Synopsis for Ph.D. Thesis

“A STUDY OF POPULATION CHARACTERISTICS IN AHMEDNAGAR DISTRICT”

Introduction

Twentieth century is witnessed unprecedented demographic change of because of socio-economic condition of region. Population is itself a resource. Unplanned population growth within region is responsible for shortage of food, shelter, water, transport, education, health services and other socio-economic amenities resulting imbalance sex ratio, marital status, fertility, mortality, age structure, migration and occupation structure. Many geographical studies have described and compared the size, structure, characteristics, distribution and changes of population through time. The population structure and characteristics include marital status, literacy, educational status, and labourforce, etc. These may changes through social mobility (Bhende and Kanitkar, 2003). These population studies are concerned with population characteristics, its changes and socio-economic, political, biological, genetic and geographical factors of the region. The population does cause concern to many as it ought to. Paul Kennedy has rightly pointed out in his book ‘Preparing for the Twenty-first Century’ that population growth encourages economic expansion.

The geographers are taking interest relationship between population distribution and geographical space and physicosocial condition. The new field of empirical research in population studies carried out first by John Grant (1662) who is considered as father of population studies. He has written book on “Natural and Political Observation” in 1662. The most famous name in the field of population is Thomas Robert Malthus (1766–1834) whose Essay on Principle of Population (First published in 1798) is a much-cited text. Marx and Engels developed some of their own ideas on population as response to them and they show how population-related notions are involved with many general ideas in politics and society. Edmund Halley (1963) has prepared empirical life table based on data regarding births and deaths. Johann Peter S. (1765) has studied the factors influencing fertility age marriage disruption by death, prolonged nursing of infants and effect of various diseases. The term
‘Demography’ was used by Achille Guillard in 1955. Basu (1962) has examined the relationship between different methods of family planning in rural area. Shastry (1963) has analyzed the family planning and role of social workers, attitude of male and females towards family planning. Raman (1964) has discussed the fertility in India. Chandrasekaran (1964) analyzed the impact of national policy on fertility trends in India. He has described the progress of family planning programme in India and suggested some measures for future policy. John I. Clarke (1965) has brought out the text on population geography. According to him geography of population was concerned with spatial variations in distribution, composition, migration and growth. Wood S. has written book on “Population Analysis in Geography” wherein he discussed the population and future development in population studies. Sandhu and Chandra (1980) have studied the spatio-temporal attributes of “Introduction to Population Geography. Kumar and Taragi (1981) have studied the changing population in India and given certain characteristics of population distribution in India.

fertility, mortality, migration and population development in India and focused on environmental interrelationship and population policies in India.

United Nation population Funds Report has worked on Mapping the adverse child sex ratio in India in 2005. Jhingan, Bhatt and Desai (2006) have studied the relationship of urbanization population and economic growth. Harwalkar D. S. (2010) has worked on population characteristics in Solapur district. Sawant, N. N. (2001) has assumed the characteristic of population in Goa. Singh, A. K. (2010) has attempted the study of population characteristics and family welfare adoption in U.P. Dr. Neelamma (2010) has focused on seasonal rural migration in four industries. Shrivastri and Koshal (2010) have examined the population growth and quality of life in Seoni district in Madhya Pradesh. Khan, Y. S. (2010) has studied on population and crop production in Solapur district, Maharashtra state. Kumar, A. (2010) has studied rural, urban population growth, distribution, age and occupation structure and sex ratio in Jammu district. Deb, R. (2010) has examined the family planning methods among married of Khasi women in East Khasi Hills. James and Sathyanarayana (2011) have carried out study on ‘Demographic change, age structure transition and ageing in India’. Barna M. (2011) has examined the changes in literacy in India from 1951 to 2011. Mohunty, S. (2011) has explained the population growth and the millennium development goals in India. In his study, he has discussed the population growth and eradication of poverty and hunger. Joshi and Tiwari (2011) have studied the sex ratio in India and found out that India has lower number of females than that of male in 2011. Bogue and Zachariah have carried out study of migration and urbanization in India.

Choice of Region

The study region has been selected for present study due to various reasons. Firstly, region has diversified relief and amount of rainfall and soil types. Secondly dry region lies in east, irrigated region in north and tribal dominant population dominant in west in study region. Thirdly north part has sugarcane cultivation in study region and fourthly researcher belongs to this study region hence familiar with study area.

Study Region

Ahmednagar district is situated partly in upper Godavari basin and partly in Bhima basin occupying in central west part in Maharashtra state. It extends from 18° 10' to 20° 00' north latitudes and 73° 30' to 75° 37' east longitudes (Fig.-1.1). It is
flanked by Igatpuri, Sinnar and Yeola talukas in Nashik district in north, Vajapur, Gangapur and Paithan talukas of Aurangabad district and Georai, Beed and Ashti talukas of Beed district in east, Bhum and Paranda talukas in Osmanabad district and Karmala taluka in Solapur district in south, Junnar, Shirur, Daund and Indapur talukas of Pune district and Murbad, Sahapur talukas of Thane district in west. The region with irregular shape and has 200 kilometers a length and width of 210 kilometers on 17,048 square kilometers area and having population of 4040642 persons in 2011 accounting 5.5 percent area of Maharashtra state. In study region density was 237 persons per sq. kilometer. The sex ratio was 908 females per thousand males, literacy was 78.3 percent accounting urban literacy (84.7 percent) and rural literacy (72.9 percent). The growth of population from 1991 to 2001 was 19.80 percent. The study region has 46.48 percent cultivators, 22.28 percent agricultural labours and remaining 31.24 percent workers engaged other than agriculture sector. Phyiographically, study region is divided into three regions, namely, Sahyadri hill ranges, namely, Kalsubai, Adula, Baleshwar and Harishchandragad, Plateau and plains drained by Godavari and Bhima rivers. Average rainfall receives 575.8 mm. The mean daily maximum temperature is 39° centigrades and means daily minimum temperature is 11.7° centigrades. The deep black soil, medium black soil, gray soil and red soil appear in study region. 71.10 percent area is found under cultivation and irrigation accounts 32.40 percent. The major crops, namely, jowar, wheat, bajra, maize, sugarcane, cotton, pulses and oilseeds are cultivated in study region.

**Objectives**

The undertaken study has attempted to assess and evaluate the population characteristics of Ahmednagar district in Maharashtra state by following sub-objectives

i) Examining the physical background of Ahmednagar district.
ii) To compute the density, growth and distribution pattern of population.
iii) Assessing the literacy, occupation structure, composition of age and sex ratio, and
iv) Assessing marital status and religion composition and urbanization.

**Database and Methodology**

The present study is based on primary and secondary data obtained from government and non-government sources. This study is carried out at taluka level for
the period for 1981 to 2001, Socio-economic Abstract of Ahmednagar District, Public Work Department, Health Department, Primary Health Centre, Zilha Parishad Ahmednagar and Agricultural Department. The collected data were tabulated and then applied to represent in the form of graphs, pie charts, maps and diagrams. The processed data were used for mapping and computing population density, population growth, population concentration literacy and male female differential index. Concentration of urban population was shown by Lorenz Curve by using Gini’s method. Besides this, choropleath method was applied for mapping. Bar diagrams and line graphs have drawn for showing temporal trends and variations of population change.

**Arrangement of Text**

The chapter first deals with conceptual framework which includes the introduction, study region, literatures review, objectives, database and methodology and limitation. The chapter second has described the physical and cultural background of study region and has studied location, physiography, drainage, soil types, climate, natural vegetation, transport, agriculture, and socio-economic condition. Chapter third has studied population density, distribution and growth both in rural and urban area. Moreover the changes in density of population and growth rate have examined. The natural growth rate of population during twenty years for males, females, rural and urban areas have studied. Chapter fourth has analyzed the spatio-temporal changes in sex ratio, age group, rural-urban change, age composition and migration pattern. Chapter fifth has assured the male-female literacy, rural-urban literacy, literacy of scheduled castes and scheduled tribes and occupational structure and urbanization with distribution urban population, literacy sex ratio and occupational structure of urban population. Chapter sixth is devoted for the marital status and composition of religions. The seventh chapter has devoted to summary, findings and suggestions.

**Suggestions**

- It is observed that the arithmetic and agricultural density and percentage of other workers was less in south east part in study region. It is suggested that talukas namely, in dry region of Jamkhed, Pathardi and Karjat talukas, the small scale industries like joggary making, food processing, packaging and cotton spinning etc units should be introduced. There should be introduced new
railway from west to east which can connect north and east part by roads. It leads for more development in the west side.

- Percolation along canal due to over-irrigation in Shrigonda taluka needs to be controlled by cement embankment of canal. Population density is less because of out-migration from Akole, Parner, Karjat and Jamkhed talukas. It should be minimized by introducing local industries and by doing best agricultural practices.
- Forest based industries should be introduced in Akole taluka e.g. handicrafts, honey, wooden articles, eco-tourism etc. Empowerment of women in industrial sector in urban area for employment opportunities in paper industry and household industry.
- School enrollment ratio should be increased in rural areas to increase rural literacy. Government has to encourage for girl’s education by providing school facilities in Shevgaon, Pathardi, Jamkhed, Karjat, Akole and Sangamner talukas in study region. People should be aware about social imbalance due to decreasing sex ratio in the study region. In both rural and urban areas, sex ratio should be increase by implementing government and social initiatives.
- Child marriage of early marriage should be banned forcefully specifically in rural areas where drop outs from the schools are more. Government or private institutions should take initiative to decrease drop outs. Henceforth, child marriages would be minimized. New industrial units and training centers should be introduced in the study region to empower the young generations for their economic as well as social development. This would facilitates the forth coming population to generate the employment. Henceforth dependency ratio would be automatically decreased. Irrigation facilities should be developed in low rainfall areas like Karjat, Jamkhed, Pathardi talukas, it should help to develop agricultural practices for more production.

**Concluding Remarks**

The selected region for study belongs to semiarid region having diversified relief and amount of rainfall and soil types. The north part in study region has more irrigated whereas west part has dominant of tribal population and north part dominating for sugarcane population. In order to reducing physiological density, new
planning strategies needs to be introduced to enhance the knowledge of farmers for increased yield besides introducing new agro-based industries in order to provide employment to rural people for improving economic and social condition. In urban areas, certain industries should develop which give training and jobs for female particularly. Social awareness in education among people in study region can easily maintain the sex ratio by government and NGO. Increasing educational facilities and people awareness reduce the marriage age. Agricultural product can possible its productivity by irrigations in south and east parts in study region. Such study has potential to attract experts from the field of planning, agriculture, economics and administration in order to around development for study region. So that socio-economic status of population may be considerably upgraded in study region.

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