A Temporal Study of Human Resources Development in the Akole Tahasil.

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ABSTRACT:
Human resources are the greatest advantages of every nation. Man is producer, saver and consumer of resources thus he is not only the receiver of the total process development and utilization, but also the most strong and dynamic agent of production. Therefore, population is the essential element from which resources characteristic taking their significance and such human resources are playing very important role in its economic development. Human Resource Development is the process of growing, developing knowledge, the skills and the capabilities of the human. Human Resources Development is a structure for the development of human capital which is surrounded by a society during the development of together the society and the person to achieve presentation development. The main aim of these analyses is to focus on temporal variation and growth in the levels of Human Resource Development. In the first criteria is demographic, there are 04 demographic variables, related to census 1991 and 2011 are selected, second variables related in occupation sectors there are 07 elements selected and lastly HRD related variable agricultural sectors there are 04 elements selected to study the Human Resource Development.

KEY WORD: Human resources development, Akole Tahasil, quantity and qualities, Tribal area.

I. Introduction
Human resources are a term which is used in connection with the society. It is very important factor for the regional development. Quality of human resources development depends on such as literacy, education, health, population density, sex ratio and techniques, etc. Natural and Human resources plays a very important role in the development of the national economy. Human resource is one of the vital resources of a country. Its study falls under the preview of man in geography has for long been questioned by the geographers. Mainly because of the fact that the former geographers had greater receptiveness towards the study of natural environment, but with the increasing realization among the geographers this geography is one of the social science, a number of publications by geographers on population and associated problems have been growing in recent years. Hence, the geography of population is a recent sprout of the science of geography. Over the years, it has come to denote the discipline for the study of human population. In increase or decrease the human resources may convey about a flexible change in the man-land ratio, population distribution and composition of population, amenities etc. Populations as resources become any region or nation economical development that depends on the qualities of population. Human resources are Population distribution, density, sex ratio, literacy rate, literates and growth rate etc. depends on quantity and qualities of population. The present study reveals human resources development in Akole tahasil during last three
decade (1991-2011) years. The primary aim is to study of temporal growth and pattern human resources development in study area and its positive and negative impact on balance of development.

II. Study Area
Geographically Ahmednagar district is the largest district in the state of Maharashtra. It is divided into 14 Tahsil. Is one of the Akole tahasil on western Hilly region western part of the Ahmednagar district. It is divided into 191 villages and 4 (Four) Revenue Circles namely Rajur, Akole, Samsherpur and Kotul. There are total population of this tahsil is 2, 71,719 [2001] one of which 1, 01,966 [ST] Tribal people and Population is 2, 91,950 Census 2011, literacy 1, 92,461 persons and one of which 1, 39,730 (ST) Tribal people in this area. Akole tahasil is located in 19°15' 14" N to 19°44' 59" N latitude and 73°37' 00" to 74° 07' 24" E (Fig. No 01 Location Map) longitudes Total Geographical area is150508 hectors.

III. Objective
The major objective is to analysis and focus on temporal variation and growth of Human Resource Development in study area. The parameters are used in Human resources development Population density, growth, sex ratio, literacy, occupation structures, Agricultural density, Nutritional and caloric density, marginal resources density these all parameters are calculated in 1991 to 2011 years.

IV. Date base and methodology
The researcher has been to use secondary data for related human resources development parameters in data based on 1991 to 2011 decade years in District censuses years of Ahmednagar. And agricultural related information collected in agricultural department. The used has been varies method and technique on the related works. The good quality and suitable method apply due to essay calculated the work and to good comes with the outputs. The analyzed human resources development and to match statistical and cartographic techniques have been used. The used statistical techniques are quantitative data to convert the qualitative data e.g. population density, growth rate, sex ratio, literacy, agricultural density, nutritional, caloric density and marginal resources density.

V. Result and Discussion
Human resources can be measured there are two types in the first quantitatively and secondly qualitatively. In the first a quantitative assessment includes are total population, distribution, density, age groups, sex structure, class structure and the working population. And second a qualitative assessment would include thought of qualities, education, skill, activity and moral values, all of which affect the economic development of a country to a great extent. This all parameters study in the akole thasil, this all information to share table number 1, 2 and 3. In the first table Parameters in Human resources development based on population second occupation and third based on agricultural, calculated the human resources parameters. This all based calculation in 1991 to 2011 decade years.
Table 1 – Parameters in Human resources development of population

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Human Resources parameters</th>
<th>1990-91</th>
<th>2000-01</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Sex ratio</td>
<td>955</td>
<td>974</td>
<td>974</td>
</tr>
<tr>
<td>02</td>
<td>Density (per km$^2$)</td>
<td>146</td>
<td>177</td>
<td>194</td>
</tr>
<tr>
<td>03</td>
<td>Population Growth (in percent)</td>
<td>-</td>
<td>20%</td>
<td>9.4%</td>
</tr>
<tr>
<td>04</td>
<td>Schedule Cast population (SC)</td>
<td>9446</td>
<td>11234</td>
<td>13323</td>
</tr>
<tr>
<td>05</td>
<td>Schedule Tribe population (ST)</td>
<td>101966</td>
<td>121566</td>
<td>139730</td>
</tr>
<tr>
<td>06</td>
<td>Literacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male -</td>
<td>52.72%</td>
<td>82.07%</td>
<td>85.95%</td>
</tr>
<tr>
<td></td>
<td>Female -</td>
<td>27.44%</td>
<td>57.57%</td>
<td>65.54%</td>
</tr>
</tbody>
</table>

Sources: District censes of Ahmednagar.

1. **Sex Ratio**

   The sex composition is also important human resources components for the human development. It’s considered an important indicator of inequality between males and females in a society. Sex ratio is defined as the number of females per thousand males. Sex ratio is one of the significant indices of social but also economic conditions of an area and important parameter for regional analysis of all the demographic attributes of a population, the sex structure is most essential characteristic of demographic and resources study. The condition of sex ratio in the study area reveals that from 1991 to 2011 that is 955, 974 and 974 females per 000’ males. The sex ratio in 2011 census is 974 for the study as a whole, 976 for rural areas and 917 for urban areas.

2. **Density of Population:**

   Density of population has it’s upon the environment of the region and hence its quality of life. Therefore it is of special interest for geographers to analysis the changing pattern of density of population for understanding the processes of development affecting quality of life. The density of population is a measurement of population pressure on a given unit of land. The density of population shows the land man ratio. The sequential change in the density of population of tahasil 1990-91 to 2010-11 has been shown in table no.01. The density of rural population in relation to cultivated area is moderate to high in the irrigated land. The population density is continues change in period wise that is 1991, 146 per sq. kms living the people with the 2001 year density is 177 persons per sq. kms in 1991 showing continuous increasing in the population density. Western part of akole very low density this area is hilly region and density increasing eastern part because of come out the plain area with development of agricultural and well development of water resources.
3. Population Growth: one of the requirements of population growth analysis is that the data at two points in time should be comparable. It referred to the change in number of population of a region during a definite period of time. This change can be expressed any in terms of complete number or in terms of percentage. The growth of population in any area is an index of its economic development social conduction and a lot of other disposition. The growth of population in any area is resolute by three basic factors e.g human fertility, mortality and mobility. The period 1991 to 2011 was chiefly due to the increase speed developmental activities and upgrading in the health facilities. The standard of living and medical facilities reduced the death rate. The high birth rate and low death rate resulted into the rapid growth of population. In since 1990-91 to 2000-01 population growth in 20%, and 2000-01 to 2010-11 growth rate is 9.4%.

4. Literacy:
The expression literacy is one of the very important qualitative indicators of social development related to the economic expansion. Level to day education is the mainly interesting tool for varying the socio-economic standing of a human being and society as a whole. Literacy level is one of the most important indicators of social development. Improvement in literacy is an important index of socio-cultural development and economic change of a society. However, literacy rate is the number of literate persons for each hundred people and is expressed in percentage. According to census 2011, a person aged seven and above, who can both read and write understanding in any language, is treated as literate. A person, who can only read but cannot write, is not literate. In the censuses prior to 1991, children below five years of age were necessarily treated as illiterates. The face literacy is one of the very significant qualitative indicators of social development connected to the economic development. Even today education is the most amazing elements for changing the socio-economic position of a human being and society as an entire.

The level of education in a society is a good measure of its development towards modernization. The process of literacy and education is often liable for changing employment, occupational pattern and also increase speed mobility of population in the study area. Therefore, literacy and educational status of folks in a society serves as one of the best indicators indicates the quality of population. Literacy is one the great challenge in the tribal society. In the study area, as per population census 1991, the literacy rates of male and female be real 52.72 % and 27.44%, 2001, literacy rates is 82.07 % and 57.57 % and 2011, the literacy rates of male and female be real 85.95 % and 65.54 % correspondingly. The percentage of literacy in the study area was 40.11% in 1991, 69.95% in 2001, and 75.85 % in 2011.

5. Occupation structures:
Human resources development is based on economic opportunities for the available population meaning there by available workforce. The study of the economically dynamic population or labour force occupies an important position in the field of population geography. The economic and social development of a nation depends on the number of persons who are economically active, the quality of their work and the reliability of their employment. The work force is separated into various industrial categories. The different type of occupations can be known from the industrial classification in Indian census. The study on the occupational structure was made by many geographer is as under. The vital elements of human resources development, lower class or low level coeducation of human resources in Non workers, labours, and Agricultural cultivators etc. it all related detail information should be given table no.2.
Table 2: Parameters in Human resources development of occupation

<table>
<thead>
<tr>
<th>sr. no</th>
<th>Types of occupation</th>
<th>No. of engaged Population in Decaled years</th>
<th>Change 1</th>
<th>Change 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Total main workers</td>
<td>103173</td>
<td>113704</td>
<td>137755</td>
</tr>
<tr>
<td>02</td>
<td>Non workers</td>
<td>10656</td>
<td>128424</td>
<td>137815</td>
</tr>
<tr>
<td>03</td>
<td>Household industry et, workers</td>
<td>677</td>
<td>3224</td>
<td>2220</td>
</tr>
<tr>
<td>04</td>
<td>Other workers</td>
<td>4564</td>
<td>19349</td>
<td>18001</td>
</tr>
<tr>
<td>05</td>
<td>Agricultural labours</td>
<td>16576</td>
<td>19019</td>
<td>33307</td>
</tr>
<tr>
<td>06</td>
<td>Agricultural cultivators</td>
<td>69771</td>
<td>72112</td>
<td>84227</td>
</tr>
<tr>
<td>07</td>
<td>Marginal workers</td>
<td>8324</td>
<td>24510</td>
<td>16380</td>
</tr>
</tbody>
</table>

Sources: District censes of Ahmednagar.

The Parameters in Human resources development of occupation like total main, Non-workers, Household Workers, agricultural cultivators and labours with marginal workers he studded 1991 to 2011 with the change detection. In since 1991 to 2001 changes in vary sectors are positive growth. But change between in since 2001 to 2011 a negative change in Household industry workers, other workers and marginal workers otherwise positive growth of remain sectors like total main workers, non workers, agricultural labours and cultivators. Other workers including in Trade and Transport activities, this sectors negative change because of study area is tribal area no suitable topography for development in transport modes. And limitation of Households industry or industrial sectors because of well situation of forest area with tribal area and western part of akole declares of Hotspots in wildlife. Thus the remaining agricultural sectors only one sectors development, this sectors under the workers increasing years to years. This all related information and changes ratio to match table no 2 and figure no 3and 4.

Figure 3: HRD of occupation

Figure 4: HRD of occupation Changes

6. Agricultural density:
Agricultural density means ratio between the numbers of agricultural population and actual net sown area in particular place or area. In the study area agricultural density is progressing in very decade years in 1991(243) 2001(291) 2011(319 person per 100 hectares). Means high agricultural density indicates high population pressure on agricultural because of population growth progressive in since 1990-91 to 2000-01 in 20%, and 2000-01 to 2010-11 growth rate is 9.4%. But not open or development same rate agricultural land with net sown area under the crops. Thus, population pressures increase very
decade years on the agriculture activities. This means that the population pressure on the agricultural land in this area is high as more than 319 persons per 100 hectares. This all types change and related information show in table no 3 and figure no 5&6.

**Agricultural density**

\[
\text{Agricultural density} = \frac{\text{Population}}{\text{Net Sown Area}} \times 100
\]

7. **Caloric Density:**

Caloric density is a method of calculating man and land ratio in comparison to other density. It is ratio between total rural number of population and total food cropped area. It is expressed in terms of number of persons per kilometer of food cropped area. In the akole thasil caloric density are changes in decaled years wise in 1991, 699, 2001, 814 and last decaled years 2011 caloric density was 569 person per 100 hectares. Caloric density decline in 2011 decaled year it’s may be first causes is population are increase but same ratelly not increasing food cropped area and second causes is decline the food cropped area and farmers agricultural thought changes, the maximum farmers view said in commercial crops and other crops. This all types change and related information show in table no 3 and figure no 5&6.

Caloric Density

\[
\text{Caloric Density} = \frac{\text{Population}}{\text{Area under food crops}} \times 100
\]

8. **Nutritional density:**

Nutrition density is a more refined method of calculating ratio in comparison to other density. It is also a micro-fine shape of physiographic density to calculate the density of an area. It is ratio between total population and total food cropped area. It is expressed in terms of number of person per square kilometer of food cropped area. Therefore, it will be a true measure of ratio between man and land in the tahasil level where agriculture is a main resource of human beings.

In the period of 1991 224 person per 100 hectares, 2011 221 person per 100 hectares this ratio is negative change. The nutritional density is decline each year because of number change in agricultural sectors e.g increasing commercial crops, growth of Irrigation methods and techniques, and changes a farmer view etc. this all elements effects on the nutritional density. Thus the study of nutritional density is an implement to understand population pressure on geographical cultivated area. This all types change and related information show in table no 3 and figure no 5&6.

**Nutritional density**

\[
\text{Nutritional density} = \frac{\text{Total Population}}{\text{GCA}} \times 100
\]

9. **Marginal resources Density:**

The ratio of rural population to areas not available for agriculture is called marginal resources density. Follow land, pasture, forest land, permanent follow land and cultivable waste land is included in the marginal resources. Marginal resources density is decline each decaled year, because follow land, pasture, forest land, permanent follow land and cultivable waste land is decaling this all land under the agricultural field. It’s may be Because of various method and technique use in agricultural sector and effects on modernization of agricultural in study area with the increasing irrigation facilities, construction new dam thus new agricultural land under agricultural sectors as well as marginal resources density is decline ratio in years to years. Since in 1991 483 person per 100 hectare and 2011 380 person per 100 hectares. This period MRD is negative change 102 person. This all types change and related information show in table no 3 and figure no 5&6.
MRD = \( \frac{Rural\ Population\ Areas\ not\ available\ for\ agriculture}{x100} \)

Table 03 Parameters in human resources development of agricultural

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>Types of Parameters</th>
<th>Index Value in decaled years wise (Density per 100 Hectare.)</th>
<th>Change 1991-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1991</td>
<td>2001</td>
</tr>
<tr>
<td>01</td>
<td>Agricultural density</td>
<td>243</td>
<td>291</td>
</tr>
<tr>
<td>02</td>
<td>Caloric density</td>
<td>699</td>
<td>814</td>
</tr>
<tr>
<td>03</td>
<td>Nutrition density</td>
<td>224</td>
<td>218</td>
</tr>
<tr>
<td>04</td>
<td>Marginal resources density</td>
<td>483</td>
<td>457</td>
</tr>
</tbody>
</table>

Sources: Compiled by the Author

Figure 5: HRD of agricultural development, Figure 6: Change: HRD of agricultural development

VI. Conclusion

1. The average literacy is 40.11% in 1991, 69.95% (2001) and last decaled year 2011 75.85%.
2. The average literacy of male is increasing more than female literacy rate each decaled years.
3. The average sex ratio in 1991 (955 female per 1000 male) but 2001 and 2011 decaled year sex ratio is consented 974.
4. Population growth rate is decline in 2001 to 2011, 20% to 9.4% come out the rate.
5. The agricultural is major economical activities because more than averagely 70% people engaged these sectors.
6. Non worker rate is increasing each decaled year with positive changes this situation is not good for human resources development elements.
7. Other and Household industry in related workers is decaling rate each decaled year.
8. The agriculturally human resources parameters like agricultural, caloric, nutritional marginal resources density each decaled year positive and negative changes.
9. Caloric, nutrition and marginal resources density is negative movement and agricultural density is positive movement.
10. Future Scope for Research, the present study has possible core of further research work for field of population
and human geography. The studies also provide the scope for geographical planning. The present investigation has taken an over human resources development.

VII. Significance of research

This study will be useful for understanding population characteristics and human resources development helpful future palling in population, agricultural, social development, and parameters in human resources. It will be provide help for policy planning and programmed completion of the government.

References