in towns of Jogindernagar, Kangra and Kulu, 38, 15 and 17% of manpower consists of cultivators. By having much over 90% of female workers and 70-90% of male workers engaged in cultivation, the contribution of womenfolk to subsistence type of family farming invariably exceeds that of their men counterparts. The region stands prominent for having 45-55% of all cultivators as women generally sharing this characteristic with other Himalayan regions. This proportion higher than 20-40% of adjoining areas of Punjab-Jammu and of eastern Himalayan states, lower than that prevailing in Uttar Pradesh hill districts and in Kinnaur and closer to that of Ladakh, Himachal Pradesh and of Sikkim.

Although the variation in cultivated acreage ranges from 15 sq. miles in Pangi-Lahaul in the north to about 200 sq. miles in Kangra-Palampur in the south, the number of cultivators
inhabiting each sq. mile of it is 1885 and 1354 in the two areas respectively. It illustrates not only the preponderance of farming people despite six times the cultivated area of the region under forests plus pastures but is also suggestive of problem of this occupation.

Leaving aside the centres of bread valley plains and innumerable basins, one very rarely comes across the continuity of farming and of the settlement of cultivators. This fails to convince us in the field that such a large number of rural hamlets (rural population is virtually synonymous with cultivators' population) are dotting the countryside even in densely populated areas like Kangra. But the billiard-table size of fields bear full testimony to excessive number of cultivators supported by agriculture.

Initially it was creditable for the early hill settlers that as a body of pioneer farmers, they could explore the nooks and corners of this difficult region and brought every conceivable plot of cultivable land under plough. Their ingenuity and indigenous skill and the acceptance of a low level of living have alone helped them in settling on the land and staying on it in face of increasing pressure of population and a general absence of occupations. In order to expect the subsistence for his family, the hill farmer's struggle for arable land has proved to be a lever of human history.

If we go back to the agrarian structure prevailing in 1951, in addition to owner-cultivators, the non-cultivating owners and non-owner cultivators besides landless agricultural
FIG. 32

DHAULA DHAR–PIRPANJAL REGION

NON-OWNER CULTIVATORS AND NON-CULTIVATING OWNERS AS PER CENT OF CULTIVATORS

1951

DATA BY REVENUE CIRCLES

Agricultural worker* include cultivators and mostly landless Agricultural labourers.

FIG. 33

DHAULA DHAR–PIRPANJAL REGION

AGRICULTURAL LABOURERS AS PER CENT OF AGRICULTURAL WORKERS

1961

DATA BY REVENUE CIRCLES

AGRICULTURAL WORKERS

include cultivators and mostly landless agricultural labourers.
labour are marked. The non-cultivating owners formed about 10% of rural population in Mandi-Jogindernagar and about 3% in Kangra-Palampur and Karsog falling in the outer zone to the south of Dhaula Dhar. The non-owner cultivators were on the other hand, greater in Kangra-Palampur forming 10-12% of rural population, between 3-5% in Bhattiya, Kulu, Churah and Pangí and lesser in other parts. The landless labourers were also more in Kangra-Palampur making the outer populous area of the region (Fig. 32).

Before 1948, in parts of the region, the land belonged to the Bajas, known as 'Malik Ala (superior owner)' and there was no private individual ownership. In 1963, by passing of the Himachal Pradesh Abolition of Big Land Lord estates and Land Reforms Act and subsequent ceilings on land holdings, the agrarian structure underwent a major change.

Since then, most of the non-cultivating owners and non-owner cultivators have virtually disappeared but the proportion of landless agricultural labour has risen by five times in Kangra-Chamba, two times in Kulu districts and has decreased to half only in Lahaul during 1961-71 period. Thus more than what the agrarian reforms are attempting in solving the problem of land hunger, the urgency of reducing the pressure of population on farmland is greater.

In low hills and valleys of the region, a general security of crops goes on concentrating people on agricultural land from which they are not easily driven off till reduced to straits.
It makes productive soils, uneconomic holdings and poverty among the general mass of cultivators to co-exist. 2

In agriculturally non-remunerative high hills and valleys, a possible resort to allied occupations has provided a 'pull-through' the situation. The better use of region's forests and pastures is becoming equally difficult because the composite nature of occupations (all jobs rolled into the occupation of farming) can no longer outlive the current break-up of joint family structure and ill suits the need for a better distribution of agricultural manpower over different occupations. As the areal variations in percentage of working population occupied in farming are not large, the data summarised by broad regions is useful for this discussion.

Generally both the proportion of landless agricultural labour and of cultivators with less than one acre of holding decreases towards inner part of the region. If we qualify it further, on an average of 1.6% of total area is cultivated in the middle and inner zones and 14% in the other relatively easier sections. This areal distribution results in two-fold regional division for detailed discussion of this occupational group: (1) Areas with greater proportion of cultivators living under easier conditions of working situated to the south of Pir Panjal Range, (with 98% of agricultural workers on an average); (2) Areas with relatively lower proportion of

2 Indo-German agricultural project introduced in Mandi in 1963 and in Kangra in 1967 is the only improvement in these major areas of agriculture aiming at introducing mixed remunerative farming, diversified crops, reclamation and irrigation of land.
cultivators living under difficult conditions in the most mountainous middle and trans-Pir Panjal inner tracts (with below regional average of 77% agricultural workers).

1. **Areas with Greater Proportion of Cultivators and Easier Working Conditions**

A greater number of persons depending on cultivation in dense to moderately populated outer zone is accounted for by the following favourable factors: (a) A large proportion of land made capable of receiving yearlong irrigation. (b) A large area favoured by suitable temperatures, 9-10 months-long growing season and seasonal rain for growing two crops a year, making it the rice-land of this region. (c) An adequate supply of agricultural labour helping family-labour in intensive cultivation and (d) Availability of sundry jobs in neighbouring urban tracts and nearness to plains providing sources of considerable extra income not easy to state in statistical terms. (e) Certain castes of the peasants are as much associated with the occupation as 'sons of the soil' as certain others with military jobs. These castes are of 'Ghiraths' (equivalent to hill jat) in Kangra-Palampur, of 'Kanets' in south-eastern interior and 'Bathis' found more in western part of the outer region as alluded in Chapter on caste composition. In terms of total population, their strength is not much. Yet they make sizable communities of fine hill peasants concentrated in pockets. Their caste traditions are well-suited to the tilling of soil and one can hazarded to guess that more people could have subsisted upon the land given a still higher proportion of such
hardy cultivators raising the maximum output from scarce land. The caste prejudices do not allow the persons (largely Rajputs) owning larger holdings to take full interest in farming and, in case of small holdings (generally belonging to hard-working cultivating castes) the produce is not enough to feed the family.

There are different categories of agricultural labour filling up the need for manpower in fertile valleys of low Himalayas. Away from these tracts, the reduction in its proportion coincides with area of less productive soil where intensive cultivation is limited and population is less dense. Still, with an increase in the size of family holding exceeding 5 acres, the need for the employment of farm labour arises even in hilly terrain and its proportion registers a moderate increase. On the one hand, the need for greater labour inputs in difficult farmland provides scope for the employment of such labour. On the other hand, the relatively greater size of holdings has left little land for it.

Next to the wage labour, children are also seen helping their families on subsistence farms tending to lower the per capita output and that, too, at the expense of their school education. The female workers have also come to form a permanent family labour in these valleys and their participation in the work of cultivation is generally very high.  

3 Computed from table 1.21-B-X of relevant District Census Handbooks, 1961.
In the long-last these are the different modes of combinations of mutual relations, duties and obligations among family-labour, wage labourers and share-croppers which describe the agrarian hierarchy and patterns of productive organisation of subsistence economy rather than any statistical grouping of people with reference to size of land holdings.

The structure of cultivated holdings with an average of less than one acre per head in most of these areas and generally 50 to 75% of the households having not more than 2.5 acres, has gone to shatter the economic basis of agriculture turning cultivators to subsist on income as wage earners. Thus, despite the impact of favourable environment, the total agricultural production is hardly sufficient for the growing needs of people.

Although agriculture is the major primary occupation, only 64% of the cultivating households depend principally on farming, 22% falling equally upon household industry and the rest choose other alternate secondary jobs. From among workers in secondary occupations, a little over 10% of total households are engaged in cultivation and another 10% of them work as hired agricultural labour or as tenant-proprietors of land because many of the Rajput landowners still do not or can't work in fields themselves.

3 Computed from table 1.21-B-X of relevant District Census Handbooks, 1961.
4 Computed from table 1.16-B-VII Part A of relevant District Census Handbooks, 1961.
Dwindling and fragmented size of cultivated holdings consequent upon split of joint families and increasing pressure of population has deteriorated the economy of agricultural classes. It has resulted in employment of larger number of poorer peasants as wage labourers or share-croppers on farms of others, helping the adults from the employing families to seek outside jobs both for need and enterprise.

It is worth mentioning that a number of small proprietors of land are also tenants by working additionally in the farms of other land-owners. While the landless farm labour is classified as primary workers, the hired agricultural labour, many times, consist of secondary workers. For instance, many local artisans whose traditional jobs are no longer lucrative with the introduction of factory-made articles in markets, join the ranks of this type of labour force in villages. This work is also undertaken irregularly by poor cultivators of small-sized holdings whose condition is not much better as compared to their landless counterparts. As a matter of fact, the low wage rates of this class of unorganised labour in rural areas, paid in cash or kind and its demand in many male-adult-deficient tracts, have provided for a high degree of intensive farming.

While generally the proportion of landless agricultural labour is only 2.8% of the cultivators in outer zone (being 1.4% in rural areas in the whole region), they make the maximum of

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8 With less than 50% of rural population falling to 40% in Palampur, comprising adult farm workers, the parts of this zone depending fully on manual labour, suffer from their deficiency at peak seasons.
10% in parts of densely populated valleys of Palampur-Jogindermagar, Kulu and Kangra (Fig. 33).

2. Areas with Lower Proportion of Cultivators and Difficult Working Conditions

The proportion of cultivators towards inner zone in Brahmpour, Bada-Banghal, Pangi and Lahaul situated close or to the north of Pir Panjal is relatively less. There is an acute shortage of farmland, extremely rough and high terrain, cold-arid climate, shortening the growing season to one crop a year. Very little cultivation is possible without managing difficult irrigation and only in low-level villages (7000 to 9000 ft. above sea level) two crops are generally expected because of late fall and earlier melting of snow.

Despite an astonishingly large number of cultivators in proportion to land area under plough, although the share of cultivated holding per head of adult farm worker remains small, the proportion of cultivators with more than one acre of land is the greatest in the whole region. At least half of them possess more than 2.4 acres. The polyandrous family system in areas like Lahaul and the persistence of joint management of households in other parts have kept a check on fragmentation of holdings among brothers.

Although cultivation remains the primary occupation, only 10% of rural households depend exclusively on it, 60 to 74% deriving extra income by working equally in household industry and the rest in other jobs in Pangi-Lahaul tracts. 6

6 Computed from table 1.21-B-X in District Census Handbooks of Chamba and Lahaul, 1961.
As for secondary occupations, household industry of some sort has the greatest hold and farming has little surplus scope to supply work to tenant cultivators or hired agricultural labour. These conditions are glaringly different from those existing in areas of the outer zone.

The landless agricultural labour also assumes insignificance and it is only in and around 'Pattan' valley of lower Lahaul that about 5% of cultivators come up locally as such primary workers.

This valley is the most productive one in higher Himalayas in the whole territory extending from Ladakh to Spiti. As already described in first part of this discussion, the proportion of landless farm labour tends to rise locally in fertile and densely-populated valleys. But over most parts of these areas, it is much more paying to turn a grazier, trader or a muleteer than an agricultural labourer to make a living.

Dealing separately with living conditions of cultivators in each part of this zone, Lahaul is unique in having almost 100% of irrigated agriculture, as a dire need in its dry climate to grow even hay and trees in private holdings.

The crops are not only generally secure but 50% more grain has been recently obtained with the introduction of new variety of high-altitude wheat and barley with potato being an important cash crop.

\[7\text{ Computed from table 1.16-B-VII Part A of relevant District Census Handbooks, 1961.}\]
More than two-thirds of the farmers in Lahaul are Buddhist kamets, thriftier and hardier than their counterparts in the outer zone. In certain years, they have been sparing barley for undertaking an exchange against wool from Ladakh and seed potatoes to Indian plains. Till recent times, they spared 1-2 members from each family following trade sum—muleteering as an alternate or secondary occupation during summer season, making at least one-third of total cultivators. Another two-thirds of them possess large flocks of sheep and goats and almost all practise some grazing on the pastures. The household and the farm has been left over largely to the care of women folk, making 84% of female workers participating in difficult and busy farming spread over half of the year. The prevalence of polyandry allows the scope of following 'integrated occupations' (one brother working in the field, another gone with the mules and the third for grazing) on joint family basis, not allowing as much fall in agricultural manpower as is experienced in Palampur-Kangra valleys of outer zone. This practice has been the basis of social organisation of Buddhist farmers living in upper Chandra and Bhaga valleys. Along with the prevalence of Lamanism, this system yielded a fair distribution of local resources and provided social measures to keep the pressure of farmers' population under a check. The political conditions have now changed in this border area, mule transport is getting replaced by motor transport and the fancy

8 It exceeds the male cultivators by 40% in Lahaul, 19% in Pangi and 11% in Brahour.
of getting cash-rich has entered even in its tribal population. Along with it, the old social system is on the decline; fragmentation of holdings and of families has already started among the young people and it is early to say as to how the fairly better-level of peasant prosperity will be maintained in years to come.

The 'Gaddi' peasants belonging to the mid-mountain zone of Brahmour inhabit a far more difficult environment not blessed with good cultivable soil and assured means of irrigation. It has made them taking to grazing of sheep up and down the mountain pastures. They have remained farmers in the sense that they have kept their homes and links with the village community. In their neighbourhood in Banghal tract, the size of holdings is greater, but the cultivators are also more of graziers than peasants. There is a single village of Bara-Banghal in a 290 sq. miles of tract covered with forests, pastures and high-mountain rock waste around. In this village, the landowners are cultivators in name only. They cannot produce enough foodgrains for their own needs and are said to be often paying the land revenue from the income from sheep and wool. Subsidised foodgrains, about 37 quintals of rice and the same quantity of wheat are supplied to the shepherds by the Government during summer grazing season.

The western half of the inner zone known as Pangi stands as a typical instance of the precarious kind of high-Himalayan farming upon which its people survive frequent scarcity.
It suffers from all the natural handicaps described in the case of Lahaul. But the cultivators are least enterprising to resort to alternate occupations or long-distance seasonal migrations. They are literally locked up amidst the mountains and remain isolated from rest of the region even during summers. Except with Lahaul, the passes and the routes connecting it with Chamba are far more difficult and it is the only part of the region which does not expect to enter the automobile age in the near future. Despite 50% of cultivated area under irrigation, the valley experiences frequent untimely snow-fall or prolonged drought creating dangers of foodgrains' scarcity in many of its villages. The cost of transporting 40 kilos of wheat from Pathankot used to be Rs.40/- to Rs.50/- and that too has to be carried on backs of hundreds of sheep and goats in the last 40 miles strip. With no roads and longer snowbound winters, only these animal carriers are capable of walking over narrowly hanging mountain paths of the area. Often there have been reports of air-dropping of foodgrains during scarcity periods, contrasted with surplus production in better years finding no way for export.

The two immediate basic needs to help the cultivators subsist are: i) making irrigation more assured and ii) supplying less difficult links of communication possible with neighbouring areas, particularly with Lahaul in the east.

To ward off scarcity conditions, the supply of wheat was increased from 600 quintals to 1362 quintals in 1972-73 meant for supply on subsidized rates.
(II) GRAZIERS

THEIR STRENGTH AND PLACE IN THE OCCUPATIONAL STRUCTURE

Next to the tillers of land, grazing of livestock, particularly of sheep and goats is an important occupation of the people of this region. As the product of sheep is in the nature of a cash crop which can either be sold or made into clothing, there has recently been a 20% rise in their number as compared to the soil-depleting goat which being eaten or exchanged in the villages, is mostly a subsistence crop. It is only below 4000 feet altitude in important agricultural valleys where stall-feeding is common and the people are rightfully cultivators and incidentally graziers.

In the high mountains, 'where the horizontal area is constricted, the mountain dwellers become conscious of vertical stratification of (grazing) resources by following a staggering schedule for their exploitation within an annual cycle'. The rights of grazing are jealously guarded by the generations of local people and forest literature is replete with the problems of increasing number of flocks and the difficulties in curtailing the established grazing rights of the users. Both in summers and winters, the vacant spaces on both sides of high mountain ranges and lower hills are frequented by the renowned Gaddi shepherds and Gujjar cattle-herders, the most

...and enterprising in visiting far-distant pastures. Till recently, they have played the quiet role of a connecting link between the people inhabiting the isolated valleys, have been supplying meat and wool to the people and their contact with cultivators and traders has created the folk songs, tales and local festivals over the generations.

The graziers' occupation has become lucrative with rise in the prices of animals, the income from the sale of their products forming 17-33% of the total income of many areas. The Government earns revenue in the form of grazing fee levied on graziers, and the villages on way to, and in the vicinity of, pastures benefit from the manure of flocks and tax in cash or kind from all non-local graziers.

As virtually the graziers in this region are the cultivators, a sort of 'farming-shepherds' with one or two members of an average family engaged in grazing as an essential adjunct of hill agriculture, it has become practically difficult to form an idea of the proportional strength of graziers as a separate occupational group. Even in the 'Gaddi shepherd' village of Brahmour, as a representative case, only 35% of the households each with about 100 sheep earned the largest income from grazing, although everyone of them spares members regularly or alternately for spending 6-7 months on seasonal pastures.

12 See foot-note on page 288.
at least two months in transit and only the rest of the short period in their fixed homes in valleys during autumns and springs. On an average in all high Himalayan areas, each household owns 15-20 such animals but none of its members may appear everytime as graziers accompanying the flocks for seasonal grazing. They pay in kind in the form of wool and sheep to some of their kin whom the flocks are assigned by a customary rotation. If the number of sheep has gone on increasing because of lucrative business, and the bribe or a tax prescribed have not proved to be deterrants, the number of graziers howsoever ill-defined, has expectedly increased.

Information from various sources has been tapped in the following paragraphs to reach some readily acceptable estimate of the graziers' strength in working population both at the regional level and in its individual areas.

In the census of 1931, 2.4, 4 and 11% of people in Kangra Chamba and Mandi districts respectively, were enumerated as dependent upon grazing as their main source of living. Even the census of 1961 has broadly placed the proportion of graziers as secondary workers at 15, 4 and 7% of total workers in Chamba, Mandi and Lahaul districts respectively.

The rearing of animals was estimated to provide employment to nearly 10% of the population of hill areas and 22% of state revenue on the basis of a study for all hill and border areas of Himachal Pradesh, conducted by National Council of Applied Economic Research, New Delhi in 1955-56.
at the same time 97-100% of them being cultivators. In the
Primary census abstract, workers primarily depending on grazing
forestry, hunting, fishing and mining etc. together form from
about 1 to 5% of workers (Fig. 34) in individual tracts, an
estimate which obviously is not helpful for our purpose.

In a bid to form a nearly reliable estimate from seeing
a large number of tribal families and high hill dwellers
engaged in pastoralism as a regular or alternate occupation,
the Gaddis forming 2.6% of total population and 3.6% of total
workers of our study area, are suggestive of graziers' strength.
By further including all Gaddi stock of shepherding people in
areas surrounding Brahmour, the proportion rises to 7.4% of
population and 11% of total workers.

In Forest records we come across the number of graziers
authorised to visit important alpine pastures located in
different forest ranges. As their actual number is far in
excess of the few accompanying the flocks, these figures
are also no reliable index of their strength, the flocks
taken to pastures belonging to a much larger body of 'farming-
shepherds' whether holding grazing permits or not.

Thus a conservative estimate is formed on the basis of
average number of animals per head of a grazier and the total
number of animals visiting the pastures from year to year as
entered in Forest records rather than the number of authorised
graziers directly.
FIG. 34

DHOLA DHAR-PIR PANJAL REGION

PRIMARY RURAL WORKERS IN FORESTRY-LIVESTOCK-MINING-FISHING-ORCHARDS AS PER CENT OF TOTAL WORKING POPULATION (1961)

(DATA BY REVENUE CIRCLES)

FIG. 35

DHOLA DHAR-PIR PANJAL REGION

SEASONAL DENSITY OF GRAZIERS (PASTURE BOUNDARIES APPROXIMATE)

DATA BY MAJOR PASTURES

PERCENTAGE

0
10
20
30
40

0 4 8 12 16 MILES

PER 50 MILE

45
50
60
75

UNDENMARKED: WINTER GRAZING TRACTS

FIG. 34

FIG. 35
Although the number of total animals is again underestimated, it gives a little over 3% of the total population and 5.6% (approximately 32,000) of total workers who are known to be practising alpine pasturing in the region as chief source of living. By giving a careful thought to the various estimates we can safely remark that 3.6% in Gaddi areas or 5.6% of rural workers all over the region depend primarily on grazing, the proportion rising to 11% if we include others for whom it is only a secondary means of living.

REGIONAL DISTRIBUTION

In order to form an idea of relative distribution of graziers in view of the situation discussed above, maps showing (Figs. 23 and 35) seasonal migration and seasonal density of graziers on important pastures, the number of sheep per thousand of people and per capita wealth from them, ratios of cultivated/grazing acreage and nutritional density of population have all been taken into account. These are the indicators of the degree of their concentration and the prospects of graziers' occupation in individual parts of the region.

1. Areas with Relatively Greater Concentration of Graziers:

These areas comprise Lahaul, Brahmuor, Banghal and Pangi situated in the rainshadow of Dhaulat Dhar or to the north of Pir Panjal, their high-level pastures scattered between tree and snow line in inner and middle parts of high Himalayas close to the main ranges. Winters being snowbound, the tribal people have perforce combined seasonal grazing with seasonal cultivation.
The number of graziers visiting the pastures is the largest, their proportion reaching 10-15% of workers in localised tracts as the pastures are also the final resting-place of migratory graziers from the end of May (when monsoon breaks on outer ranges) to the end of September. The average area under plough is just 2% but grazing area increases from one-fourth to more than one-third of the total area. The good pasturage and paucity of cultivable land have conspired to give over 2000 sheep+goats per one thousand people (rising to 10,600 in Bara Banghal) and the per capita wealth derived from them ranging between 85/- and 130/- rupees (Rs. 793/- in Bara Banghal) in 1961. The pressure of population on cultivation is fairly high except in the case of Banghal tract where 50-60% of this land otherwise occupies very steep slopes. Obviously people's dependence on cultivation is precarious, virtual non-existence of other resources and proximity to extensive pastures have led to such a widespread adoption of grazing.

The people of Bara Banghal village derive at least 40% of their income from grazing alone, sometimes paying their land revenue out of it. The difficulty of winter feeding of a large number of flocks, local traditions and harsh winter conditions force them out to low Kangra hills during that period.

Highest seasonal densities of more than 50 graziers per sq. mile are observed in Banghal and the lowest in rest of the included areas. Banghal tract is situated in the northeastern corner of Palampur tahsil in the mountain fastnesses of two ranges rising to 20,000 ft. at a number of places. It is the
nearest zone of rich alpine pastures for outer populous zone and for the Gaddis of adjoining Brahmour. It becomes the abode of about 1.5 lakh sheep and goats, both local and migratory for the whole of the summer season (Fig. 23). The pastures in Brahmour are mostly frequented for short intervals on way to the sheep runs of Lahaul, for which reason the seasonal density of graziers does not become very high at any time. Lahaul's high-level pastures are the northernmost, most inaccessible and away from the main populated zone. As the area under grasses is extensive, the seasonal density of visiting graziers remains low despite the fact that over one lakh sheep and goats remain there for 4-5 months in summers.

2. Areas Having Moderate Concentration of Graziers :

In upper Churah, Kulu-Seraj and Karsog, all situated between the two main ranges, partly in the middle and partly in low Himalayas near the mountain ranges, have a moderate concentration, the average area under cultivation being 10% of the total and pastures occupying 12 to 25% of it. Pastures are rich except many in Kulu proper which are found scattered amidst rock waste along the valley heads. Unremunerativeness of agriculture have given rise to 5-10% of workers taking to grazing in localised tracts close to the mountain ranges. There are more than 760 sheep-goats and more than 1000 cattle per one thousand persons, per capita wealth from sheep and goats being roundabout fifty rupees. The seasonal density of graziers is about 20 per sq. mile in Kulu and parts of Churah,
migratory flocks staying for shorter periods during their passage to the destinations in inner zone pastures of Lahaul and Pangí. Graziers hailing from low-lying valleys of Mandi, Kangra and from adjoining parts of Punjab and Jammu have also got their grazing rights in these mid-zone pastures of the region (Fig. 23). The number becomes so excessive in relation to the area available that many graziers go to seek richer pasturage in the inner zone of Lahaul-Pangi. As larger parts lie within the hill agricultural zone of 5000-8000 ft., in many parts of Seraj, Churah and Karsog, pastures, forest blocks and cultivation are frequently found interspersed.

Grazing of sheep loses the dominant importance it has in first group of high-level areas, but that of cattle travelling to medium level pastures, it becomes significant combined with cultivation. Although the number of cows is double the grazing land is capable of carrying of, fifty per cent of the cattle is kept for supplying manure to the area dwindling under active cultivation. Although pastoralism is not as remunerative as in Lahaul-Brahmour zone, members from each family have to practise it as a subsidiary occupation, more of cattle grazing in the interest of subsistence agriculture.

3. Areas with Low Concentration of Graziers:

The proportion of graziers is further reduced in heavily populated agricultural valleys of low Himalayas with reversal of cultivated/grazing area relationship found in high Himalayan tracts. Such areas are marked mostly to the south of
Dhaula Dhar extending from Bhattiyat—lower Churah—Chamba in the west to Chichiot-Mandi in the east. While the proportion of cultivated area rises to an average of 18%, that of pastures decreases to 5%. The nutritional density of population is moderate to very high, indicating great pressure on very small—sized holdings. In these agriculturally important tracts, pastures generally far removed, the practice of extensive pastoral life is precluded and the graziers form far less than 5% of workers. The number of cattle per one thousand people comes to 725 on an average, that of sheep and goats only 600, per capita wealth derived from the latter amounting barely to ten rupees.

Seasonal density of graziers on a few high—level pastures remains below 15 except in Mandi—Jogindernagar where it reaches above 50 per sq. mile. The number of sheep graziers is relatively lower as many of them pass on to inner zone pastures after the onset of summer rainfall. In addition, being nearer to the agricultural and main populous zone with more of medium and low elevation pastures suitable for slow moving cows and buffaloes, the number of cattle graziers (mostly hill gujars) is relatively greater. The geographical location of this zone makes it suitable mostly for the migratory graziers passing their time till they are forced seasonally up and down the hill ranges (Fig. 23).

Three types of graziers' movements are experienced:

1) Spreading of migratory graziers marching downhill from higher alpine pastures, passing their winters on scrub, waste and
ill-defined grazing grounds of low hills between 2000-5000 ft. situated within the main settled zone. They cross over the high passes as soon as snow melts in early summers. ii) Summer grazing on a small number of alpine pastures near mountain tops to the south of the main crest of Dhauladhar. More of cattle-rearing gujjars and a few of gaddi shepherds are observed along northern margins of all low Himalayan valleys of the region. iii) Along southern-most hill margins of this region, dairying is practised by local cultivators because of rainfed agriculture, deficiency of forests and availability of scrub-waste for the cattle. The proportion of waste and of village grasslands (sold to cattle owners) is twice as great and cultivation one-third less than that found in the neighbouring irrigated valleys of the outer zone. The shallow rocky soil and unirrigated cultivation leaves greater scope for local people to turn cattle graziers, more as a secondary occupation. The intervening location between higher summer season alpine meadows on the one hand and low winter grazing grounds on the other, raises the number of migratory graziers twice a year.

(iii) FOREST DWELLERS

With an average 25% of total area of the region under wooded forests yielding good revenue14 and only 8% under

14 In 1960-61, 37% state income of Himachal Pradesh was obtained from forest resources, only Mysore and Kerala having greater surplus revenue among Indian states from this wealth.
cultivation, the occupation of forestry is expected to assume proportionately greater importance. But on the basis of information that could be gathered from the state Forest Department, only 12,000 local persons and 300 from outside the region are estimated to be normally employed in the working season every year in sawing, planting and carriage of timber besides sundry labour drawn into large-scale operations from time to time. It comes to form only about 2.5% of total workers in rural areas, less than half of which is shown as included in forestry and various other occupations like grazing, hunting, fishing and mining etc., in the primary census abstracts of 1961.

As forestry does not exist so far as a regular or an independent occupation, the first figure is not fully informative because of the fluctuating estimates made by private contractors employing this labour. The second estimate is equally unserviceable as the absence of forest workers in the form of a distinct and exclusive category in the Primary census abstract adds to our difficulties of measuring their strength. These shortcomings have been pointed out while discussing the basis of classification and distribution of working force in different occupations at the start of this chapter. Notwithstanding the apparent insignificance of existing proportion of forest workers because of the technical as well as social constraints on development of forestry in a well-populated region of this type, virtually the sole dependence of people on forest wealth fully in higher valleys and partly in low Himalayas and its growing job potential needs to be brought into a sharper focus.
The significance of this distribution of forests for occupational structure of the region is three fold: i) The middle belt has, get the largest number of reserved and protected blocks of timber forests containing exploitable species on easy slopes which are regularly worked out. Those on difficult slopes here and elsewhere in higher Himalayas are worked selectively for commercial benefits. They supply the bulk of regularly seasonal or periodical jobs, of extraction, sawing, carriage of timber and of charcoal making on priority basis to local people, ii) Collection of resin from majority of low-level forests and minor forest produce of varied types mostly from high altitude forests throw another fringe of employment to a sizable section of people. iii) In case of other less supervised forests in the vicinity of human settlements, inter-mixed with scattered blocks of cultivation, the people are virtually expected to exercise a vigil for their maintenance in return for which they are paid in the form of rights of use on grass, leaf and wood for their personal needs which they can't otherwise manage. Periodical closure of this traditional local use in the interest of forest policy makes them eligible to receive a cash compensation for themselves and for benefitting their villages.

Both the primary wage-giving capacity of forests, their acting as a source of secondary employment and as standby in satisfying local needs of dependant and a growing population can help to understand their relative occupational importance in different areas in years to come.
The foresters consider the term 'forest dweller' synonymous with right-holders having a claim on use, jobs and incomes of forests, a section of them to be the forest workers in days to come with development of forestry. From this practical standpoint, the spatial distribution of people living within 2 miles from the edge of nearest forest block has been shown on the map (Fig. 36) by means of circles proportionate to the number of dwellers. While preparing the map, the inhabitants of important agricultural tracts have been excluded even if they are found within the prescribed distance, both because of the lesser dependence of these relatively better-off people on forests and lesser employment potential of the latter. An additional map (Fig. 37) showing the number of persons recorded by the Forest Department as earning their living from forest operations along with per head and per acre forest acreage (for each acre of cultivation) have been used in the following discussion.

1. The high number of forest dwellers is marked in the mid altitudinal belt along numerous hill ranges and spurs right from Kulu-Seraj in the east to Churah-Bhandal in the northwest, with one-third to two-thirds of the land area under forest cover of various density. Although a good part occupies an inaccessible location or a difficult ground requiring greater investment to push up the growth of forestry, low to moderate demographic pressure is an advantage to create more of forest jobs for the needy Himalayan cultivators.
Table 27
Cultivated Acreage and Forest Area Ratios

<table>
<thead>
<tr>
<th>Name of the Area</th>
<th>Forest Acreage for Each Acre of Cultivation</th>
<th>Forest Acreage Per Head of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bara Banghal</td>
<td>319</td>
<td>224</td>
</tr>
<tr>
<td>Churah</td>
<td>49</td>
<td>4.5</td>
</tr>
<tr>
<td>Kulu-Seraj</td>
<td>10</td>
<td>5.3</td>
</tr>
<tr>
<td>Chota-Banghal</td>
<td>10</td>
<td>7.0</td>
</tr>
<tr>
<td>Pangi</td>
<td>29</td>
<td>12.0</td>
</tr>
<tr>
<td>Lahaul</td>
<td>11</td>
<td>3.0</td>
</tr>
<tr>
<td>Chamba</td>
<td>3.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Brahmour</td>
<td>3.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Jogindernagar</td>
<td>2.7</td>
<td>0.8</td>
</tr>
<tr>
<td>Kangra</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Karsog-Chichiot</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Palampur</td>
<td>2.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Bhattiyat</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Region as a whole</td>
<td>4.3</td>
<td>1.9</td>
</tr>
</tbody>
</table>


The forest acreage per head of population and per acre of cultivation is considerably above the regional average (table 27) in majority of these tracts except towards the southeast where small block of forests are interspersed close to the settled zone, with appreciable concentration of forest dwellers.

An extensive commercial exploitation of timber is confined to a few large-sized reserved blocks in the vicinity of habitations besides which a large majority of the dwellers...
are only self-employed in gathering fodder, litter, minor
forest produce and in clearing the ill-defined forest fringes,
for gradually adding to the area under fruit orchards.

The remaining parts in the zone of high forest dwellers
generally converge towards valley flats or plateau spurs but
their greater extension occupies higher elevations away from
the villages. Such are the forests which contain the largest
quantity of exploitable cedar and blue pine timber fit for
regular working and for providing seasonal job opportunities
to local residents engaged as forest labour for plantation
work, carriage and supervision of timber (Fig.36). The sawers
being in short supply are supplemented from outside the region
from areas like Garhwal and Jammu-Kashmir.

2. The areas with moderate number of forest-dwellers are
found along western part of Dhaula Dhar, its terminal spurs in
Bhattiyat-Chamba, Mandi-Chiehiet in southeast and parts of Pangi
to the north of Pir Panjal. Although the forest acreage in these
areas as a whole is below the regional average, it is found to
be near it in tracts still largely at a distance from the main
populated zone.

Along middle slopes and spurs of Dhaula Dhar, the land
found suitable for human occupancy has already been cleared or
only islands of population plus included cultivation are marked
within the forests. Naturally in comparison with the first
category of areas, the number of forest dwellers above 5000 ft.
is just moderate at present. Yet under continuing expansion
of cultivation helped by the nature of ground, the capacity of most of the forests is dwindling for developing them on sound commercial lines thereby leaving little scope for employment of local people in forestry.

The hope lies in low-level forests of this belt below 5000 ft. altitude in southwestern and southeastern parts where the reserved blocks of *Pinus Longifolia* are successfully maintained for the commercial value of resin despite their situation closer to the zone of population. Although the number of forest dwellers in real sense of the term are low to moderate, they are regularly employed in the collection of resin (Figs. 36 and 37).

To the north of Pir Panjal, in western part of Pangi, forest blocks occupy difficult ground and the villages are found stringing their lower margins. As the population is sparse and cultivation limited, the number of forest dwellers is moderate, forest acreage above the regional average, its coverage sufficient in supplying its needs, in providing grass and fodder and minor forest produce for sale to supplement their meagre incomes.

The timber value of these high-lying forests is reduced although the local pressure of population is low, because of their inaccessible situation and difficult configuration. These are mostly worked selectively providing additional quantum of jobs to the people only during such periods, the forest occupations not otherwise likely to engage many people in the foreseeable future.
3. The areas with low number of forest dwellers are observed both in high and low Himalayas with above and below regional average of forest acreage respectively for two different reasons (Fig. 36).

In the higher Himalayas, this situation is observed in Lahaul, adjoining parts of Pangi to the north of Pir Panjal and Bara Banghal to its south because of sparsity of population.

The low Himalayan hills and valleys with lower share per acre of cultivation and per head of population appear as another low forest dwellers area on the map under study. It is obviously the result of larger areas under plough, heavier population, long-standing clearance and current encroachments of forests in main agricultural tracts of Mandi, Kulu, Chamba and Kangra valleys.

In trans-Pir Panjal tracts, the uniformly low number of forest dwellers is far more the result of lesser suitability of areas like Lahaul for forests than for rich alpine pastures (many of which are included in its undemarcated forests) and for human habitations close to them. A number of forests in Lahaul's arid zone have either minor forest produce or have been planted laboriously only for the conservational needs and those in adjoining Pangi and Bara Banghal are not meant for regular exploitation again because of their difficult ground and inaccessibility. The job opportunities are accordingly less and because of extremely difficult working, local people are far less interested in forestry than in grazing (Figs. 36 and 37).
A conspicuous decrease in the number of forest dwellers to the south of Dhama Dhar in the outer zone, in agriculturally important tracts of Kulu-Chamba valleys in the middle zone and their absence in the uninhabited area falling on two sides of the central ranges overlying the forest zone is marked. The expansion of agriculture in the former and that of seasonal alpine grazing in the latter have been responsible for the disappearance of forest settlements and jobs in forestry.

(iv) INDUSTRIAL WORKERS

The industrial structure of the region primarily consists of two types of manufacturing or generating processes and repair servicing agencies.

The first one which is widespread is that of Household industry and is conducted by the head of household himself with the assistance mainly of the members of household and secondarily of hired workers. As proximity to the sources of raw materials decides their location and participation by members, this work is practised largely in rural areas and mostly along with cultivation affording employment for a good part of the year. Partly it provides living to village menials and craftsmen who are not owner-cultivators, belong mostly to low-caste groups and are almost entirely dependant upon household industry. It is remarkable that at least 37% and the maximum of 60% of household industrial workers in different rural areas were found to be scheduled castes (the share being 50-60% in towns) and scheduled tribes.
On an average, among more than half of such households and 70% of household industries, this work is one man affair. It is unlike the average of 3-5 persons engaged commonly in a cultivated holding among 56% of farming households.

Among the household industries of major importance, those based on rearing of livestock particularly concerned with wool-weaving are practised by the largest proportion of workers. Others of minor household type, more important in the southern densely-populated agricultural zone, employ workers in shoe-making, gold, silver and blacksmithy, weaving of sundry fibres, bamboo work, earthenware, tanneries, making of agricultural implements, wooden articles and structural wooden frames. Although the employment potential is large, some like apiculture and sericulture (the latter in the low valleys) fetching sufficient returns in the shortest time, they fail to have a place in occupational structure in economic sense of the term unless these are converted usefully into non-family cooperatives preparing articles to stand better in competition outside the local markets.

The second type is of non-household industries employing workers in registered manufacturing and servicing concerns, making shawls and carpets, engineering goods of daily use, roofing slates, bricks, tiles, preparing herbal products processing tea, generating hydro-power and repairing automobiles, mostly confined in or near the urban areas. Some of these are resource-based, making use of local raw materials or skills and others are non-resource based depending upon local requirements and the transport links with the adjacent plains.
Out of the total workers occupied in the two types of industries in rural areas, a little more than two-thirds are getting their living from household manufacturing as their primary work. They have come to form one-fourth to more than half of rural non-agricultural workers. The hold of this type of industry on regional economy is so great that even among workers engaged in different secondary occupations, 73, 85 and 96% of them depend on it in outer, middle and inner zones respectively.

On the basis of census data, the proportion of rural working population engaged in all types of industrial production was 5.3 per cent (29,226 workers) in this region in 1961. In urban areas, it was about 10% (2824 workers) of workers in towns.

In 1961, only 1.8% of total rural population consisted of persons dependent upon industrial production as their primary occupation. In comparison with rural areas in other parts of Himalayas and adjoining Punjab, the region is most backward with the exception of Uttar Pradesh hill areas, Sikkim and Nagaland where hardly one to four per cent of workers were found in industrial work in 1961. Among neighbouring states, rural areas of Jammu-Kashmir with 12%, Punjab with 9% and Himachal Pradesh with slightly more than the corresponding ratio in this region, are ahead of it. While the range of these values is

According to the figures supplied by Block Development offices covering a larger part of the region, 9.2% of workers are estimated to be employed in various rural crafts.
2 to 8.6% in its individual areas, it is 6-10% in adjoining districts of Jammu-Ladakh, 13-16% in Gurdaspur-Hoshiarpur areas of Punjab and Kinnaur in Himachal Pradesh.

As for urban areas, the regional strength of such workers falling largely in 13-20% range is closely parallel to that marked in adjoining towns of Jammu and of Himachal Pradesh, ahead of 1-7% in east Himalayan towns and lower than 21-38% in Gurdaspur-Hoshiarpur and 35% obtained in Uttar Pradesh hill towns.

Confining ourselves to the surrounding rural and urban areas of neighbouring regions, our region stands industrially backward from the viewpoint of the proportional strength of these workers.

**Table 28**

**Primary Industrial Workers : 1961**

<table>
<thead>
<tr>
<th>Tahsil</th>
<th>Household Industry (As % of Total Workers)</th>
<th>RURAL</th>
<th>URBAN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household Number</td>
<td>Areas</td>
<td>Areas</td>
</tr>
<tr>
<td></td>
<td>Absolute Industry Number</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Non-Household Industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(As % of Total Workers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bhattiyat</td>
<td>7</td>
<td>1801</td>
<td>0.5</td>
</tr>
<tr>
<td>Pangl</td>
<td>6</td>
<td>441</td>
<td>0.6</td>
</tr>
<tr>
<td>Churah</td>
<td>6</td>
<td>2182</td>
<td>0.3</td>
</tr>
<tr>
<td>Brahmour</td>
<td>5</td>
<td>778</td>
<td>3.5</td>
</tr>
<tr>
<td>Jogindernagar</td>
<td>4</td>
<td>1519</td>
<td>0.3</td>
</tr>
<tr>
<td>Mandi</td>
<td>4</td>
<td>1687</td>
<td>0.3</td>
</tr>
<tr>
<td>Kangra</td>
<td>4.7</td>
<td>3288</td>
<td>1.0</td>
</tr>
<tr>
<td>Palampur</td>
<td>4.3</td>
<td>3960</td>
<td>1.0</td>
</tr>
<tr>
<td>Kulu-Serej</td>
<td>4.8</td>
<td>4776</td>
<td>1.4</td>
</tr>
<tr>
<td>Chamba</td>
<td>3.3</td>
<td>1161</td>
<td>0.2</td>
</tr>
<tr>
<td>Lahaul</td>
<td>1.9</td>
<td>206</td>
<td>0.2</td>
</tr>
<tr>
<td>Chichiot</td>
<td>3.0</td>
<td>1168</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Karsog</td>
<td>2.4</td>
<td>591</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**SOURCE:** District Census Handbooks, 1961.
Some important inferences drawn from the statistical data and field observations about occupational structure of industrial workers can usefully be summed up as follows:

1) In 1951, all areas having above average proportion of industrial population fell in the outermost zone to south of Dhaula Dhar extending from Bhattiyat in the west to Mandi in the east. But in 1961, many rural areas falling in the interior to the north of Dhaula Dhar extending from Kulu in the east to Churah-Pangi in west, recorded more than the regional average of industrial workers. In the mid zone of this region, an average of 7% turned out to be their ratio while it came to a little over 4% in the outer Mandi-Jogindernagar area. It was the general result of state efforts to encourage the production and sale of indigenous articles.

II) Throughout this region and particularly in its interior yet untouched by the development of vehicular traffic or cash economy, self-subsistence type of rural economy has not disappeared. Within the limits of this type of economy, the industrial activity is not strongly related to the infrastructure like good transport, power, capital, markets, operation of price mechanism or modern organisation. In such an industrial structure a sort of 'ecological order' can be traced in many cases. It can be explained by citing the close and sequential relationship between sheep-grazing and weaving of wool, developing within the bounds of local environments. Thus a closer proximity to grazing runs, a chain and a direct relationship between graziers and rural households, their meeting
9. Mark a set of terraces along right bank of a hill stream in low Himalayas. Such sites are thickly inhabited and cultivated.

10. With no depositional formations, the gentler hillier terrain is brought under plough to eke out living. (Outer zone)

11. The low Siwaliks mark the rise in land along southern margins of the area. Deep torrents, circuitous roads, and settlements on foothill plateau are observed a little to the south of Kangra town.
12. An inter-fluvial tract commonly supplies the favourable sites for, scattering of human settlements and the fields. Although cultivation has reduced the forest cover considerably, mark a fair number of trees around habitations in outer zone valleys of Kangra-Palampur.

13. A sub-alluvial fan of a typical village at southern foot of Dhaula Dhar has cultivation downslope making use of slate quarries upwards in the vicinity.

14. Amidst scattering of settlements, the small cluster marks the centre of group life or the nucleus of rural habitations in the neighbourhood in heavily populated low Himalayas.
15. A compact and endagamous village of Malana (Upper Kulu) at 7560 ft. elevation is isolated by physical, cultural and linguistic barriers of high mountains around. (Courtesy Tourist Deptt. Himachal Pradesh).

16. A side view of Brahmour (7000 ft. elevation) overlooking Budhil-Ravi rivers as a central place in the land of Gaddis.

17. A relatively bigger village (Pangna at 5000 ft. elevation) in low hills and small valleys of outer zone with old fort in the background. It has a site along hill valley contact favouring its importance and the saving of flatter terrain for cultivation. (Courtesy Census Deptt. Himachal Pradesh.)
18. Erstwhile capital of Chamba hill state (elevation 3000 ft.), the town of Chamba has a picturesque site overlooking the Ravi river. There is no other regional town higher in latitude (its being 32°50' N) than this one.

19. Old urban settlements like this of Mandi along Beas river (elevation 2500 ft.) are most compact with little space to expand. All such valley towns are of Indian origin, unlike a few sprawling on ridge tops standing as a legacy of British empire.

20. The town of Kulu (4000 ft. elevation) along Beas river is centre of rural valley settlements in different direction. The fields around still show its overgrowth from a village. (Courtesy Himachal Pradesh Tourist Dept.)
21. Nomadic Muslim Gujjars still carry on cattle-rearing up and down the medium-level pastures of Dhaula Dhar.

22. Gaddis from villages on both sides of Dhaula-Dhar range practise large-scale migratory grazing encompassing pastures extending from slopes of Dhaula-Dhar to those of Pir Panjal.
23. A lonely village of Bara Banghal in 289 sq. miles area (elevation 8000 ft.) tucked between two main ranges. Mark the children of its shepherd-cultivators in their native dresses with a single teacher of local school.
(Courtesy Himachal Pradesh Forest Officer's collection.)

24. In rural settlement of Kareri at southern base of Dhaula Dhar axis (elevation 5850 ft.) in Kangra, are observed the long cabins of its grazier-peasants with village fields in front.
at fixed places for fleecing and clipping of sheep or exchange of its wool, reciprocal needs bringing the producers, industrial workers and consumers nearer, all have created a natural togetherness of influencing factors. The rise in industrial workers within such a socio-economic set up has taken place in local pockets of high density of population which is likely to increase the demand of goods as well as the supply of labour.

iii) There is considerable participation of womenfolk in the household industrial pursuits both in this and other Himalayan areas, leaving men free to try subsidiary or seasonal jobs. With one-third of industrial workers being females at the regional level, their proportion assumes greater importance making two-thirds to more than three-fourths of industrial labour force towards interiors of the valleys particularly in tracts around Pir Panjal range (Fig.39).

iv) If we include the secondary industrial workers, taking up this employment as additional part time source of living, the small hill farmer is himself a flockmaster, cowman, haymaker and the blanket maker, recording 1.5 to 4 times increase in the farming population also engaged in this activity in a number of tracts towards the hill interiors. All household industries in villages are thus interlocked into the total life of the farmstead. But more than that, in snowbound villages of high valleys where people have to keep indoors during long winters, this work is equally important in making the compulsory period of leisure well-occupied.
### Table 29

**Household Industrial Workers by Duration**

<table>
<thead>
<tr>
<th>Districts</th>
<th>With Cultivation</th>
<th>Without Cultivation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engaged for</td>
<td>Engaged for</td>
</tr>
<tr>
<td></td>
<td>More 4-5 months</td>
<td>More 4-5 months</td>
</tr>
<tr>
<td></td>
<td>3 months</td>
<td>or lesser months or</td>
</tr>
<tr>
<td></td>
<td>6 months</td>
<td>lesser period</td>
</tr>
<tr>
<td></td>
<td>(As % of total workers in industries)</td>
<td></td>
</tr>
<tr>
<td>Chamba</td>
<td>68 32 ...</td>
<td>2 98 ...</td>
</tr>
<tr>
<td>Mandi</td>
<td>70 19 11</td>
<td>3 84 3</td>
</tr>
<tr>
<td>Lahaul &amp; Spiti</td>
<td>12 2 96 20</td>
<td>24 56</td>
</tr>
</tbody>
</table>

### Table 30

**Cultivators Engaged in Household Industry by Size of Land**

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>With less than 1 acre</th>
<th>With 1-5 acres</th>
<th>With 5-10 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(As % of Total Cultivators)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Outer Zone (To south of Dhaula Dhar)</td>
<td>22 20 51</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interior Parts of Outer Zone</td>
<td>25 10 67</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mid Mountain Tract of Brahmour</td>
<td>35 5 68</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Inner Zone (To the North of Pir Panjal)</td>
<td>79 8 61</td>
<td>23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** (Tables 29 & 30) Computed from General Economic Tables B Series, Tables 1.27 and 1.28-B-XVI, District Census Handbooks, 1961.
v) A reference to table 29 briefly indicates that a large proportion of persons engaged in household industry, without any means of cultivation, do not get this employment for more than 6 months in a year in outer areas. In rest of the year, they have a difficult time to eke out their livelihood. In snowbound mountainous tracts like that of Lahaul, where more than 50% of household industrial workers without any means of cultivation are engaged in it only for about three months of agriculturally inactive period, after which they get more remunerative jobs. In these parts there is a general shortage of labour at the start of busy summer season. On the other hand the work in household industry is available for 4 to more than 6 months to almost all such workers who carry it on with cultivation in lowlying agriculturally better-off areas. In Lahaul, very few of the agricultural household industrial workers are free to busy themselves for more than three winter months in a year.

vi) One-half to two-thirds of the farmers having 1-5 acres of cultivated land in different zones of this region combine cultivation with work in household industry. As the land is generally more productive in the outer agricultural zone, the cultivators with this size of holdings are relatively self-sufficient and a lower proportion cares to work in industrial units. Those with less than one acre of land, particularly in the middle and trans-Pir Panjal zone, have to put in much more labour in cultivation to get needed returns. For this reason they are scarcely free to work in local industries to get a little additional income. At the other end, not more than
one-fourth of the farmers with more than 5 acres combine household manufacturing with cultivation because it is less of a dire need and more of a profitable venture if it otherwise tempts them (table 30).

SPATIAL DISTRIBUTION OF INDUSTRIAL WORKERS

A glance over the map (Fig.38) shows that generally about 5% of rural workers are employed in industrial production over half of the region, 5-10% over a considerable part of the rest of it and their proportion is further raised in localised pockets usually reaching a ratio of 20% of working population.

1. Areas with Relatively Higher Proportion of Industrial Workers: (5-10% and above)

The first group of such parts include the mountain and forest locked areas of Pangi-Bhadhal in the extreme west, Sanghal, Brahmour, upper Kulu in the centre, many tracts of Lahaul in the north and a few pockets along Seraj boundary in the southeast.

All these areas are part of the interior to the north of Dhauladhar range, are relatively inaccessible and suffer from an inadequacy of agriculture thereby inducing an appreciable proportion of rural manpower to engage itself in household industries based upon animal, forest and orchard products.

The second set of such areas are spotted to the south of this range within sizeable strips running through Bhattiyat, Kangra, Palampur and Mandi valleys of the outer zone. The individual tracts carrying higher ratios are usually marked either near the towns, along roads passing through them close to greater localisations of rural population or nearer the
mountain range itself forming locally inaccessible parts of these valleys. A greater proportion of surplus manpower of densely populated area and its landless agricultural labourers have contributed to the rise in the strength of industrial workers. The quarrying of slates and building stones along southern front of Dhaula Dhar in Bhattiyat-Kangra, plucking and preparation of tea leaf mostly by females in sub-montane zone of Palampur-Jogindernagar in response to increasing local demand have come to occupy a large number of persons.

While the total number of persons engaged in household industries is very high in Kulu-Palampur-Kangra (table 28), their proportional strength is the greatest in higher Himalayan areas like Brahmeur, Churah and Pangi despite their isolated situation away from the areas with greater tempo of modern developments. It has given rise to rural pockets having more than 10% (reaching the maximum of above 30%) of industrial workers, widespread to the north of Dhaula Dhar than to its south.

2. **Areas with Relatively Lower Proportion of Industrial Workers:** (Less than 5%)

An almost continuous belt running midway between high ratio southern and northern parts of the region has less than 5% of industrial workers except in the vicinity of towns. Westwards the tracts having this proportion are fairly extensive to the south of Dhaula Dhar and south-eastwards but get restricted to its north.
The causes responsible for it lie in low degree of transport development in southern tracts and an equal lack of usable forest, pastoral and mineral resources in localities to the north of it. We mark 10 to 30% values where such local resources are available in the middle zone or communications are well developed in the outer zone.

Incidentally, it is worth mentioning that in southeastern and in the north-western parts of the region, wherever the pressure of population on cultivated area is relatively lower and the development of fruit orchards is yet in infancy with no industries based on their products, the proportionate share of industrial workers tends to fall down.

In Kangra-Palampur tracts, the fascination of military life drawing away a good number of youth belonging to enterprising strata of society is an additional factor denying the participation of adult workers in the promotion of rural industrial growth.

It is of interest to find out that in all rural areas with less than 5% of industrial workers, their average proportion in household industry is 31 and that in non-household industries and services is as high as 69%. On the other hand, in areas with higher proportions, their share in household industry rises to 44% and that in the non-household industry plus miscellaneous services gets lowered down to 55%.
INDUSTRIAL WORKERS IN URBAN AREAS:

In all towns, much over 90% of the non-farm workers are employed mostly in other than household industries and miscellaneous services put together. The percentage of workers occupied exclusively in industries ranges between 4 and 6 in the case of Kangra-Palampur towns and 13 and 20 in towns of Kulu, Mandi and Chamba. A few of the important factors causing these variations need to be briefly discussed.

Chamba and Mandi being the old capitals of native hill states, got a better start in industrial production under the patronage of their rulers. The urban tract in Kulu valley was made into a tourist showpiece for the production of woollen goods rapidly in post-1951 period both in the sphere of household and non-household industries. Otherwise situated in an extensively hilly countryside as single small-sized urban centres, the last three towns were a natural choice for the location of many repairing and producing units.

In the case of Kangra zone, on the other hand, its towns are situated closer to each other and no one singly dominates the equally and relatively better connected rural hinterland providing industrial services needed by the rural community. They were administratively part of Punjab for long and being nearer to adjoining Punjab towns, many of their urban-industrial functions were captured by the latter.

While the proportion of industrial population in the four towns of Mandi, Jogindernagar, Chamba and Kulu is up to 14% higher as compared to their surrounding area, it is exceeded
only by about 1-2% in the case of towns of Kangra, Nagrota, Dharamsala and Palampur respectively.

Besides this contrast, the rise in the proportional strength of industrial workers was commonly the result of developments observed during the closing years of 1951-61 decade, relatively faster from hill standards in erstwhile centrally administered hill towns of Mandi-Chamba than in those of Kangra group.

(v) NON-AGRICULTURAL OCCUPATIONS

Considering the persistent dependence of a great number of people on agricultural land with proportionately lesser carrying capacity, their employment in various non-farm activities in rural areas stands as a touchstone of the economic development and of change in occupational structure of the countryside of this region. The significance of non-agricultural occupations is understandable when about one fourth of the scheduled castes being economically and socially the most backward section of society derive their living from them in the villages, and 60 to 99% of the town dwellers flourish on the growing non-agricultural sector of urban economy.

As the magnitude of these sources of employment, particularly among rural population, is fairly indicative of the degree and nature of shift from the well-known ills of agrarian economy, a resume of all non-agricultural occupations at the close of this discussion is appropriate.
In comparison with other Himalayan areas, 12% of rural workers employed in non-farm occupations in this region in 1961 were more than the corresponding ratio of less than 10% in Kumaon and eastern Himalayas and it kept within 15-25% in Jammu in the west and Kahan-Kilaushar areas of Himachal Pradesh towards the east. Along a traverse from south to north, 20-30% range in adjoining plains and 9-10% across our region was found, rising to more than 30% in Kinnaur-Lahaul and Spiti in the far north.

The comparison of the proportion of workers classified in three major categories of Primary, Secondary and Tertiary occupations (table 31) reveals a general similarity of economic conditions both in the rural and urban parts of Himalayan areas.

Table 31

<table>
<thead>
<tr>
<th>Area</th>
<th>Rural</th>
<th></th>
<th></th>
<th>Urban</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
<td>Tertiary</td>
<td>Primary</td>
<td>Secondary</td>
<td>Tertiary</td>
</tr>
<tr>
<td>Study Area</td>
<td>26.0</td>
<td>7.3</td>
<td>4.8</td>
<td>12.7</td>
<td>12.3</td>
<td>74.1</td>
</tr>
<tr>
<td>Himachal-Pradesh</td>
<td>25.0</td>
<td>7.6</td>
<td>4.4</td>
<td>13.2</td>
<td>24.9</td>
<td>62.1</td>
</tr>
<tr>
<td>Jammu-Kashmir</td>
<td>23.9</td>
<td>8.4</td>
<td>7.7</td>
<td>12.6</td>
<td>16.3</td>
<td>71.1</td>
</tr>
<tr>
<td>Uttar Pradesh Hills</td>
<td>20.4</td>
<td>6.0</td>
<td>4.6</td>
<td>10.9</td>
<td>12.2</td>
<td>77.0</td>
</tr>
<tr>
<td>Sikkim</td>
<td>23.9</td>
<td>1.9</td>
<td>4.2</td>
<td>11.0</td>
<td>10.0</td>
<td>78.0</td>
</tr>
</tbody>
</table>


The tertiary sector which is generally less stable by being supported more by population growth is very strongly developed
in urban areas and the secondary occupations induced more by some solid economic achievements are slightly more important than tertiary sector in the countryside.

Spatially, in 1951, only 8% of rural population was non-agricultural showing only a few pockets, at places forming strips with higher proportion (Fig. 40). By 1961, the map portraying the percentage of such workers (Fig. 41) emerged into locally varied distribution in place of its widely prevalent uniformity in 1951. Although a general comparison suggests an improvement, the earlier size of non-agricultural sector, either kept up or further developed in some areas, the genuine quantitative shift in the inter-censal period cannot be exactly measured because of different patterns of classification and definition of livelihood categories adopted in two censuses and little known facts about the intervening years. But, in the case of state of Himachal Pradesh which included 43% of the area of this region in 1961, the change in distribution of such workers in 1951-61 period has been estimated to be +5.50% and that in agricultural workers -5.30%.[16]

As the proportions of non-agricultural population both in the rural area of our region and in Himachal Pradesh in 1951 was almost in the same 6-8% range as also the corresponding ratios

Of 13-16% in 1961, a fair degree of reliance can be placed on
Himachal's increase for forming an idea of such a shift in the
case of this study area as well. It may not suggest any such
breakthrough in the traditional pattern of agrarian economy but
cannot be ruled out for an undeveloped countryside of this type.

The change in male participation in various categories
of workers during 1951-61 is considered to be a more reliable
test to measure inter-category shift in employment (Table 32).
By expressing the difference between 1951-61 in a particular
industrial category of male workers as a percentage of total
change in male workers, a decline of -67.27% in agricultural
workers is noticed in Kangra, at the same time bringing about
a positive marginal index in all non-agricultural occupations
except commerce. In Chamba and Mandi, there is an increase
suggesting favourable shift in employment in Agricultural,
Industrial, Construction and Services occupations and a fall
in other categories.

Table 32
Changes in Industrial Categories of Male Workers,
1951 as Per Cent of Total Change in Male Workers
Over 1951

<table>
<thead>
<tr>
<th>District</th>
<th>Cultivators</th>
<th>Agricultural</th>
<th>Forestry</th>
<th>Labour</th>
<th>Grazing</th>
<th>House-hold &amp; Truc- erce</th>
<th>Other</th>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Kangra</td>
<td>-67.27</td>
<td>-4.04</td>
<td>16.93</td>
<td>48.22</td>
<td>27.34</td>
<td>-2.47</td>
<td>9.34</td>
<td>7.95</td>
</tr>
<tr>
<td>Chamba</td>
<td>33.06</td>
<td>-0.83</td>
<td>-0.65</td>
<td>29.60</td>
<td>14.01</td>
<td>-3.15</td>
<td>-0.26</td>
<td>26.76</td>
</tr>
<tr>
<td>Mandi</td>
<td>62.96</td>
<td>-11.19</td>
<td>-0.07</td>
<td>9.42</td>
<td>7.04</td>
<td>-3.27</td>
<td>-0.55</td>
<td>35.64</td>
</tr>
</tbody>
</table>

SOURCE: Ashok Mitra, 'Relationship between Patterns of Shift
from Agriculture to non-Agricultural Occupations in
1951-61 and levels of development', Patterns of Population
Change in India, 1951-61, (Edited by Ashish Bose) p.171,
(1967).
The comparative figures of non-agricultural workers available for the period 1961-71 point out an increase of 1.79% in Chamba, 3.62% in Kulu, 7.76% in Kangra, 8.61% in Lahaul Spiti and 13.20% in Mandi districts, the maximum increase in male workers being in the order of 10-15% and that in female workers 5-6% in the same period.

As the factors instrumental in the growth of non-agricultural activities have been discussed in earlier sections of this chapter, it is worth directing our attention only to a few most prominent ones at this place.

Over the last two decades, it has been the construction of hill roads which initially provides wage labour in turn proving to be a multiplier of various types of jobs growing out of transport-market oriented cash economy and organisation of various social and utility services at locationally significant points along them. Generally, higher the road density (linear miles of road per 1000 of rural population), greater the proportion of non-agricultural workers and the vice-versa. That is why in high Himalayan areas of low population, even the construction of a single stretch of road tends to raise the road density and the engagement of bigger but temporary labour force is soon followed by an increasing provision of non-agricultural employment serving the local needs. In low Himalayan areas of heavy population, road density remains obviously lower for a longer time, also the size of the labour force engaged at the work site yearlong but intermittently, and slower is the growth of ancillary activities.
SPATIAL DISTRIBUTION OF NON-FARM POPULATION — A RESUME

A synoptic view of table 33 makes it clear that the areas having more than the regional average proportion of 13% of rural non-farm workers are found either in the lower valleys of the outer zone or in the interior of high Himalayas in and around the inner zone.

Table 33
Non-Agricultural Occupation: 1961
(As Per Cent of Total Workers)

<table>
<thead>
<tr>
<th>Tahsil</th>
<th>Rural Areas</th>
<th>Urban Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kangra</td>
<td>14.8</td>
<td>85</td>
</tr>
<tr>
<td>Palampur</td>
<td>16.1</td>
<td>99.9</td>
</tr>
<tr>
<td>Bhattiyat</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Jogindernagar</td>
<td>11</td>
<td>62</td>
</tr>
<tr>
<td>Mandi</td>
<td>10</td>
<td>96</td>
</tr>
<tr>
<td>Chichiet</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Karsog</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Brahmour</td>
<td>16.2</td>
<td>-</td>
</tr>
<tr>
<td>Churah</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Chamba</td>
<td>7</td>
<td>99</td>
</tr>
<tr>
<td>Kulu</td>
<td>10.8</td>
<td>83.4</td>
</tr>
<tr>
<td>Pangi</td>
<td>12.5</td>
<td>-</td>
</tr>
<tr>
<td>Lahaul</td>
<td>32.7</td>
<td>-</td>
</tr>
</tbody>
</table>


The distributional patterns of such workers on the choropleth map (Fig. 41) bring out many local pockets with more than 16% proportions appearing as islands of development in continuity of the tradition of paying more attention towards outer zone and in consequence of quickening the tempo of economic growth in strategic areas of middle and inner zones. While there are more of such pockets carrying 16-24% ratios in the lower
zone in the vicinity of roads, towns and sites of local resource-
development, out of seven rural tracts carrying above 32% and
another five with over 40%, more are marked to the north of
Dhauladhar than to its south. Lahaul, suffering from a
combination of geographical disadvantages recorded 39% (with
about 31% employed as construction labour) of its 10,619 workers
in non-agricultural activities. Its local tracts with well
over 40% of this type of manpower are illustrative of such
patterns in higher Himalayas.

Areas with moderate proportion of non-farm workers within
8-15% range of values are widespread in all parts of the region.
Their emergence caused both by the advantages of accessibility
and a developed resource base and by the dire need to resort to
some little alternative means to supplement poorer returns from
agriculture.

The parts of this region marked in its south east and
towards the west have below 8% of rural non-agricultural workers.
Many of such tracts have for long remained at a relatively lower
level of economic development for lack of resources other than
the usual hill cultivation without even the means to improve
upon it. In the absence of the development of transport and
education for instance, the diversion of people towards
non-farm activities lagged behind as it would have been in the
case of the village Silhagrat near the town of Chamba but its
proximity to resources like forests and pastures absorbed 30% of
its population as whole or part time non-agricultural workers.
SUMMARY AND CONCLUSIONS:

The study area has a large size of working force and with 60% of its working population, it has come to occupy a position midway between low ratio areas of Punjab and high ratio of inner zone in the north.

The proportion of female workers is equally large although there are local distinctions in employment pattern of women, corresponding to their varying concept of social status determined by economic situation, caste traditions and taboos prevailing among different classes of hill society.

In subsistence type of family farming, engaging 87% of rural workers, man and women are seen working shoulder to shoulder in agriculture and household industry, forming a notable contrast from the pattern usually found in plains. Instead of being an index of advanced level of economic activities, the higher participation ratio notably in the hill interiors implies the sole dependence of rural people on cultivation of their small fragmented holdings demanding much of manual labour, the compulsion of combining it with many ancillary jobs and little choice to move out or enter into other occupations.

Characteristically the occupational structure of this region is at a stage where limits of distinctions get blurred between different avocations, a large majority consisting primarily of cultivators who are partly grazers or household industrial workers and others indirectly associated with their work.
In the field of agriculture, despite productive soils, highly intensive irrigated cultivation and groups of peasantry capable to draw out the maximum from land, the growing pressure of farming population, greater strength of agricultural labourers, uneconomic holdings and depletion of forests and pastures questions the continuance of such a great dependence upon agriculture.

The age-old modes of mutual relations among farming families, wage labourers and share-croppers thus far practically determining the patterns of productive organisation of subsistence agriculture, are failing to resist the land hunger of subsistence peasantry with few other sources of living to look up.

Even with a sizeable area given to forests and pastures and the essential place they occupy in hill agriculture, they have not created whole-time occupations well worth a statistical measurement.

As the locus standii of a person in rural society still depends on a parcel of cultivable land, the pursuit of grazing ascribed not to choice but to compulsions, even the people in higher valleys who are more of shepherds and incidentally cultivators make it difficult to form a safe estimate of the graziers' strength.

Likewise the forests suffering from natural handicaps as well as from increasing demands of vicinal population have precluded their commercial development capable of throwing forestry as an independent occupation for an appreciable proportion of workers, notwithstanding their wage-giving potential.
Considering the dependence of forest dwellers and hill graziers on this mode of living, at least 8-10% of workers still seem to be directly getting their sustenance from it.

A widespread distribution of household industries, intertwined in the whole web of rural life, run on family basis and depending on local raw materials, skills, labour and needs rather than the modern per-requisites, is marked equally in accessible and inaccessible parts of the countryside. Generally, they employ 80% of industrial workers, forming one fourth to one half of rural non-agricultural workers (30-60% being scheduled castes) in addition to providing a secondary source of living to more than 70% of working force.

Despite slow shifts from agricultural to non-agricultural sector, 13% of rural workers occupied in the latter, is not insignificant for this type of region. A gradual provision of roads initially raises the number of temporary construction workers on the work sites, bringing gradually the quota of various non-agricultural self employees or service workers in areas close to them, in response to dire need or the expectation to quicker the tempo of socio-economic growth.