CHAPTER III
POPULATION CHARACTERISTICS
AGE AND SEX COMPOSITION

A reliable picture of the age and sex composition of a given society is of far greater significance than is apparent at first sight. As Bogus has observed, "The age and sex composition of the population at a given instant has a substantial influence on the capacity or potential for population growth in future years."¹ Not only population growth but also the nature and character of economy of the region, its values and norms and its adaptability to changing circumstances are determined by the proportion of males and females and that of very old and very young persons and working adults in the population. Thompson and Lewis have rightly compared the age and sex groups to the building blocks that go into the construction of a society.² Variations in the size and shape of these blocks cannot but have a profound impact on the society as a whole.

Mortality, fertility and migrations are the three factors which condition the age structure. These variables, as has been pointed out by experts, are not wholly independent. Any change in one later or sooner affects the other two also. Social and economic conditions also influence the age structure but only through these variables.³

The most common measure used to show the balance of the sexes in a population is called the sex-ratio. It is the number of females per thousand males and is obtained by dividing the number of females by the number of males and multiplying the result by 1000.

These factors appear to determine the sex composition of a community:

1. Sex-ratio among newly-born children;
2. Difference in death-rates, and
3. Different rates of net-migration.

It has been noticed that males and females neither begin nor end the journey of life in equal numbers. It is the difference in numbers at birth followed by difference in the rate of mortality at different stages of life which together explain the over-all sex-ratio. It has also been observed that sex-ratio among the newly-born is high in India because, though there is a slight preponderance of males over females at the time of birth, the mortality rate is higher in case of male children, susceptible as they are to most diseases. Nature itself seems to be interested in preserving female lives. Added to this is the fact that the birth of a female child often goes unreported and sometime even the census enumerator is not given correct figures of the women in a family.

Migration also exerts a significant impact on the sex-ratio. It is specially significant in the Sagar-Damoh plateau. Sex-ratio varies a great deal in accordance with

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the nature of labour requirement, types of industries, possibilities of female employment, sex-ratio of the general population in a region and the social traditions of the people concerned.

Growth of Sex Ratio 1

Table III.1

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
<th>State level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Rural</td>
<td>Urban</td>
<td>Total</td>
</tr>
<tr>
<td>1981</td>
<td>903</td>
<td>875</td>
<td></td>
<td>941</td>
</tr>
<tr>
<td>1971</td>
<td>917</td>
<td>936</td>
<td>880</td>
<td>941</td>
</tr>
<tr>
<td>1961</td>
<td>943</td>
<td>955</td>
<td>889</td>
<td>990</td>
</tr>
<tr>
<td>1951</td>
<td>957</td>
<td>961</td>
<td>934</td>
<td>986</td>
</tr>
<tr>
<td>1941</td>
<td>930</td>
<td>937</td>
<td>933</td>
<td>974</td>
</tr>
<tr>
<td>1931</td>
<td>953</td>
<td>963</td>
<td>921</td>
<td>973</td>
</tr>
<tr>
<td>1921</td>
<td>943</td>
<td>955</td>
<td>886</td>
<td>970</td>
</tr>
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<td>1911</td>
<td>971</td>
<td>978</td>
<td>919</td>
<td>967</td>
</tr>
<tr>
<td>1901</td>
<td>931</td>
<td>927</td>
<td>946</td>
<td>953</td>
</tr>
</tbody>
</table>

1. Economic and Cultural table, Census of India, 1971 provisional figures.

2. Census of India 1981.

The first thing that emerges from this table is the fact that, except for the 1941 census, the sex-ratio variation in this region is less marked than in the State
as a whole. Moreover, the region shows a trend of steadily increasing masculinity since 1941.

During the first decade of this century sex-ratio showed a downward trend. In addition to widespread famine, this region also suffered from bubonic plague and malaria during these years. It has generally been observed that women suffer much more than men in times of such adversities in all the developing societies. Their share of nutrition is always proportionately smaller resulting in a weakening of body and thus greater proneness to disease.

The second decade shows an even greater fall in the sex-ratio. The world-wide influenza epidemic of 1919-19 took a heavier toll of the female population in this region also.

The third decade registered an equally speedy recovery. Instead of falling further, the sex-ratio recorded a rise, though it did not reach the level of the first year of this century.

In the fourth decade sex-ratio of this region exceeded the State average, suggesting a higher level of emigration. The post-independence decades have steadily registered a downward trend in the sex-ratio. It could have been due to selected migration of females or omission of the enumeration of female births. These decades have been more favourable to males.
Rural-Urban Pattern:

By and large males outnumber females in villages while females outnumber males in the towns. In this region, however, males outnumber females in both rural and urban areas. Rural sex-ratio has been consistently higher than the urban sex-ratio in all the decades of this century. The same is true about the whole State too. Higher sex-ratio in the villages suggests the incidence of male selectivity in migration from rural to urban areas. It is also apparent that the subsistence agricultural economy of the villages has some difficulty in supporting the increasing population. Since the cost of living is higher in the cities, the male migrants leave behind their families in the villages.

An explanation for the disparity of sex-ratio in villages and cities can be had by paying attention to patwari circle-wise variation in sex-ratio. For this purpose, the patwari circles can be divided into three categories. (Map 17)

1. The areas of high sex-ratio, i.e., 950 females per 1000 males.
2. The areas of moderate sex-ratio, i.e., 900-950 females per 1000 males.
3. The areas of low sex-ratio, i.e., less than 900 females per 1000 males.

1. The Areas of High Sex Ratio:

About 27 per cent of the total patwari circles are included in this category.
SAGAR-DAMOH PLATEAU
SEX RATIO OF RURAL POPULATION
1971

NUMBER OF FEMALES
PER THOUSAND MALES

KMS. 0 5 10KMS.

URBAN AREA
FOREST AREA

BASED ON DISTRICT CENSUS HANDBOOKS 1971; TAHSLIL LAND RECORDS
High proportion of females has been registered in the eastern parts of the region. The belt of high sex-ratio extends into the Southern highlands in the Fatehpur range near the Padri nala, a right bank tributary of the Beas, and into the hilly tracts of the Beas river where average angle of slopes is more than 40°. The Eastern parts of the Singrampur valley and the upper waters of the Beas and Guraiya nala also fall in this category. In the Sonar valley, most of the patwari circles belonging to this category are found on the right bank. On the left bank of the Sonar, where the Beas joins it after coursing through hilly forested areas up north, high sex-ratio circles can be found. Some patches can also be seen in the Western highlands and in the hilly tract from Jaisinghnagar through Sagar to Banda.

2. The Areas of Moderate Sex Ratio:

Patwari circles with moderate sex-ratio number 222, that is, the areas of moderate sex-ratio occupy 44 percent, the total patwari circles of the region, is found over a greater part of the region. On the Western highlands, these are found mostly in the Dhasan upland and on the right bank of its tributaries Bankri and Karvan. Towards the east of Sagar city, moderate sex-ratio can be found on both the banks of the Beas. Patches of this category can be abundantly seen in the Sonar upland, particularly on the northern extremity and between the Beas and the Sonar. Some circles are found near the point where the kopra joins it. In the Beas, valley
of the Southern Highlands such areas are usually absent. In
the Sun valley in the east, Singrampur valley in the south,
Guraiya nala in the middle and the upper waters of the Bannar
these areas are more numerous.

3. The Areas of Low Sex Ratio:

This category is found mostly on the Western high-
lands and northern hilly range. Only two or three patwari
circles in the latter region belong to moderate sex-ratio
while the remaining all belong to low sex-ratio category.
In the Western highlands, the entire Bina valley, the upper
waters of the Beas, Dhawan and Sonar and the upper waters
of its tributaries are covered with low sex-ratio circles.
An interesting fact to note in this connection is the presence
of this category in the vicinity of all the tahsil head-
quarters in the region. In some patches the sex-ratio is
as low as 850. In the Southern highlands it is found only
in Jabera plain and Singorgarh plain.

Patwari circles belonging to this category account
for the remaining 29 per cent of the total.

Conclusions:

1. The Western Highlands and uplands of the Dhasan
river, the Beas upland and the upper waters of the Sonar
are the regions of low sex-ratio. This region is covered
mostly with medium black soil which is good for wheat cul-
tivation. Consequently this region attracts selective male
population known as 'Chaitua' labours (those who work during the month of 'Chait') for the purpose of rabi harvesting. Since this also happened to be the time when the 1971 census was carried out the figures of male population tend to get artificially inflated.

2. The Northern highlands has a rather low sex-ratio. Sparsely populated, this region is agriculturally very poor. Soil is largely unproductive. These patwari circles are situated adjoining reserve forest areas, making for less than adequate safety for women and children. Because of this, menfolk prefer to live and work here keeping their families elsewhere. The forest workers also live in this region mostly without their families.

3. As against these two regions, the Southern highlands are areas of high sex-ratio. The reason is not far to seek. The unproductive and undulating terrain of the Southern highlands pushes the able-bodied males to industrially forward Jabalpur region.

AGE DIFFERENTIALS OF SEX-RATIO

A study of sex-ratio pattern both in its static and dynamic aspects remains grossly incomplete without considering how sex-ratio varies with age. Chief causes of variation in sex-ratio in various age-groups are two-fold: Sex-selective births and sex-selective/age-specific mortality.
Table III:2

Age-composition of the population of Sagar-Damoh plateau with sex-ratio
(Based on 1971 Census Report)

<table>
<thead>
<tr>
<th>Age-Group</th>
<th>Total Population</th>
<th>Rural Population</th>
<th>Urban Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sex-ratio</td>
<td>Sex-ratio</td>
<td>Sex-ratio</td>
</tr>
<tr>
<td>0 - 14</td>
<td>885</td>
<td>901</td>
<td></td>
</tr>
<tr>
<td>15 - 19</td>
<td>914</td>
<td>965</td>
<td>770</td>
</tr>
<tr>
<td>20 - 24</td>
<td>1039</td>
<td>1121</td>
<td>799</td>
</tr>
<tr>
<td>25 - 29</td>
<td>933</td>
<td>953</td>
<td>859</td>
</tr>
<tr>
<td>30 - 39</td>
<td>937</td>
<td>951</td>
<td>886</td>
</tr>
<tr>
<td>40 - 49</td>
<td>895</td>
<td>917</td>
<td>810</td>
</tr>
<tr>
<td>50 - 59</td>
<td>855</td>
<td>854</td>
<td>858</td>
</tr>
<tr>
<td>60 +</td>
<td>906</td>
<td>878</td>
<td>1027</td>
</tr>
<tr>
<td>All Ages</td>
<td>909</td>
<td>919</td>
<td>869</td>
</tr>
</tbody>
</table>

(Source: Census of India 1971, Madhya Pradesh, Economic tables, Part II-B (1))

Table III:3
Comparative sex-ratio according to age-group

<table>
<thead>
<tr>
<th>Age-group</th>
<th>Sagar-Damoh Plateau</th>
<th>State</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1961</td>
<td>1971</td>
</tr>
<tr>
<td>0 - 14</td>
<td></td>
<td>915</td>
<td>991</td>
</tr>
<tr>
<td>15 - 34</td>
<td></td>
<td>945</td>
<td>915</td>
</tr>
<tr>
<td>35 - 59</td>
<td></td>
<td>1180</td>
<td>945</td>
</tr>
</tbody>
</table>

(Source: Census of India 1971, Economic table.)
of the two different segments of population, rural
and urban, we note that in the rural population the highest
sex-ratio is obtainable in the age-group 20-24 while the age
group 15-19 comes next. As for the urban population, the
highest sex-ratio is found in the 60+ age-group while the
second highest is 0-14. In the rural areas, high sex-ratio
in the 15-49 age-group appears to suggest heavy out-migration
of the male population. The low sex-ratio found in 0-14 age-
group may be due to the known and recognised fact that, owing
to certain sociological factors, female children are generally
neglected. Mortality rate may be high among female children,
a direct consequence of the general backwardness of this region.
The number of male children, in contrast, tends to go up because
there is a noticeably higher birth-rate of males in this
region and also because no one forgets to include all the
sons in a family enumeration. Low sex-ratio in the age-group
50-59 and 60+ may be due to migration of old widows to town-
ships looking for menial jobs or generally high mortality
due to poor medical attention.

In the towns, age-group 0-14 has a high sex-ratio.
The urban social mores do not encourage concealing female
births or neglecting them later. Yet the ratio goes down
in the next two age-groups. One wonders if it indicates certain
factors not fully understood, like teen-age mortality, early
marriages, maternity-deaths etc. Age-groups 25-29, 30-39,
40-49 and 50-59 also have a low sex-ratio, mostly because of
high in-migration of working males from the villages, who prefer to leave their families behind. The 60+ age-group has the highest sex-ratio, due mostly to in-migration of old widows from the villages as well as somewhat lower mortality rate due to better medical facilities provided by the cities. In the lower class, man has to bear the bulk of the burden of maintaining the family which starts telling adversely on his health in later middle age. Sapped of much of his energy he succumbs easily in early old age.

Conclusions:

The first point that emerges from a study of this data is the fact that sex-selective migration has exerted its influence in the evolution of a typical age-structure in this region. Overall decrease in sex-ratio has led to the emergence of a male-dominated society. Excess of males over females is primarily a biological phenomenon, although sex-selective mortality and human mobility have caused sharp areal variations in the sex-structure of the population. The sex-ratio differs in different age-groups as well as in rural urban areas due to their varying mortality and mobility behaviour. Areal variation in the sex-ratio of rural population exists between the male-deficient areas in the Sambal upland and the Southern highlands and the female-deficient areas in the Western highlands. The male-deficiency in the former is primarily due to male-selective out-migration over a long period. The periods of scarcity recorded increase in the proportion of females due to male out-migration. Such areas
have been considerably reduced during the decade 1961-71. Thus, the areas with decreasing sex-ratio have been enlarged during the decade 1961-71 as compared with the preceding decade. This may be due also to internal movements of population.

AGE COMPOSITION OF RURAL POPULATION IN 1971

The 1971 Census Report reveals that as much as 44.39 per cent of the total population of the Sagar-Damoh plateau belongs to 0-14 age-group. Adult population (15-69 age-group) constitutes 50.23 per cent while the remaining 5.41 per cent belong to 60+ age-group.

Table III-l

Sagar-Damoh Plateau : Age Composition 1971

<table>
<thead>
<tr>
<th>Age-group</th>
<th>Rural Population</th>
<th>Percentage of Rural Population</th>
<th>Urban Population</th>
<th>Percentage of Urban Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 14</td>
<td>578020</td>
<td>44.38</td>
<td>149133</td>
<td>43.96</td>
</tr>
<tr>
<td>15 - 19</td>
<td>102753</td>
<td>7.92</td>
<td>33003</td>
<td>9.72</td>
</tr>
<tr>
<td>20 - 24</td>
<td>101410</td>
<td>7.83</td>
<td>29334</td>
<td>8.64</td>
</tr>
<tr>
<td>25 - 29</td>
<td>96920</td>
<td>7.47</td>
<td>24278</td>
<td>7.19</td>
</tr>
<tr>
<td>30 - 39</td>
<td>157522</td>
<td>12.15</td>
<td>40110</td>
<td>11.82</td>
</tr>
<tr>
<td>40 - 49</td>
<td>113770</td>
<td>8.77</td>
<td>29541</td>
<td>8.41</td>
</tr>
<tr>
<td>50 - 59</td>
<td>78517</td>
<td>6.05</td>
<td>17799</td>
<td>5.24</td>
</tr>
<tr>
<td>60+</td>
<td>67369</td>
<td>5.19</td>
<td>17019</td>
<td>5.01</td>
</tr>
<tr>
<td><strong>All ages</strong></td>
<td><strong>1296319</strong></td>
<td><strong>100.00</strong></td>
<td><strong>339235</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

(Source: Economic tables, Census of India 1971, Series 10 - Madhya Pradesh, Pt. II B21)
The next table shows the district variation among age-groups of rural and urban population.

Table III.5

Sagar-Damoh Plateau : District-wise Age Composition of the Rural Population: 1971

<table>
<thead>
<tr>
<th>Age-Group</th>
<th>Sagar District</th>
<th>Percentage of Rural Population</th>
<th>Damoh District</th>
<th>Percentage of Rural Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 14</td>
<td>354452</td>
<td>44.19</td>
<td>223568</td>
<td>45.23</td>
</tr>
<tr>
<td>15 - 19</td>
<td>65732</td>
<td>36.19</td>
<td>37021</td>
<td>7.48</td>
</tr>
<tr>
<td>20 - 24</td>
<td>65953</td>
<td>8.23</td>
<td>35452</td>
<td>7.17</td>
</tr>
<tr>
<td>25 - 29</td>
<td>60514</td>
<td>7.54</td>
<td>36406</td>
<td>7.36</td>
</tr>
<tr>
<td>30 - 39</td>
<td>97026</td>
<td>12.09</td>
<td>60496</td>
<td>12.23</td>
</tr>
<tr>
<td>40 - 49</td>
<td>70675</td>
<td>8.31</td>
<td>43095</td>
<td>8.71</td>
</tr>
<tr>
<td>50 - 59</td>
<td>47539</td>
<td>5.92</td>
<td>30979</td>
<td>6.26</td>
</tr>
<tr>
<td>60+</td>
<td>40113</td>
<td>5.00</td>
<td>27256</td>
<td>5.51</td>
</tr>
<tr>
<td>All ages</td>
<td>802093</td>
<td>100.00</td>
<td>494296</td>
<td>100.00</td>
</tr>
</tbody>
</table>

(Source: Economic tables, Census of India 1971, Series 10 - M.P. (Pt. II B21)).

The Table III.5 shows that the two districts have more or less same age composition. Damoh district has an edge in the 0-14 age-group which may be due to higher sex-ratio in this region. Sagar district has an edge in the next two age-groups. Comparing with the 1961 figures, one
notices that the first age-group has increased much more than 
the middle and older age-groups.¹

Dependency - ratio :

According to the 1971 Census Report, dependency-ratio 
in the rural population of this area was 99 per cent. The 
younger generation accounts for the bulk of it — about 89 per 
cent — while the older generation accounts for only 10 per cent. 
It may be noted that the ratio is lower than what obtains in 
most of African, Latin American and Asian third-world countries, 
though it is certainly higher than that of the northern, deve-
loped countries.

Dependency - ratio — calculated by dividing the first 
and the last age-groups by the 15-69 age-group multiplying it 
by 100 — has important demographic implications. Dependence 
of the younger generation means a burden on the economic 
resources of a region. However, it may be questioned whether 
all the children below 14 in Indian villages really depend on 
their parents. A number of them share responsibilities in 
ariculture, particularly in animal husbandry and in household 
jobs. It is indeed a pity that the number of such youngsters 
has been not recorded. A comparative scarcity of older and 
more experienced members in the labour force should also be 
noted.

¹ Since the age-composition is not recorded tahsil-wise, only 
district-wise figures were available and have been made use 
of. Thus, Khurdi tahsil of Sagar district has also been 
taken into account. However, it did not affect the picture 
since our purpose was only to notice the trends.
The life-cycle of the population

The life-cycle of the population inhabiting a given region may fruitfully be examined with the help of the age-pyramid. It represents the proportion of different age-groups in the total population in an ascending order. One can easily gather a reasonably reliable impression of the social and economic conditions of the region through this kind of diagram.

If such a pyramid were to be drawn to highlight the peculiarities of the local situation, one would find a fairly broad base in the first place. This suggests a high level of fertility. Proportion of 0-14 age-group in the population is 44.45 per cent. However, a rapid decimation up to the age of 39 in both urban and rural areas would indicate an out-of-the-ordinary mortality rate during the first three decades of human life. The difference would really be due to the sex-ratio. A disproportionately large number of young men die in villages, neglect of women and deaths during child-births notwithstanding. This brings down the average age considerably. In towns also, young men and women die in a notably large number. Female of the species is perhaps endowed by nature with a greater capacity for survival. Meagre, and in some cases non-existent - medical facilities in the countryside, in consequence, take a heavier toll of men than of women. The strains of alien urban life on the migrating young men may also be a contributing factor.

Survival-rate appreciably picks up in the following years and the pyramid would tend to bulge in the middle in both urban and rural areas. The rate of mortality in the 30-39 age-group is lower than the one for the preceding group. Then onwards, there is a tapering off, the pyramid getting narrower as it goes up. There are no sharp twists and turns, clearly showing that the mortality rate gradually increases with age.
Table III.6  
Region and Sex-wise Age composition of Population 1971

<table>
<thead>
<tr>
<th>Age-group</th>
<th>Rural Pop. of Males</th>
<th>Percentage of Total Rural Pop. of Males</th>
<th>Urban Pop. of Males</th>
<th>Percentage of Total Urban Pop. of Males</th>
<th>Rural Pop. of Female of Sagar</th>
<th>Percentage of Total Rural Pop. of Female of Sagar</th>
<th>Urban Pop. of Female of Sagar</th>
<th>Percentage of Total Urban Pop. of Female of Sagar</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>307245</td>
<td>43.50</td>
<td>270775</td>
<td>43.59</td>
<td>78411</td>
<td>43.22</td>
<td>70722</td>
<td>44.81</td>
</tr>
<tr>
<td>15-19</td>
<td>52280</td>
<td>7.74</td>
<td>50473</td>
<td>8.12</td>
<td>18643</td>
<td>10.27</td>
<td>14360</td>
<td>9.09</td>
</tr>
<tr>
<td>20-24</td>
<td>47801</td>
<td>7.07</td>
<td>53609</td>
<td>8.63</td>
<td>16299</td>
<td>8.98</td>
<td>13035</td>
<td>8.25</td>
</tr>
<tr>
<td>25-39</td>
<td>49634</td>
<td>7.34</td>
<td>47296</td>
<td>7.61</td>
<td>13053</td>
<td>7.19</td>
<td>11223</td>
<td>7.11</td>
</tr>
<tr>
<td>30-39</td>
<td>80719</td>
<td>11.95</td>
<td>76803</td>
<td>12.36</td>
<td>21362</td>
<td>11.71</td>
<td>18848</td>
<td>11.94</td>
</tr>
<tr>
<td>40-49</td>
<td>59327</td>
<td>8.78</td>
<td>54443</td>
<td>8.76</td>
<td>15762</td>
<td>8.68</td>
<td>12779</td>
<td>8.09</td>
</tr>
<tr>
<td>50-59</td>
<td>42344</td>
<td>6.27</td>
<td>36173</td>
<td>5.82</td>
<td>9575</td>
<td>5.27</td>
<td>8224</td>
<td>5.21</td>
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<tr>
<td>60+</td>
<td>35899</td>
<td>5.31</td>
<td>31510</td>
<td>5.07</td>
<td>8396</td>
<td>4.62</td>
<td>8623</td>
<td>5.46</td>
</tr>
<tr>
<td>All ages</td>
<td>675226</td>
<td>100.00</td>
<td>621093</td>
<td>100.00</td>
<td>181417</td>
<td>100.00</td>
<td>157818</td>
<td>100.00</td>
</tr>
</tbody>
</table>


Rural-Urban Differential in Age Composition:

The urban segment of 0-14 age-group is 0.62 per cent smaller than the rural. There is no ground to think that infantile mortality is higher in the towns. Perhaps greater literacy and modernity have something to do with this difference. Adult population, constituting the larger group in both the segments, is more or less of the same proportion in both — 50.18 per cent in rural, 50.98 per cent in urban. The older people account for 5.19 per cent of rural and 5.01 per cent of urban population.
The higher proportion of aged people in rural areas is a little surprising. Better medical facilities available in urban areas were expected to help keep the mortality rate of aged people lower. However, the differential is very small — only .19 per cent. Two factors might be responsible for this situation. Many rural workers who migrate to cities in search of employment, move back to their rural homes after becoming too old to get a job. Secondly, it has been reported that, relatively speaking, lives of aged dependents among lower and lower-middle class families in urban areas are harder. This makes for a greater longevity in rural areas.

The lower proportion of children and aged in urban areas account for a lower dependency-ratio — 96 per cent — in towns than what obtains in the villages — 99 per cent.

Conclusions:

1. There are no conspicuous areal variation in age composition of rural and urban population, district-wise. Some minor variations, however, are there.

2. The rural-urban differentials of age composition are also not very sharp. Concentration of population in the 0-14 and 60+ age-groups is somewhat light in the urban areas, due perhaps to an in-migration from rural areas of adult workers, out-migration of the same people on becoming too old as also to a higher mortality-rate of aged in urban areas.

3. Dependency-ratio is 96 per cent in urban areas and 99 per cent in rural areas.
Migration, as Gosal has pertinently observed, is a fundamental factor helping to explain the ever-changing space-content and space relations in a country. A given region's population, thus, may inflate due to an influx of migrants while it may also deflate if the process is reversed. Moreover, where the migration is selective in regard to particular demographic, social or economic characteristics, it may affect not only the size but also the composition of the population.  

Migration, however, has no physiological component. It is a response of human organisms to economic, social, demographic and even political changes and/or forces in the given situation. The survival-needs as well as a well-recognised need for comfort and security are by and large the motivating factors behind any migration.

Factors determining whether the migration would be in or out have been characterised as 'pull' and 'push' forces. The former comprise opportunities for better life available elsewhere while the latter denote a want of such opportunities at home. But, as S. Lee Everett suggests, "Between every two points there stands a set of intervening obstacles which may be slight in some situations and insurmountable in others."

3. Ibid., p. 753.
The most studied of these obstacles is distance. In other words, physical constraints must also be taken into account besides the pull and push forces.

In view of the importance of distance in migration, transport becomes a relevant factor. The region under study is rather poor in this regard, especially in the interior areas. In a small region like the Sagar-Damoh plateau, lack of transport facilities may not be such a big hurdle for the male migrants, but it does apparently affect female migration.

The focus of the present study being largely on the rural or semi-urban areas, which form the bulk of the field of investigation, migration is an important parameter. Rural population, it has been noted, is more migratory than urban population. Most rural migrants, however, migrate to places not very far from their own. Many of them find their first job after migrating to another place while there are others who change their occupation from an agricultural one to a non-agricultural one for varied reasons.

In rural areas, as Clarke has observed, the effects of migration may vary from a welcome relief from the pressure exerted by over-population to depopulation, dereliction and downright abandonment. Between these two extremes lie various stages such as the adverse effects of unbalanced age-and-sex

structure on agricultural operations, population growth and
social activities, the closing of village schools, retreat
from marginal hilly tracts, the amalgamation of holdings. The
worst affected localities are, naturally, those with difficult
physical conditions.

Data shedding light on the migratory trends are
not available patwari circle-wise. These have to be deduced
from the data pertaining to population growth.

There are certain features of rural migration which
attract attention. First, most migrants, as noted earlier,
are short distance migrants. Secondly, working population,
both male and female, migrate only for short periods of harvest
time. Since this also happens to be the time when census
operations are carried out, an unnatural increase of population
can always be noticed in the wheat-growing areas. Thirdly,
the issue of migration cannot be divorced from the population
density in areas whose economy is based on agriculture. Where
the scope for extending agricultural land is limited, migration
will naturally be more. Lastly, Gosal's observation regarding
the pattern of migration of the whole country that 'Much of
the inter-district migration that does take place is due to
marriage' appears to hold for this region also.

The patwari circles of the Sagar-Damoh plateau can
be broadly categorized into three types from the point of view
of net migration:

1. The Areas of in-migration:

2. The Areas of static-constant or natural increase;

3. The Areas of out-migration.

1. The areas where in-migration substantially exceeded the out-migration are situated mostly in the fertile wheat-producing river basins. This is particularly so where the arable land is 85 per cent of the total land available. In the Western highlands, these are found in the Dhasan and the Basas uplands in the western tip and in the upper waters of the Sonar and the Bander nala in the southern part. In the Northern highlands these circles are located in the areas where the Barana nala provides some irrigation. In the Southern highlands these are noticeable in the Singrampur valley and in the areas adjoining Gamiya nala. All these circles are highly cultivated with a physiological density of less than 150 persons per square kilometre.

2. Circles belonging to the second category are few and far between. These really act as a transitional zone between the first and last categories.

3. Out-migration circles can easily be located by paying attention to the topography of this region. In addition to those situated in the vicinity of the urban centres, these circles are found in and around reserved forest tracts. In the Western highlands these are found near the water-sheds of the Dhasan, the Basas, the Sonar and the Bander which are all steep-rising forest-covered hills. In the Southern highlands, similarly, such circles are found near the hilly
terrain of the river banks of the Searma and the Guraiya nala and in the Sun valley. Out-migration is rather pronounced in the extreme north-east where the Mangaram range is dissected by the Padri nala. These are the areas where the physiological density is more than 200 persons per square kilometre.

In sum, the wheat growing belt of this region is characterised by 'pull' force, while the regions of Northern and Southern highlands adjoining forest tracts are the reverse.

SCHEDULED CASTES IN RURAL POPULATION

The percentage of scheduled castes in the total population of this region is 20.70 — 7.61 per cent higher than the State level in 1971. No scheduled tribe inhabits this area. There are sharp areal variations in the scheduled caste population in the region. A small fraction of the population at one place, they constitute as much as 36 per cent in some other places. (Map 18 )

The region can be divided into three categories from the point of view of scheduled caste population:

1. Areas of high concentration (28 per cent or more);
2. Areas of moderate concentration (12 percent to 28 per cent);
3. Areas of low concentration (Less than 12 per cent).

1. 16 per cent of the total patwari circles come
under the category of high concentration. Particularly
notable segments are found in the Western highlands, between
the Dhasan and the Bawas uplands and around the Sagar city.
The Sonar upland also has some pockets near the town of Hatta
and in the midland between the Sonar and the Bawas's joining
point. Another cluster of high scheduled caste concentration
can be found near the north-eastern edge of the Damoh (Jamnias-
Hindoria) range. In the Northern highlands it is restricted
to the right bank of Dhasan. This category is wholly absent
from the western and southern parts of the Damoh plateau.

2. Almost the entire rabi tract region is covered
by the second category. Nearly 68 per cent of the total patwari
circles fall under it. The entire Western highlands along
with its valleys, the Sonar upland, the Koprav valley, the
Bawas valley along with its tributaries and the Singrampur
valley have moderate concentration of scheduled caste population.

3. Low concentration of scheduled castes characterises
the remaining 16 per cent patwari circles. In the Western
highlands these are found near the upper waters of the Bawas
while in the Northern highlands, these are located mostly on
theBawas hills. Few patches of Dhasan upland and Southern
highlands also come under this category. In the Southern
highlands it is found near the upper waters of the Bawas and
Guraiya nala as well as in the Sun valley in the east. Some
Patwari circles of this category are located near the southern
tip of the upper waters of the tributaries of the Guraiya nala.
Conclusion:

Scheduled caste concentration is low in the regions with low agricultural density. It appears that, being largely landless agricultural labourers, the scheduled caste people migrate from such regions to adjoining areas where they can find work. Secondly, the highest percentage of scheduled caste population is found near the townships, explainable perhaps by the fact that the entire region is known for its bidi-making cottage industry. Migrating from the unproductive areas, they settle near townships so that they may earn their living by making bidis and live in relatively less expensive rural surroundings. Thirdly, the over-all percentage of scheduled castes is high in this region mostly because, being primarily wheat-producing, it needs a larger labour force. Members of scheduled castes from other places visit this region for harvesting too. Since, as noted earlier, this happens to be the time when census-operations take place, scheduled caste figures tend to inflate.

LITERACY

Literacy must form an important parameter in the study of population. Ability to read and write is unquestionably the first requirement in man’s quest for a better life. Bogue has rightly observed that though education by itself cannot ensure economic development, lack of it will certainly retard it. "A certain minimum level of literacy seems to be required in order for a population to break out of the vicious
circle of subsistence economy into full participation in
the modern world economy based on complex technology and
intricate systems of specialisation and exchange it Consequent-
ly, the level of literacy in a community becomes a good
measure of its progress towards modernisation. As a demo-
graphic characteristic, degree of education really points
to the level of sophistication, degree of cultural advancement
and the socio-economic position in general. In these days
of knowledge explosion, literacy has assumed a significance
it never had before. A modern farmer does not work on the
basis of only accumulated experience. A great deal is going
on in institutions of agricultural research, and this can be
brought to the farms only if there is not only literacy but
also climate receptive to new ideas and information. In
this sense, educational level has a direct relevance to such
diverse aspects of social life as fertility, morbidity,
mortality and other demographic events on one hand and to
inventories of human resources and possibilities of systematic
social change on the other. Literacy and educational status

1. Bogue, Donald J., Principles of Demography, (John Wiley,

2. Cf. Davis, K., The Population of India and Pakistan
(Princeton University Press, 1951) p. 150.

3. Cf. Hawley, A.H., 'Population Composition' in The Study
of Population, Hauser, P.M. and O.D. Duncan, eds.
(Asia Publishing House, Bombay: 1961)
of the members of a community, for this reason, serves as one of the best indicators of the quality of population. The role progress of literacy and education plays in changing employments and occupational pattern and in accelerating mobility of population should also not be overlooked.

By and large, the rural areas falling under this region, as in most other parts in the country, have to be content with primary and elementary education. The single University and a few degree colleges and higher secondary schools are mostly situated in the urban centres. As far as the villages are concerned, three of them have to make do with one primary school and a single middle school serves the need of as many as twenty-five villages. There is one higher secondary school for 133 villages, indicating the extent of illiteracy in this region. There are 22 higher secondary schools, 116 middle schools and 1005 primary schools in the whole of Sagar-Damoh plateau.

Decadal Variation of Literacy:

Compared to the preceding decades, some progress in the field of literacy appears to have been made after 1951.

1. Cf. Gosal, C.S., 'Regional Aspects of Rural Literacy in India', *Transactions of the Indian Council of Geographers*, 41, 1967, p.2. Gosal believes that as ability to read and write with understanding is attained after the age of 10, literacy should be calculated for the population age 10 and above.
Table III:7

Sagar-Damoh Plateau

Decadal Variation of Literacy

<table>
<thead>
<tr>
<th></th>
<th>1951-61</th>
<th>1961-71</th>
<th>1971-81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sagar-Damoh Plateau</td>
<td>19.51</td>
<td>25.45</td>
<td>32.01</td>
</tr>
<tr>
<td>Madya Pradesh</td>
<td>17.10</td>
<td>22.00</td>
<td>27.82</td>
</tr>
<tr>
<td>India</td>
<td>24.00</td>
<td>32.00</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Census Reports, 1961 and 1971 and Provisional Figures, 1981)

It is a curious fact that while the literacy level of the state is considerably lower than the national level, that obtaining in this region has been consistently higher. However, while the national percentage rose by 8 per cent, that of the state increased by less than 5 per cent and of this region by 6.24 per cent between 1951-71. During 1971-81, this region’s literacy growth rate has been 6.56 per cent, which is higher than the state’s 5.82 per cent. This may be because of smaller percentage of castes and a relatively higher literacy among females.

Rural Literacy:

The figures for rural literacy are considerably lower than those for the region as a whole. As a matter of fact, this region appears to be among the least literate ones in the whole country. As against the national average of 23.6 per cent for the rural sector, both the state average and the
average for this region happens to be only 16.7 per cent. The literacy rate of the population aged 10 and above, which accounts for the bulk of literates, is, however, 25 per cent. Keeping in view the goal of universal literacy even this figure is usefully low.

As the table below shows, rural literacy also increased from 1971 to 1981 along with the total population. However male literacy rose at a higher rate than the female literacy. While the former registered an increase of 7.37 per cent over the decade, the latter rose only by 3.75 per cent. Similarly, the growth rate of urban literacy is far higher than that of rural literacy. In the total population, it rose by 6.68 per cent. The thing to note is the fact that while male urban literacy rose by 5.78 per cent, corresponding figure for females is 7.73 per cent. Male literacy recorded a higher growth rate in the villages while female literacy rose at a faster pace in the cities.

Table 3.8
Sagar–Damoh Plateau

<table>
<thead>
<tr>
<th></th>
<th>1971</th>
<th>1981</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Population</td>
<td>Male</td>
<td>Female</td>
<td>Total Population</td>
</tr>
<tr>
<td>Total</td>
<td>25.45</td>
<td>36.45</td>
<td>13.46</td>
<td>32.01</td>
</tr>
<tr>
<td>Rural</td>
<td>19.45</td>
<td>30.19</td>
<td>07.85</td>
<td>25.15</td>
</tr>
<tr>
<td>Urban</td>
<td>51.08</td>
<td>62.48</td>
<td>38.13</td>
<td>57.76</td>
</tr>
</tbody>
</table>

(Source: Census Handbooks for Sagar and Daman districts, 1971 and Primary Census of Madhya Pradesh, 1981, Abstract Part I (Provisional Figures)).

The factors responsible for the low rate of literacy in this region are the same which account for general illiteracy in India. These relate to the socio-economic and cultural background of a region. First of all, two large segments of population – women and the scheduled castes – have been traditionally discouraged from going in for education. The causes for mass illiteracy among women have been gone into and identified by Cowan¹, Misra² and a committee appointed by the Ministry of Education, Government of India to go into this problem.³ It has been pointed out that although the Vedic women enjoyed an equal status with men and in many cases went to achieve high academic accomplishments, from circa 5th Century A.D. the status of women has been continuously going down. Once the girls were excluded from the initiatory rites, the possibility of their getting educated ended. During the


medieval times, women came to be confined to the four-walls of their home and this situation has not helped. Now the purdah system is no longer so rigid, particularly in the region under study, and the women do contribute to the economy in a small measure. Yet, their education still remains neglected. Women account for a little less than half the population.

The scheduled caste people, belonging to the lowest stratum of the society, form 20.70 per cent of the population of this region. This section too has been traditionally denied the educational facilities and the situation has started changing towards the better only in the recent past. Children of this class more often than not start contributing to the family earning at a very young age and hence cannot go to school.

Prior to the advent of the welfare state, education and the spread of literacy was not given much importance. Last but not least, education holds little value for subsistence agriculture and the economy based on it. Prevailing poverty, traditional conservatism, a general lack of facilities and also perhaps a low level of aspiration in the people — these and similar other factors have come to form a vicious circle which can be broken only after a great deal of determined effort and expenditure.

Areal Variations in Rural Literacy:

Sharp intra-regional variations in literacy rate are noticeable. If it is just one per cent in some segments, it goes up to 55 per cent in some others. Literacy is one of
those qualitative aspects of population which serve as vital area-characterising and area-differentiating elements. In this capacity it helps reveal the degree of advancement towards modernisation and socio-economic progress in different areas within this region. Analysis of the areal patterns of literacy thus, becomes useful as a tool for understanding the demographic character of different parts of the region.

Maps reveal the variations in rural literacy.

Three types of segments are distinguishable on the maps.

1. The Areas of high level of literacy (over 24 per cent);
2. The Areas of moderate literacy (16 to 24 per cent) and
3. The Areas of low level of literacy (less than 16 per cent).

1. The Areas of High Literacy:

Only 16 per cent of the patwari circles come under the category of high literacy rate. The percentage varies from 24 to 53. This highlights the generally low level of literacy in the region as a whole. Map no. depicts the high literacy segments in very small patches, limited to only a few areas. This category is almost unrepresented in the Northern and Southern Highlands. The patches of this category are situated mostly in the prosperous river valleys. The Western Highlands appear to have a lion's share of these. Uplands of the Dhasan, the Bows and the Kopa (a tributary of the Sonar) have the bulk of these scattered patches. Some
SAGAR-DAMOH PLATEAU

LITERACY OF RURAL POPULATION

1971

BASED ON DISTRICT CENSUS HANDBOOKS 1971.
SAGAR-DAMOH PLATEAU

MALE LITERACY OF RURAL POPULATION
1971

PERCENTAGE OF TOTAL MALES

ABOVE 40
32
24
22
BELLO W 24
URBAN AREA
FOREST AREA

KM: 10 5 0 10 KM

BASED ON DISTRICT CENSUS HANDBOOKS 1971.
SAGAR–DAMOH PLATEAU

FEMALE LITERACY
OF RURAL POPULATION
1971

PERCENTAGE OF TOTAL
ABOVE 24 FEMALE
24
16
8
BELOW 8
URBAN AREA
FOREST AREA

KM

0
10
20

10°0' N
10°15' N
10°30' N
10°45' N
7°30' E
7°45' E
8°0' E
8°15' E

BASED ON DISTRICT CENSUS HANDBOOKS 1971.
small segments of the Sonar upland and the upper waters of
the Banar also belong to this category. The other clusters
of these patches are in and around the urban centres of the
Western Highlands, for obvious reasons. The remaining patches
are located near the upper limit of the Southern Highlands,
near the Bhondla range, and in the extreme south near the
Singrampur valley.

Coming to the sex differential in the rate of lite-
ration, one notices that in the region under study only 5
per cent patwari circles have a male literacy of over 24 per cent;
while those where female literacy reaches and exceeds this
figure are only 3 per cent. In the category of high level
of literacy, male literacy is notably higher, above 40 per
cent of the total literate population. Even female literacy
is over 24 per cent in this type of segments, though only
near townships where better facility of schools and transport
is available. Patwari circles with the highest male-and-
female literacy are mostly found in the Western Highlands.
Few patches of very high male literacy are also found in the
Sonar upland and the Southern Highlands, but they have very
low female literacy. Scheduled caste population, a constant
drag on the literacy rate, is relatively low in this category
of patwari circles.

In the high literacy areas, the male-female diffe-
rential is also high because in general the female literacy
is low. For instance, there are circles where male literacy
is over 32 per cent but female literacy is only 6 per cent
or less. This naturally widens the gap. Patwari circles with a differential of more than 24 per cent are only 31 per cent of the total. Of these, the widest gap — above 32 per cent — is found in only 4 per cent of the circles which are located near the townships and big villages of the Western Highlands. Differential of 24 to 32 per cent is found in a few patches of the Northern Highlands also. In the Western Highlands, this category is found in big patches in the vicinity of Sagar and Banda towns, in the uplands of Dhasan and Besas and in the valleys of Sonar and Koppa. In the Sonar upland, these are found along the Sonar river. Some patches are found in the Southern Highlands also, near the lower water of the Bearma and the Guraiya nala, Singrampur valley and around the Sun Valley.

2. The Areas of Moderate Literacy:

Areas with moderate literacy rate — 16 to 24 per cent—are widely scattered all over the region. Some 48 per cent patwari circles are covered by this category. Patches of high and low literacy appear to break the continuity here and there. The eastern and southern limits of the Western Highlands are somewhat more patchy. Uplands of the rivers belong to this category, the most prominent being the Sonar upland (excluding its upper waters), the upper waters of the Bearma and the Guraiya nala.

Over 24 per cent males are literate in nearly 65 per cent of circles belonging to this category while the corresponding figure for female literacy is 39 per cent.
Proportion of males in the literates is between 24 and 40 per cent all over the Western Highlands, the Dhasan and Bevas uplands, the upper waters of the Beasma nala and along the upper waters and valley of the Kopra. Some patches are also found in the Northern highlands. In the Sonar upland these patches are confined to where the Bevas and the Kopra join it on the right and left bank respectively. In the Southern Highlands these patches are found along the course of the Beasma valley and in the Singrampur valley. Female literacy rate of 8 to 24 per cent is also found mostly in the Western highlands particularly in the uplands of Dhasan and Bevas. Few patches are found near the upper waters of the Beasma and the Kopra. A very few patches are found in the Sonar upland and in the Southern Highlands, the latter only near the upper waters of the Beasma and some scattered here and there.

Moderate differential between male and female literacy is found where the general level of literacy is between 16 and 24 per cent, male literacy is between 24 and 32 per cent and female literacy is between 8 and 16 per cent. In such areas the gap is between 16 and 24 per cent. Nearly half of the total patwari circles belonging to moderate level literacy have this gap. These are found in the Northern Highland to some extent. Vast stretches in the Western Highlands covering almost the whole of the region west of the Bina valley and most parts of the Dhasan and Bevas valleys belong to this category. Valleys of the Sonar and its main southern tributary Dehar also come under this category. Finally, patches are scattered in the Kopra valley and near the upper waters of the Beasma.
3. The Areas of Low Literacy:

The last category of segments, with less than 16 per cent literacy rate, covers the remaining 46 per cent patwari circles. These areas extend over the Northern Highlands as well as over those located near the water-sheds of the rivers Bina, Beas, Sonar and Kopra in the southern part of the Western Highlands. In the Southern Highlands, these segments are widely scattered in the uplands of the Bearma the Guraiya nala, all over the Mangarh range above the Sun valley and in some patwari circles in the forested areas.

Areas of low literacy among males and females are 27 per cent and 68 per cent respectively of the total patwari circles. Low male literacy widely characterises the Sonar upland, the lowest being near the Sonar-Bearma confluence. It is found all over the Northern Highlands. In the Western Highlands it is found only near the upper waters of the Beas, around the hilly tracts of the region and in the southern most parts. In the Southern Highlands this category is spread over vast areas along the Bearma valley, Guraiya nala and Padri nala.

Female literacy is generally rather low in the region. Except for a few patches, the entire Northern Highlands falls under this category. The Sonar upland also presents a clear picture of this category, as do numerous circles of the Southern Highlands. In the Western Highlands, it is found along the Bina river and around the Rahatgarh hills. Dhasan upland also
has some patches in its lower course. Beas upland along with its upper waters has a large patch of this category. Small patches can be seen, finally, along the course of Sonar, Koppa and Banasar nala.

Only 19 per cent patwari circles have the lowest differential of male-female literacy. These are found mostly near the forested hilly tracts. Facilities for schooling and transport are rather poor, as the maps show, and most of these circles belong to the interior and highly undeveloped areas of the region. Male literacy in this area is below 24 per cent while female literacy is less than 8 per cent. The gap between the two is naturally narrow, less than 16 per cent. These patwari circles are found mainly in the Northern Highlands. In the western Highlands the lowest differential is found along the Bina basin which is hilly and forested. Some circles are situated near the upper waters of the Beas and Sonar. In the Sonar upland this category is found only in small patches. In the Southern Highlands, it is found in the hilly, forested patwari circles near the upper waters of the Guraiya nala.

Conclusion:

The region has registered a low level of educational standard. In a backward region like the one under study, the problem gets indeed accentuated. The cities, with all kinds of facilities and winds of change, tend to do better in this regard. Yet, in Sagar-Damoh plateau, even urban literacy is only 57.76 per cent. That the rural literacy is as low as
25.15 per cent should surprise no one. There are several reasons for this state of affairs.

1. In an area dependent on subsistence agriculture, even male children cannot be generally spared from going to the fields, much less the female children. Though *per capita* land availability is low, the nature of terrain and the absence of adequate irrigation facilities compel the farmers to put as many members of their families in the field as possible.

2. The region under study is largely hilly and forested. This hinders the development of transport and communication. Over a greater part of the interior accessibility from the urban centres is poor which retards diffusion of modernisation and general consciousness for education. This has affected the general level of aspirations on one hand and has strengthened backward looking mores on the other. Both these combine to keep the literacy at a very low level. Women and the scheduled castes have by and large not been encouraged to acquire education in this, as in many another region.

3. Urbanisation has exerted some influence on the literacy. Thus, female literacy is higher in the Western Highlands where most of the urban centres of the region are located. The urban influence is spreading in the Sonar upland and the Southern Highlands. However, it is a pity that the most fertile segment of the region — the Sonar upland — has a low level of female literacy. Perhaps this is due to the
fact that the agriculture as an occupation diverts people from cultural advancement.

4. Yet another notable feature of this region is that the scheduled caste population does not affect the literacy rate as adversely as it does in many other areas. The reason is its employment in the small-scale bidi industry. Families of scheduled castes have moved on to the outskirts of the urban centres to get employment in this industry, and it is gratifying that this section of population has acquired a new confidence and an urge to do better. Children of these families, both boys and girls, get to the schools and manage to acquire at least primary education.

In sum, it must be realised that literacy cannot be increased on a substantial scale without first toning up the economy and diversifying it to absorb all the new entrants. It is really a symbiotic sort of situation — literacy and economy are mutually supportive.

WORKING POPULATION

The nature and character of the working force of a given region can be regarded as an index of its economic health. However, in a predominantly agricultural economy, the rate of participation of the working force cannot be over-emphasised. Undoubtedly productivity depends to a great extent on the skill and training that a worker has received. A skilled and well-trained worker is easily worth two or more unskilled, untrained
or ill-trained workers. Nevertheless, a higher rate of participation denotes the willingness of the population to take part in the economic effort.

The region under study supported a working population amounting to 34.55 per cent of the total population in 1971. The figure dropped to 29.05 per cent in 1981. The corresponding figure for the State in 1971 was 36.72 per cent, indicating that this region was somewhat less active in respect of gainful employment in that year. It is notable that the percentage of active workers has steadily declined over the decade in both the State and in this region. This seems to indicate that the region is progressively advancing to the stage of socio-economic development where participation in gainful economic activities is greatly reduced on account of preoccupation of younger segment of workforce in educational attainments.

Table 3

Break-up of Workforce Engaged in Agriculture in Sagar-Damoh Plateau and Madhya Pradesh.

<table>
<thead>
<tr>
<th>Region</th>
<th>Cultivators</th>
<th>Agricultural Labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sagar-Damoh</td>
<td>42.11</td>
<td>37.48</td>
</tr>
<tr>
<td>Plateau</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>48.53</td>
<td>43.93</td>
</tr>
<tr>
<td>Females</td>
<td>16.95</td>
<td>14.72</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>52.96</td>
<td>52.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>56.70</td>
<td>54.00</td>
</tr>
<tr>
<td>Females</td>
<td>41.29</td>
<td>47.31</td>
</tr>
</tbody>
</table>

(Source: Supplementary Table 4 of the 1981 Census Report, Provisional Figures and the Census Handbooks for Sagar and Damoh)
This table clearly indicates that this is a predominantly agricultural region, as is the entire state. Much more than half of the working force is directly engaged with agrarian activities. Those agrarian workers not working directly on the farms are far from insignificant, though they have not been recorded in this table.

Several features stand out in this table and have significant implications. First, men and women who owned small holdings were only 42.11 per cent in 1971 while the state average was 52.36 per cent. Limited scope for extending the cultivated acreage must be held responsible for it. Over the decade, due to this factor along with rise in population, the percentage fell by nearly five points in this region though at the state level the fall was only of .76 per cent. Secondly, while the percentage of agricultural labourers recorded a decline of only 2.39 per cent, at the state level in this region the fall was to the tune of nearly eight per cent. This confirms the earlier picture. The steepness is really due to a precipitate fall in the number of female workers. While male workers came down from 21.96 per cent to 17.41 per cent, female workers came down from 52.92 per cent to 29.00, a fall of over 23 per cent. As observed earlier, bidi industry attracts female labourers in particular. Lastly, it does no credit to this region that the percentage of female cultivators is only 14.72 in the latest census (it was only two per cent more a decade earlier) while the state average was 47.31 in 1981 and 41.09 in 1971. This decisively demonstrates the plight of women in this
backward region. Though the State of Madhya Pradesh cannot be considered an advanced state, obviously woman's position in other regions must be better than what we find here.

The percentage of non-agricultural and/or indirectly agricultural workers in this region is, as is to be expected, higher than the State average. While the latter stands at 20.59 (23.97 males and 10.21 females), the former is 30.82 (29.51 males and 30.13 females). Percentage of women non-agricultural workers is nearly thrice in this region than the State average, indicating once again the dominance of cottage industry and a somewhat greater urban character.

Agrarian Workforce:

Coming to the nature and character of the agrarian workforce, one notices that primary agricultural activities occupy the bulk of workers. Cultivators and agricultural labourers, between these, appear to account for as much as 98 per cent of the total workers in some circles. The percentage is not less than 23 in any circle, and the circles with this low percentage are really few and far between.

Percentage of workers in the male population ranges between 46 and 70 and in the female population between 1 and 35. Patwarai circles with 70 per cent male workers, however, are few. These are found near townships and have invariably fewer female workers. The high percentage of female workers is found mostly in the rice-growing areas. Patwarai circles in the vicinity of forests and townships have a distinctly
lower percentage of female workers. Differential of male-female workers is also highest in these circles. Predictably it is the lowest in the productive wheat and rice growing areas. The region can be divided into three types of areas from the point of view of workforce and its position vis-à-vis population:

1. Areas of high percentage of working population—between 41 and 59 per cent.

2. Areas of moderate percentage of working population—between 33 and 40 per cent.

3. Areas of low percentage of working population—between 27 and 32 per cent.

1. Areas of High Percentage of Working Population:

Nearly 22 per cent patwari circles belong to this category. Spread over most of the region, these are found in small patches. Circles around urban centres have as high percentage of workers in population as 59. The percentage of male workers in these circles is the highest in these circles, above 56 per cent of the total male population. On the contrary, percentage of female workers in female population is as low as 8 in these circles, the differential being 48 per cent. The reason lies in the fact that in a large number of cases male workers prefer to live alone in these areas while their families continue to live in their native villages. In certain instances, however, whole families live and work together, particularly in circles with thriving bidi-industry. Fertile tracts served by small rivers and streams also abound with such circles. Most of the uplands belong to this category.
SAGAR- DAMOH PLATEAU
FEMALE WORK FORCE
OF RURAL POPULATION
1971

PERCENTAGE OF TOTAL FEMALES
>32
24
16
< 8

KMS. 10 5 0 10KMS.

BASED ON DISTRICT CENSUS HANDBOOKS 1971
SAGAR-DAMOH PLATEAU
MALE FEMALE DIFFERENTIAL
IN RURAL WORK-FORCE
1971

NUMBER OF MALE WORK FORCE
PER FEMALE WORK FORCE

KMS 10 5 0 10KMS

URBAN AREA
FOREST AREA

BASED ON DISTRICT CENSUS HANDBOOKS 1971
As against the patwari circles near the urban centres, those in these fertile tracts and uplands have a large female workforce, nearly 34 per cent of the total female population, while the percentage of male workers in male population remains over 56 per cent. The differential between the two workforces thus comes down to 32 per cent. In the Northern highlands, circles with high percentage of workers are found near the Bilia, on the small rills that join the Dhasan and also on those which join the Sonar on the left bank. In the Western highlands these circles are scattered over the areas near the Beemas and the upper waters of the Sonar, the Kopra and the Banner. The Southern highlands have comparatively fewer patches of this type, situated along the Bearma and the Guraiya nala. Male workforce remains over 56 per cent in these circles also, but the female workers account for less than 16 per cent of the female population.

2. Areas of Moderate Percentage of Working Population:

Majority of patwari circles in this region, 56 per cent of the total, have a moderate percentage of workers vis-à-vis the total population. Large clusters of circles belonging to this category are spread over the Western highlands and the Southern highlands, particularly around the river Bina, the upper waters of the Sonar and the Banner, and in most parts of the Dhasan and the Beemas uplands. The Sonar upland has big patches of this type, as do the areas adjoining the Bearma and the Guraiya nala and the Singrampur valley. In this type of patwari circles, male workforce is relatively larger in areas
near hills and forests where life is difficult and unsafe and in the uplands of rivers where arduous labour is required to ensure greater productivity. Female workforce, however, is low in this category also. The differential also fluctuates between 32 and 48 per cent.

3. Areas of Low Percentage of Working Population:

The remaining 22 per cent patwari circles, covering mostly the less fertile hilly tracts, have a low percentage of workers in the population. These are found mainly in the Southern highlands, the eastern parts of the Sonar upland and in a few patches of the Western highlands. This category has a low male working force, a low female workforce and a low differential. Most workers from these circles migrate to the rabi tracts during the harvesting season or to the industrial areas of Jabalpur.

Cultivators and Agricultural Labourers:

Cultivators and agricultural labourers — the former are petty land-owners while the latter merely work for others and are by far the poorest of the poor — form the backbone of any agriculture-based economy, as has been observed earlier. It would be interesting to find out the relationship in which they stand to other workers in different patwari circles. This would reveal the state of economy as well as the job situation. For instance, in some circles cultivators and agricultural labourers are nearly 98 per cent of the total working class.
Does it mean that these are particularly high-production zones? Importance of answers to such questions can hardly be gainsaid.

The region can be classified into four categories from the point of view of the percentage of cultivators and agricultural labourers in the total workforce:

1. Areas of high percentage of cultivators and agricultural labourers (above 89 in the total workforce);
2. Areas of moderately high percentage (between 78 and 89 per cent);
3. Areas of moderate percentage (between 48 and 78 per cent), and
4. Areas of low percentage (less than 48 per cent).

1. Areas of High Percentage:

Cultivators and agricultural labourers are more than 89 per cent of the total workforce in as many as 27 per cent patwari circles. Bulk of these circles is situated in agriculturally less promising and backward areas while some are in fertile areas also. The conclusion is inescapable that this high percentage does not indicate robust health of agriculture. It really means that in these circles, hilly and interior as these are, people have no alternative but to devote themselves to agriculture even when it barely sustains them. This is thus a far from welcome phenomenon.

Coming to the details, one notices that it is only
SAGAR-DAMOH PLATEAU
CULTIVATORS & LANDLESS LABOURERS
OF RURAL POPULATION
1971

PERCENTAGE OF TOTAL WORK FORCE

KMS 10 5 0 10KMS

URBAN AREA
FOREST AREA

BASED ON DISTRICT CENSUS HANDBOOKS 1971.
the Sonar upland where the high percentage of people directly connected with agriculture is very high because of its profitability. Otherwise, this category covers only the interior areas of the Western highlands and most of Southern highlands. In both these cases alternative opportunities are scant. Few patches of this category are found in the Northern highlands, and the uplands of Dhasan and Beas. It needs being emphasised that the low opportunity areas where such patwari circles are mostly located supply labour to the Jabalpur industrial tracts in the south and the Sonar upland in the north. Remaining population has no option but to eke out some kind of living from agriculture. Even metalled roads are far from these circles.

2. Areas of Moderately High Percentage:

The second category of moderately high percentage is found in 39 per cent of patwari circles. Some patches of such circles are found in the Northern highlands. Along the Sina river and in the Dhasan upland, particularly in the upper waters of the Dhasan and the Beas these are found extensively. Few patches are found in the Beas upland also. More than half of the Western highlands is covered with such circles. In the Sonar upland this category ranks first. This really shows the general fertility of this area. In the Southern highlands this category is generally found along the water courses and upper waters. Patches are found along the courses of the Beams, the Guraiya nala and the Jabara nala. Upper waters of the Padri nala, Sun river, the Beams, Jabara nala and the Siran river also have this category.
3. Areas of Moderate Percentage:

In 31 per cent patwari circles the percentage of cultivators and agricultural labourers is between 40 and 70. These circles are found all over the region in small patches. In the Northern highlands this category can be seen in those patwari circles where big villages are slowly developing into urban centres and are well-served by highways. Some patches are found along the Sina river where it traverses through forest-covered hills. Some patches are found in the Dhasan upland. Large number of such circles — perhaps the largest concentration in the region — are found in the Bosas upland. Some patches are in the Western highlands, but none in the Sonar and Kopra valleys. In the Sonar upland patches of this category are found around townships. The Southern highlands have the lowest number of such circles.

4. Areas of Low Percentage:

Only 3 per cent patwari circles have fewer than 40 per cent cultivators and agricultural labourers in their workforce. Two different types of patwari circles have this category. First are those which include townships with two-thirds non-agricultural workers. The rest are those situated along forested areas with particularly inhospitable conditions. It is something to be thanked for that the number of such circles is so small!

Conclusion:

Several features strike one vis-à-vis the workforce of the region under study. First of all, the region is econo
mically not as active as some other parts of the State. This is demonstrated by the fact that in 1971 while the State average of total workforce was 36.72 per cent, that of this region was 34.55 per cent. It is quite likely that the industrial backwardness of this region is partly responsible for this.

Even nature is not particularly kind to man, obliging a large number of workers to seek their livelihood outside this region while continuing living here.

Secondly, it is an interesting paradox that male work force predominates in areas which are either very fertile or are very difficult to work. Fertile tracts of the river uplands fall under the first category while the remote, interior, forested areas under the second.

The third feature appears to spring directly from the foregoing. Since, proportionately, the easy-to-work, fertile areas are fewer than the other kind of areas, percentage of women workers is far below in this region than the State average. In the remote, forested areas of Northern highlands and Southern highlands women workers can make a living only with a great deal of difficulty and consequently number very few. Of course the fertile tracts, few as these are, have considerable number of women workers.

Fourthly, the difference between the male and the female workers, percentage-wise, is the largest in the same inclement areas of the Northern and the Southern highlands. River uplands have a moderate difference while there is very little difference in the particularly fertile tracts of the river uplands.
Finally, the total percentage of cultivators and agricultural labourers is lower in this region than the state average. However, between these two categories, the number of cultivators is higher than that of the landless labourers. While males predominate among cultivators, there are more female agricultural labourers than male. The highest percentage of those working on fields is found either in the fertile Sonar upland of the Western highlands or in the Southern Highlands where there is no option before an able-bodied person but to work on farms. Agricultural density of this region is also high.