Chapter-V

Age and Sex Ratio in Osmanabad District

5.1 Age and Sex Ratio

5.2 Introduction.

5.3 Methodology

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5.5 Urban Age group Ratio in Osmanabad District (1981-2001)

5.6 Sex ratio of population


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5.1 Age composition of population:

Introduction:

The population of an area includes persons of various ages. The age composition is important for understanding the fertility and mortality of community. Age differences may create social and economic differences. The age composition of population (sometimes called age structure or distribution) is one of the most basic characteristics of a population. One cannot proceed very far in the study of population, growth of migration without an examination of age composition.

All aspects of an individuals or communities life. Social attitudes, economic activities, political propensities and son on, are affected by age. Age influence the needs thinking and behavior of people. The age structures very much influennces the Socio-Economics life of a nation.

The age structure of a population is determined basically by three factors mainly fertility, mortality and migration. The age data are conveniently analyzed with reference to devices like age pyramid, age grouping, and age indices etc.

The age pyramid is constructive for analyzing the age composition of population. The useful procedure for graphically representing the age
structure of a population is by constructing “Age pyramids”. The “Age Group” which will help in understanding of regional ratio of population which can be made possible by dividing the population into various age groups. Another method of studying age ratio is the calculation of age indices. A clearer picture of the relationship of the three age Group i.e. (Young / adults, Young / aged, young / adults aged) may sometimes be gained by calculating and mapping age indicates.

For understanding of future growth of population, it is necessary to know the age structure because it affects the marriage rate and reproductive performance of the population. Thus on the basis of age structure it is possible to know whether a country has progressive or regressive types of population. The study of age structure also helps us in knowing the number of old persons for whom old-age pensions may have to be provided by the government.

For the population Geographers it is very difficult to produce the age statistics, secondly, not all countries conduct census regularly to collect the data for of peoples age. In less developed countries, people are also ignorant about their exact dates of birth.

The data on age structure in a country are most likely to be inaccurate. Apart from ignorance and carelessness, there are many reasons to hide the actual age of persons. The parents of unmarried girls who have reached marriageable age will under state the age of the girls,
similarly, normally widowers and spinsters who wish to marry do not say their exact age but lower it. Another reason for giving a wrong age is the superstitious belief that it is unwise to state one’s age correctly as it reduces one’s span of life.

Age composition data, thus has wide utility and are basic to the planner, particularly those who are concerned with planning for education and defense, like insurance and other welfare programme, employers of all public and private organization. In view of those evidences an attempt has been made in the present study to analyze and to explain age ratio of population in Osmanabad district.

5.2 Methodology:

In the present study an attempt has been made here to explain the age composition in Osmanabad district. The data collected from the statistical office gives general picture of age composition with reference to rural and urban population, and generally categories into eight groups i.e. (0-4), (5-14), (15-24), (25-34), (35-44), (45-54), (55-64) and above 65 by the department of statistics in the district. For the convenient of the present study the age groups have been scientifically re-classified categories into three broad groups namely,
1. Young age group.

2. Adult age group.

3. Aged (old) group.

The young age group includes young people ranging from 04 to 15 ages. This group is already not-productive and it is an expensive segment. It must be fed, clothed, housed and educated. The youthful age group is proportionally large in number and found usually in economically less developed countries of the world.

The adult age group is considered by clubbing age group from 15 to 59 years old. This group is economically most productive and biologically most re-productive and supports the bulk of the other two groups. It is also most mobile age group. Generally, in this age group the proportions are high in the advanced countries but the lowest in the under-developed countries.

Among the aged or old age group usually a strong majority of females and windows are mostly non-productive. The present study experiences different age groups, these have been reclassified into three broad and categories i.e. 0-14 (young) 15-60 (Adult age) and above 60 years (Old) have been taken into consideration in the present analysis of the study period 1981-2001.
Table No.5.1 Agewise Rural-Urban Sex Composition in Osmanabad District:(1981-2001)

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</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Total (R+U)</td>
<td>Rural</td>
</tr>
<tr>
<td>I</td>
<td>(0-14)</td>
<td>7262</td>
<td>(43.74)</td>
<td>1001</td>
</tr>
<tr>
<td>Young</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>(15-59)</td>
<td>6260</td>
<td>(71.19)</td>
<td>1231</td>
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<tr>
<td>Adults</td>
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<td></td>
</tr>
<tr>
<td>III</td>
<td>Above 60</td>
<td>1080</td>
<td>(9.30)</td>
<td>127</td>
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<tr>
<td>Old</td>
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</tr>
<tr>
<td>All Total</td>
<td>16602</td>
<td>2359</td>
<td>(100%)</td>
<td>18961</td>
</tr>
</tbody>
</table>

3. R = Rural, U = Urban

5.3 Agewise rural sex composition in Osmanabad Distric(1981-2001):

The study area exhibits different age group of rural population in the district. The distributional aspects of agewise rural sex composition have been studied and attempt is made to compare the variations among these components of population.

Table No.5.1 explains that the relating to agewise rural sex composition in the district. It is observed that during 1981 the percentage of the age-group 0-14 (young age group) was about (43.74%) percent in
rural areas. Which has decreased to (41.12%) percent during the period of 2001 and (2.62%) percent decreased during 1981 to 2001.

In the age group of 15-59 (Adults age group). The agewise rural sex composition was about (71.19%) percent during 1981 and which has decreased to (57.68%) percent during 2001. (13.5%) percent decreased to the total. The agewise rural sex ratio during 2001.

In the age group of more than (60 old age) the agewise rural sex composition was decreased as compared to young and adults age groups, during 1981 the percentage of rural old age group was about (9.30%) percent but it has decrease (1.13%) percent during 2001. The old age group of rural area it was observed in the during the study period of 1981-2001 (8.17%) percent decreased.

5.4 Agewise urban sex composition in Osmanabad District (1981-2001):

It is evident from the Fig. No. 5.1 that the, Agewise Urban Sex composition varied from one category to another and it is different from rural age group composition. The study reveals that the percentage of age-group (0-14 young age group) about (42.43%) percent in urban area during the period 1981. Which has decreased to (41.33%) percent was observed during 2001 and totals (1.1%) percent decreased during 1981 to 2001.

In the age group of (15-59 Adults age group) the Agewise Urban Sex composition was about (52.18%) percent during 1981 and it has
increased to (57.79%) percent during 2001 and (5.61%) percentage increased to the urban areas during the period 1981 to 2001.

The age group of more than (60 old age) urban age group composition is decreased as compared to young and adults age group during 1981 the percentage of urban old age group was about (5.38%) percent during 2001. The old age groups of urban areas as also to (4.51%) percent during the study period 1981 to 2001.

5.5 Sex ratio of population:

Introduction:

The distribution of population by sex ratio is an important demographic characteristics and it is exist to obtain. The United Nation Demographic year Book (1949) explain that the male infants a high mortality than females.

It is common practice to express the sex ratio of population between male and female is known as the sex ratio is an index of the Socio-Economic conditions prevailing in an area and is a useful tool for regional analysis. It has a profound effect on the demographic structure of the region.

It is documented fact of genetics that in case of most of the mammals including human population, more males are born than females. The primary sex ratio (at the time of conception) is still higher than what the figures pertaining to natural sex ratio reveals. It has been
recognized that the number of males is higher than that of female Clarke J. I. (1905).

The distribution of population by sex ratio is an important demographic characteristic. The separate data for male and females are important for various types of planning and for the analysis of the other demographic characteristics, such as natality (Birthrate), mortality, migration, marital status and Economic characteristics etc. The balance between the two sexes affects the Social and Economic relationships within a community, since these two sexes' plays partly contrasting and partly complementary roles in the economy and society, the study of sex ratio assumes added significance for a population geographer.

It is also evident from the study that, during the reproductive period, frequent pregnancies not only results in many maternity deaths but also undermine the longevity of the life of female in the countries like India, the health of an Indian wife is adversely affected by her own pious self-denial of life’s comforts for the sake of her husband and children, Krishna Gopal and Chandna R. C. (1973).

Sex ratio is an index of the Socio-Economics conditions prevailing in an area and is a useful tool for regional analysis. Franklin (1956) Sex-Ratio in any region is mainly determined by three basic factors vic. Sex-Ratio at birth, Sex ratio at death and sex selectivity among migrants, Clark J.I.(1960): Apart from these factors natural climates like war,
famines, and earth quakes and so on will have their effects on sex ratio. Socio-economic condition such as status of women standard of living, diet, religion and other govern sex ratio,

For example a region more Muslim population exhibit a higher number that the status of woman. Ghosh (1985). Sex ratio may very among different regions. In the USA, the sex ratio is high (males are larger in number). Primary sex ratio is the sex ratio at the time of conception, secondary sex ratio is the ratio at the time of birth, and tertiary sex ratio is the ratio found at the time of enumeration.

In view of these evidences, where we can observe differences in the male and female ratio in rural as well as urban areas. In the present study the sex ratio has been calculated in terms of numbers of per 1000 males. It is calculated with help of following formula:

Formula: \[ SR = \frac{P_f}{P_m} \times 1000 \]

Whereas,

\[ SR = \text{Sex Ratio}. \]

\[ P_f = \text{Female Population}. \]

\[ P_m = \text{Male Population}. \]
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Females per 1000 males</td>
</tr>
<tr>
<td>Osmanabad</td>
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<td>970</td>
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<td>Tuljapur</td>
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<td>959</td>
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<td>57206</td>
<td>965</td>
</tr>
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<td>Bhum</td>
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<tr>
<td>District total</td>
<td>516165</td>
<td>494613</td>
<td>958</td>
</tr>
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</table>

**Source:**
5.6 Talukawise distribution of sex ratio in Osmanabad District

(1981-2001):

In the present study, the Talukawise Distribution of sex ratio has been studied at talukalevel the study reveals that the taluka level differences in their intensity and effectiveness and these differences have produced significant intra-regional contrast in the characteristics of sex ratio in Osmanabad district. The differences in Socio-Economics factors are mainly responsible for the changing pattern of sex ratio in the district. In the present study the sex ratio has been calculated by using above said formula and the results have been mapped and analyzed by choropleth map.

For the year 1981, the sex ratio is 958 females per 1000 males. Where as in 1991 it has slightly decreased to 904 females per 1000 males. But during the year 2001 again it has increased to 929 females for per 1000 males. It is clear form the table No. 5.2 that the district experiences higher sex ratio.

5.6.1 Taluka wise variation of sex ratio-1981:

Table No.5.2 and Map No.5.3 Explain that the District total sex ratio ranges between (960 females per 1000 males for the year 1981). The sex ratio (i.e. females per 1000 males) with above (965) proportion was observed in one taluka namely Omarga(970),

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where as the medium (955to965) sex ratio in four talukas namely Kalam (965), Tuljapur (959), Paranda (965) and Bhum (965). The below (955) was observed in one taluka namely Osmanabad (933). The total sex ratio was high observed in the year 1981. This variation was mainly due to migration and pitrasattak kutumb system of male population.

5.6.2 Taluka wise variation of sex ratio-1991:

Table No.5.2 and Map No.5.3 Explain that the District total sex ratio ranges between (904 females per 1000 males for the year 1991), the sex ratio (i.e. females per 1000 males). With above (930) proportion was observed in two talukas namely Paranda (931) and Tuljapur (938), where as the medium (905to930) sex ratio observed in two talukas Kalamb (923) and Bhum (908). The below (905) was indicate in two talukas Osmnabad (870) and Omerga (893). The total sex ratio was low observed in the year-1991. This was mainly due to migration of male population and increased mortality male and female in the district.

5.6.3 Taluka wise variation of sex ratio-2001:

Table No.5.2 and Map No.5.3 Explain that the District total sex ratio ranges was slightly increased (929 females per 1000 males for the year 2001), the sex ratio (i.e. females per 1000 males) with above (935) proportion was observed in one taluka namely Omerga (949), where as the medium (925to935) sex ratio observed in four talukas namely Paranda
OSMANABAD DISTRICT

Talukawise Variation of Sex Ratio in : 2001

INDEX
(Female per 1000 male population)

- ABOVE 935
- 925 to 935 MEDIUM
- BELOW 925

Map No. 5.3
The below was dictate in one taluka Osmanabad.

The overall changes of taluka wise variation of sex ratio in Osmanabad district. The high sex ratio (958) Medium (929) and Low (904). The total sex ratio was medium in the year-2001, because the same condition in the year of-1991.

5.7 Characteristics of rural and urban sex ratio in Osmanabad

District(1981-2001):

The sex ratio of rural population is typically different from that their urban centers of the talukas in Osmanabad district. The basic determinants of sex differential are birth, death and among migrants. It is true that the male dominate among the Rural and Urban migrants in the Osmanabad district. The sex ratio in urban areas suffers from paucity of females the male selective in rural urban migration is facilitated by the prevalence of joint family system where by the male migrant is assured of the safety and security of his family members left in their own native resulting in the rural-urban difference in sex ratio, which reflects the nature of sex selectivity.

In view of these evidences it was observed the difference in male and female ratio in case of rural and urban areas. The Osmanabad district as a whole sex ratio varies from one decade to another as well as one taluka to another.

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<th>Talukas</th>
<th>1981 Male</th>
<th>1981 Female</th>
<th>Females Per 1000 males</th>
<th>1991 Male</th>
<th>1991 Female</th>
<th>Females per 1000 males</th>
<th>2001 Male</th>
<th>2001 Female</th>
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<td>937</td>
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<td>133528</td>
<td>912</td>
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<td>104834</td>
<td>94620</td>
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<td>55940</td>
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<td>Kalamb</td>
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</tr>
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</table>


### 5.8 Talukaise decadal variation of rural sex ratio in Osmanabad District (1981-2001):

The sex ratio at rural areas varied from one decade to another. As such the total rural sex ratio was 936 females per 1000 males during 1981 and it has increased to 943 females per 1000 males during 1991 and it has slightly decreased to 929 females per 1000 males during 2001 in the district.
OSMANABAD DISTRICT

Talukewise Decadal Variation of Rural Sex Ratio:

Current Pattern: 2001

INDEX
(Female per 1000 male population)

- ABOVE 940
- 930 to 940 MEDIUM
- BELOW 930

Map No. 5.4
5.8.1 Current pattern:

Table no.5.3 and Map No.5.4 explains during the year 2001. The rural sex ratio is varied between females per 1000 male population was found above the (940) In Omerga (946), whereas medium (930-940) rural sex ratio was observed in two talukas of the district viz. Paranda (934) and Kalamb (930). The below (930) rural sex ratio was observed in three talukas namely Bhum (928) Osmanabad (912) and Tuljapur (929) this was result of females per 1000 males population in the district. This was resulted reduce of female population and also migration of male population to other neighbouring district.

5.8.2 Volume of change:

The volume of change in rural sex ratio has registered decreased (-07%) percent of females per 1000 male population during the study period (1981 to 2001). Table No.5.3 and Map No. 5.5 indicates the taluka wise variation of rural sex ratio in Osmanabad district. Above the (34.00) high decrease rural sex ratio was observed only one taluka namely Kalamb (36.00), whereas the medium (24.00 to 34.00) decrease of females per 1000 males was found in three talukas viz. Paranda (-32.00), Bhum (-34.00) and Tuljapur (-26.00). Where as the below (24.00) rural sex ratio was found in two talukas Osmanabad (-22) and Omerga (-20.00) during the period of 1981-2001. Due to urban influence.
OSMANABAD DISTRICT

Talukawise Decadal Variation of Rural Sex Ratio:


INDEX
(Female per 1000 male population)

- ABOVE 34.00%
- 24.00 to 34.00% MEDIUM
- BELOW 24.00%

Map No. 5.5

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### Table No. 5.4 Talukawise Decadal Variation of Urban Sex Ratio in Osmanabad District: 1981-2001

<table>
<thead>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Females per 1000 males</td>
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<td>District total</td>
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### Decadal Change in Urban Sex Ratio

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<tr>
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</thead>
<tbody>
<tr>
<td>Osmanabad</td>
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<td>Kalamb</td>
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<td>Omerga</td>
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<tr>
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**Source:**
5.9 Talukaise decadal variation of urban sex ratio in Osmanabad District (1981-2001):

The sex ratio at urban areas varied from one decade to another. As such the total urban sex ratio was increased as compared to rural sex ratio 958 females per 1000 males during 1981, and it has slightly decreased to 904 females per 1000 males during 1991 and it has again decreased to 929 females per 1000 males during 2001 in the district total. The district experienced a decreased trend of urban sex ratio due to family planning system, influence of urbanization and availability of Socio-Economic facilities.

5.9.1 Current pattern:

Table No.5.4 and Map No.5.6 explains during the year 2001. The urban sex ratio is varied between females per 1000 male population was found in the district. Above the (935) In Omarga (949), where as medium (925 to 935) urban sex ratio was confined in four talukas of the district namely Paranda (934) Kalamb (930), Tuljapur (930) and Bhum (928) talukas. The below (925) urban sex ratio was found in one taluka Osmanabad (920).
OSMANABAD DISTRICT

Talukawise Decadal Variation of Urban Sex Ratio:
Current Pattern: 2001

INDEX
(Female per 1000 male population)

- ABOVE 935
- 925 to 935 MEDIUM
- BELOW 925
OSMANABAD DISTRICT

Talukawise Decadal Variation of Urban Sex Ratio:


INDEX
(Female per 1000 male population)

- ABOVE 35.00%
- 25.00 to 35.00% MEDIUM
- BELOW 25.00%

Map No. 5.7
5.9.2 Volume of change:

The volume of change in total urban sex ratio has recorded decrease number (-29) of per 1000 male population during the study period (1981-2001). Table No5.4 and Map No.5.7 reveals that the talukas level change in urban sex ratio of Osmanabad district. Above the (35.00%) decrease of urban sex ratio was observed in Bhum (-37.00%), where as the medium (25.00 to 35.00) decrease of urban sex ratio i.e. (females per 1000 males) was seen in three talukas namely Kalamb (-35), Paranda (-43) and Tuljapur (-29). The below (25.00%) percent decrease of urban sex ratio was seen in two talukas viz. Osmanabad (-13) and Omerga (-21) talukas during the study period of (1981-2001).

The mainly impact of due to the issue rests with the development of manpower for better utilization of human resources in the context of land resources management. When able bodied population moves out to some push factor. hence this study of sex ratio of this region helps to identify such pockets and regions where attention is to be focused for planning.
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