

**“POPULATION CHARACTERISTICS AND IT’S IMPACT ON
SOCIO -ECONOMIC DEVELOPMENT OF AHMADNAGAR
DISTRICT”-A GEOGRAPHICAL ANALYSIS**

**Thesis Submitted for the Degree of Doctor
of Philosophy in Geography
(Faculty of Moral & Social Sciences)**



**To
TILAK MAHARASHTRA VIDYAPEETH, PUNE.**

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DECEMBER - 2013



DECLARATION

I hereby declare that the thesis entitled **“POPULATION CHARACTERISTICS AND IT’S IMPACT ON SOCIO –ECONOMIC DEVELOPMENT OF AHMADNAGAR DISTRICT”-A GEOGRAPHICAL ANALYSIS** completed and written by me has not previously formed the basis for the award of any Degree or other similar title of this or any other University or examining body.

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CERTIFICATE

This is to certify that the thesis entitled **“POPULATION CHARACTERISTICS AND IT’S IMPACT ON SOCIO-ECONOMIC DEVELOPMENT OF AHMADNAGAR DISTRICT”- A GEOGRAPHICAL ANALYSIS**" which is being submitted herewith for the award of the Degree of **Vidyavachaspati (Ph.D.) in Geography** of **Tilak Maharashtra Vidyapeeth, Pune** is the result of original research work completed by **Shri. Dhanwate Kishor Gajanan** under my supervision and guidance. To the best of my knowledge and belief the work incorporated in this thesis has not formed the basis for the award of any Degree or similar title of this or any other University examining body.

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CHAPTER- I

INTRODUCTION

- 1.1 INTRODUCTION**
- 1.2 STATEMENT OF THE TOPIC**
- 1.3 SIGNIFICANCE AND JUSTIFICATION**
- 1.4 SCOPE OF THE STUDY**
- 1.5 AIMS AND OBJECTIVES OF THE STUDY**
- 1.6 HYPOTHESIS OF THE STUDY**
- 1.7 DATA BASE AND METHODOLOGY**
- 1.8 LITERATURE REVIEW**
- 1.9 LIMITATION OF THE TOPIC**
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- 1.11 CHAPTER SCHEME**

1.1 INTRODUCTION :

The proposed study aims to highlight the major characteristics of population and the impact of its on socio-economic development with special reference to the geographical region of the Ahmadnagar district which is located in the state Maharashtra extending between $18^{\circ} 2' N$ TO $19^{\circ} 9'$ North latitude and $73^{\circ} 9' E$ to $75^{\circ} 5'$ East longitude¹ having recorded 4040642 population In 2001 which invite the attention of the researcher to study the various pattern and the distribution of population on the basis of growth, distribution, composition, occupation and other major and minor components of population. Hence, the concentrated the topic of the research is, **‘To study the population characteristics and its impact on socio-economic development of the Ahmadnagar district in the context of geography’**.

The study of population never be viewed in isolation. Population and other physical, industrial, environmental and geographical etc. factors are interrelated. Therefore, it is necessary to find out the adaptation of population in selected area with its minute detail, recording the various geographical resources, the influence of varied physical, industrial factors along with the growth of co-operative which is remained the crucial in all resources in the region to pressure the population and vice-versa. Above all, how the principles of population left its impact and remarkable stamp on the socio-economic development of the region. Population itself is an important aspect. Characteristics of population involves distribution of population, growth of population, religious composition, linguistic composition, age composition, sex ratio, standard of living, density and economic structure .

These characteristics are useful to understand population personality of the region. The study is related to the distribution of population. It tells us how many people live in particular geographical area, which area has concentration of population and in which area has a very few people live. Population composition involves the Age and Sex composition, Religious and Linguistic composition, Economic composition and occupational structure. Therefore the present study aims at comprehensive understanding of population characteristics and their socio-temporal variations. Recent figures related to characteristics of population and its various aspects become available through the demographic study. With this information, it is easy to understand the process of adaptation of people to their geographical surroundings. While studying characteristics of population in different geographical region of the district it has also been studied about its relationship with physical, economic & cultural factors.

Physical factor involves the topographical features such as mountains, plateaus and plains. As far as the distribution of population is concerned, mountains play favorable as well as unfavorable roles. Normally plateaus are suitable for human settlement. While plain accelerates the population growth. The Ahmadnagar district on which the researcher undertakes the study includes mountainous areas of Kalsubai-Adala range in the north, Baleshwar in the middle and Harichandragad range in the south. The district includes vast plateau in the middle and plains of 'Godavari' and river 'Bhima'.

Economic development of a region is influenced by attitudes of people and their expectations. Importance of geographical region changes as per the attitude and expectation of the people which in

turn influences distribution of population. Rapid growth of population is considered to be an important determinant of growth. Since economic growth is measured in terms of an increase in per capita income. Therefore growth of population is influenced by economic factors such as per capita income and standard of living. Economic progress and growth of population are closely related because economic progress is related to the natural resources and the population that exploits these resources. If enough population is not available then all the natural resources will not be fully exploited, and production will remain low to that extent. Population is therefore is a major factor contributing towards production.

Ahmadnagar district is characterized by two major resources such as-1) Agricultural land. 2) Co-operative Industries. The district is famous for sugarcane and cotton production as economic product from agricultural land. There are many sugar factories, cotton ginning, this also includes the industrial products such as electronic appliances majorly Videocon and MIDC dominate. Agriculture is a primary activity in Ahmadnagar district. Out of which intensive agriculture can feed & provide employment to large number of people. As we see an irrigated agriculture support more people than dry farming. In the same way social factor can not be neglected while studying the population characteristics of the region. Agricultural and co-operative industries, co-operative banks are integrally dependent which never be studied separately with reference to Ahmadnagar district.

The above mentioned factors play a key role to push the socio economy of the area. While studying population characteristics and its impact on socio-economic development it is necessary to consider the resources that are available in the region. Agriculture

and agriculture- based industries, such as sugarcane industries, milk co-operative, dairy products, quarrying, irrigated land resource are caused to form the socio-economy of the region. Along with this as mentioned already the last but not least the MIDC and much known milk industry compose the tertiary sector of the selected area. In connection with these follow the agricultural marketing society, health care facilities, educational institutions, transport and communication which gives the district the identity as a 'Gateway of Vidharbha and Marathwada. Apart from this the growing pilgrim centre build the new economy in connection with transportation. In turn tourism industry, hotel industry, railways, roadways and air travels are changing the face of the chosen area.

These resources impact the social phenomenon which is changing ghastly and giving birth to literate generation and excelling the standard of living of human resource. As Asha Bhende clearly states that “ ----population phenomena take place in a social setting and cannot be studied in isolation. Hence, while describing, ----explaining the determinants and consequences of population phenomena, the social phenomena have to be taken into consideration.’² To strengthen the same principle the title and study is focused on the impact of population characteristics on socio – economy. The main belt of population is engaged in primary sector such as farming and quarrying and minor portion of it is engaged in secondary and tertiary sector which are mentioned above. Therefore, the literacy, religion are focused in the study. Along with 'Literacy' population characteristics influence the socio-economic development of the area. We notice that literacy is related to the socio-economic status of the people and migration is related to the availability of economic opportunities.

The another important aspects of the study is to encompass the different components or determinants of population which influence and shape the size of population and the socio-economic phenomena of the region. The need arise to analyze the impact of all visible and non visible resources with the help of reliable demographic variables. As population study is multi disciplinary in nature it leads to involve its relation to society, its economy, its physiology. Hence, the effort is made to trace these inter-relations with illustrations by collecting the existing data of four decades (1961to 2001) from different sources and aims to bring out the systematic, coherent and comprehensive study of the region where very little work is done. Hence it is assured that this will be accepted as a path finder and marked as a mile stone of Ahmadnagar district.

The study aims at finding out and measuring changes in population characteristics over a period of time. It aims to provide changes in demography, changing pattern of economy, public services, which activate the concern socio-economy and social structure. Conducting this study is important in many ways, It definitely estimates the influence of population characteristics on development of the region. It may bring out the reasons of uneven population distribution and consequent uneven development in order to bring into exist the positive and quality strategy for community's social and economic well-being .The concluding points of the study may encourage either to change or sustain the determinants of development. It may possibly encourage the fellow researchers to continue the study in order to bring the significant change for the quality and healthy development of human resource. It may reaffirm the close relationship between the population characteristics and its impact on socio –economy. The discipline of

population is not only confined to statistical analysis but also the social setting in which population phenomenon take place.

The brief summary of the study will help to introduce the further data processing and analyzing of the main course. As any study require to view briefly the history, the growth of the past and present, the present record of global and local demography, the principles of study, the adopted methodology with its aims and objectives and significance of study with its scope and limitations are made to known here. The reviewed literature for this cause is displayed orderly. To carry out systematic function, the study is divided into seven chapters with its distinct features which help to facilitate the understanding of the subject and journey of the study leading to its destinations. The data on the distribution of population provide the information of the social and economic structure of the population and the changes in this structure. The above mentioned needs and necessities interests the researcher to work on the topic.

The research topic is related to population, and is the subject of 'population Geography' as well as 'Demography'. Human Geography is the branch of geography which has several sub-branches including 'population Geography' and 'Demography'. According to Trewartha, 'Population Geography studies characteristics of various human groups, found in different geographical regions'.³ Rawat has stated that – 'Demography, the statistical study of human population, that is one that changes over time or space'.⁴ The Clarke(1965 P-2) has stated that- 'Population Geography is concerned with demonstrating how spatial variations in the distribution, composition, migration, growth of population are related to spatial variation in the nature of places'.⁵ these views states that population characteristics are studied in both the

discipline but Demography gives importance to its statistics while Population Geography to its spatial variations. As S.N. Agarwala states that- ‘Demography deals with population statistics. Population studies deal with analytical interpretation of population dynamics and composition, which covers a wider area... We are shifting from Demography to Population studies’.⁶ Therefore this topic is concerned with population characteristics with necessary statistics.

1.2 STATEMENT OF THE TOPIC:

“To study the population characteristics and its impact on socio-economic development of the Ahmadnagar district in the context of geography”.

Population itself is an important aspect. Characteristics of population involves distribution of population, growth of population, religious composition, linguistic composition, age composition, sex ratio, standard of living, density and economic structure .

These characteristics are useful to understand population personality of the district. The study related to the distribution of population. It tells us how many people live in particular geographical area, which area has concentration of population and in which area has a very few people live. Population composition involves the Age and Sex composition, Religious and Linguistic composition, Economic composition and occupational structure. Therefore the present study aims at comprehensive understanding of population characteristics and their spacio-temporal variations. While studying characteristics of population in different geographical region of the district it has also been studied about its relationship with physical, economic & cultural factors.

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Economic development of a region is influenced by attitudes of people and their expectations. Importance of geographical region changes as per the attitude and expectation of the people which in turn influences distribution of population. Rapid growth of population is considered to be an important determinant of growth. Since economic growth is measured in terms of an increase in per capita income. Therefore growth of population is influenced by economic factors such as per capita income and standard of living. Economic progress and growth of population are closely related because economic progress is related to the natural resources and the population that exploits these resources. If enough population is not available then all the natural resources will not be fully exploited, and production will remain low to that extent. Population is therefore is a major factor contributing towards production.

1.3 SIGNIFICANCE AND JUSTIFICATION :

- 1) This study will be useful for the understanding of population characteristics of the Ahmadnagar District.
- 2) This study will be helpful for future planning in social amenities and services in the district.

- 3) It will provide help for policy planning and programme implementation of the government.
- 4) It enables to understand socio-economic situation and population growth of the district.
- 5) This study will help to identify areas that need policy and programme interventions, to set near-and far-term goals, and to decide priorities.

The study of Population characteristics is concerned not only with the population variables but also with the relationship between population variables such as social, economic, political, geographical interrelationship between those variables. It includes both qualitative and quantitative aspects of human population.

The study of population characteristics is one of the milestones in the development of social sciences. Its importance can be gauged from the growing application of population figures in several disciplines of study. Its significance to the individual and society hardly requires any emphasis.

In the recent decades population is multiplying and this phenomenon is having its impact in every sphere of human life, more particularly in the Social and economic life of the society.

Significance of study of population characteristics in different fields can be measured in political field and economic field. In the political field the authorities would be able to know with the help of population data about, the rate at which the number of voters, both male and female, are increasing and how the generation gap is gradually influencing national and international politics. Besides data on population can help in identifying pockets of high concentration, what types of arrangements will be needed for

conducting elections, which are the areas from where influx of population takes place, establishment of regional and national peace and prosperity.

The significance of study of population characteristics in the economic field is useful for framing economic programmes which can contribute to economic development. With the help of population studies we can know how far economic development is keeping pace with the rate of growth in population, which helps in taking appropriate measures to overcome imbalance between the two, if any Population figures furnish information in occupational pattern which helps in assessing the growth and modernization of the economy.

At present days people of different field require the information about population, so its significance is increasing day by day. It is useful to sociologist, politician, administrators and environmentalist. Its study is very important in various field like to do social work, to develop economic field, to do political work, different administration work, and to make rules and regulation.

The characteristics of a human population is used in government policy making, marketing and in the field of research. It includes gender, race, age, income, mobility, educational attainment, home ownership, employment status, and even location.

Population trend describe the changes in population over time. Such as the average age of a population may increase over time. It may decrease as well.

1.4 THE SCOPE OF THE STUDY :

Population studies was not given much priority in the past. But at present days people of different field require the information about population, so its importance is increasing day by day. Population education is very important at present to be a successful sociologist, politician, administrator and environmentalist. Its study is very important in various field like to do social work, to develop economic field, to do political work, different administration work, and to make rules and regulation.

The scope of the topic includes the following aspects-

The study of Population characteristics provides a knowledge and understanding of the existing population situation of the district.

It also creates an awareness among the learners about the inter-relationships between population situation in their own district and the state.

It assists us to make conscious rational and informed decisions regarding family size and population matters in the community and policy adopted by the Sate.

It equips us with necessary knowledge, skills, attitudes, values to ascertain and evaluate the impact of population change both in terms of the peoples future, welfare and the welfare of their community, society, nation and the world.

Population topic studies the nature, causes, changes, characteristics, co-operation and distributional aspects of human population.

It studies the relationships of man with his environment along with his quality of life.

It studies composition of the population on the basis of age, sex, education, religion, language, marital status, occupation and economic Status of the district.

It assists the relation between co-operative movement and population distribution in the Ahmadnagar District.

Population information therefore comprehensively useful for creating frameworks, identifying trends, informing financial decisions, monitoring and evaluation.

1.5 AIMS AND OBJECTIVES OF THE STUDY :

- 1) The major objectives of the present study is to make a comprehensive study of population characteristics of Ahmadnagar Districts.
- 2) To know the influence of physical factors on population distribution in Ahmadnagar District.
- 3) To find distribution and growth of population in different parts of the districts.
- 4) To find out composition of the population on the basis of age, sex, religion, occupation and economic Status of the Ahmadnagar district.
- 5) To analyze the impact of resources, literacy, and sex composition on population characteristics of Ahmadnagar District.
- 6) To understand the relationship of population growth and its impact on socio-economic development of Ahmadnagar District.

- 7) To evaluate the impact of different occupations such as agriculture, trade, comm. & industry on socio-economic development of the Ahmadnagar District.
- 8) To examine the effect of population factor on agricultural development in Ahmadnagar District.
- 9) To find out the relation between co-operative movement and population distribution in the Ahmadnagar District.
- 10) To understand the overall population characteristics and its impact on the socio-economic development of the district.

1.6 HYPOTHESIS OF THE STUDY :

This study hypothesizes –

- 1) Population characteristics has impact on social and economic aspects of the region.
- 2) Population characteristics are associated with Physical factors of the study area.
- 3) The co-operative movement influence the characteristics of population and economic development of the region.

1.7 DATA BASE AND METHODOLOGY:

The data collected and used for the period of 1961-71, 1971-81, 1981-91 & 1991-2001 comes both primary and secondary sources. At present there are fourteen Tahsil in Ahmadnagar district, Akole, Sangamner, Kopergaon, Shrirampur, Rahuri, Nagar, Parner, Shrigonda Karjet, Jamkhed, Pathardi, Shevgaon, Newasa and a new Tahsil Rahata. (Formulation year 1999). The study is concentrated only on population characteristics of Ahmadnagar district.

The data for the present study were collected with the help of observation, informal in-depth interviews, key informant interviews, case studies and census schedules.

The primary data is the raw data collected through different sources for which special questionnaires were designed and information collected through various offices and peoples.

Besides the above, Secondary data is also collected from the census handbook, District statistical abstract, Socio-economical review of Ahmadnagar district, Statistics from government offices as, District statistical department and Grampanchayat offices.

The data collected through primary and secondary sources were processed and presented by statistical and cartographic techniques. These involves Population growth rate, Decadal Growth Rate, Dependency Ratio, Sex Ratio, Work Participation Rate, Arithmetic Density, Age-sex specific rate and Crude Literacy Rate. The different techniques and methods such as Maps, Graphs, calculation, and Isopleth, Chloropleth and divided circle are used.

1.8 LITERATURE REVIEW :

Literature regarding the research topic –‘Population’, is available enormously. But in relation to the population characteristics, many scholars have written books in multidimensional views. Very few scholars have made research regarding the population of the district Ahmadnagar. The respective review is discussed here as-

Dr. Yusuf Khan (1983), In his research work entitled ‘western Maharashtra- A study of population Geography’, mainly focuses on the topics of distribution and growth of population, Density, Sex and Age composition, literacy and occupational structure, marital status and regional composition, urbanization and

population problems in respect to Maharashtra. In the topic of sex and age composition, he analyzed spatial pattern in sex ratio, rural and urban sex ratio, age composition, temporal variation in age structure, rural-urban differentials in age structure. He also calculated the dependency ratio.

Dr. Kadam N.M. (1984), In his research work entitled, 'Ahmadnagar District- A study in Regional Planning', analysed the topic of demographic aspects such as density, sex ratio, occupational structure, migration and literacy. In the topic of geographic settings, he contributed location, physical and cultural setting of the research area. Physical setup covered Geology, Mineral, Drainage, Climate, Natural vegetation and Soils. While cultural settings focuses Agriculture, Irrigation, Industries and availability of the resources.

Rajendra kumar Sharma (2004), '*Demography and population Problems*', This is revised and updated edition mainly includes concept of demography, factors determining sex ratio, age structure, dependency ratio, marital status and educational attainment.

Kayastha S.L. (2007), '*Geography of Population*', The author revived this volume in four sections as-Environmental perception, Problems and policies. In section second- Population characteristics and problems. In the section third- Problems of Urban and Rural Development and Migration. In fourth, 'population impacts of development and disasters. He introduced the natural and human resources and correlated with tourism potential in India. He also discussed the general characteristics of population as, population growth, literacy and religion.

Robert Wood (1979), *Population Analysis in Geography*’.

The author in this book emphasized the topics of sources and quality of demographic data, fertility and mortality trends, migration and models of population structure. He differentiated the boundary lines separating demography and population geography. He has given basic demographic equation which calculates the statistics of population growth and projections of population.

Bedi R.D. (1987), *Theory History and Practice of Co-operation*’. The author has thrown light on ‘Co-operation’ and its various aspects like economic organizations, private and public enterprise, producers and consumers societies. Author also discussed about definitions and principles of co-operation, co-operation and politics in India. This book was remain useful for understanding co-operation and co-operative movements in India.

The book also states the history of co-operative movements, which is divided in five stages as 1904 to 1912, 1912 to 1919, 1919 to 1929, 1929 to 1939 and 1939 to 1947. The first stage was remain experimental one. In the second stage, a new act passed in 1912 supported to remove the limitations of the previous act of 1904. During the third stage co-operatives made a rapid progress in various states in India. The important event of the third period was the establishment of the Reserve Bank of India in 1935. An important aspect of the fifth stage, which is given in this book was the setting up of the co-operative planning committee, which drawn up plans for the development of co-operative movement in various spheres.

Kamat G.S. (1987), *New Dimensions of Co-operative Co-operative Movement*’. The book covers various topics in relation to

co-operative form and its movement. Author has assessed the topics of co-operative sector and economic development, co-operative management, effect of co-operative law on management, co-operative banking and in relation too. The emphasis has been given on the topics of co-operative management. Here management of the people is expected, so that there is no conflict between the principles of co-operation and principles of management. The topic highlights traditional management, social responsibilities, planning, organization, role of board of directors in co-operative management. These topics also remain useful to understand the concept and principles of co-operative movements.

Dutta S.K. (1991), ‘Co-operative Societies and Rural Development’. The book focuses on the topics of co-operative movement, management of co-operative organization and role of co-operatives in rural development. Author has given classification of co-operative societies, as credit and non-credit societies, their sub-types as agricultural and non-agricultural credit societies discussed by the author. Book also predict that, How the growth of co-operative movement depends on efficient management, How their leaders are responsible in success or failure of the co-operative movement. These all discussions are remain fruitful to enrich the sub-topics of the research.

Sawant S.B; Athawale A.S.(1994), ‘Population Geography’. The author has explained the main topics regarding population characteristics in short but pin pointing nature. The book throws light on distribution and growth of population with explaining the nature and scope of population geography. The author also focuses on Fertility, Mortality, Literacy, Migration and Urbanization in

detail. The topic 'Composition of population' assessing Age composition, Sex composition, Economic composition with world scenario. Especially age composition expressed with diagrammatic representation of age pyramids. These forms of pyramids are illustrated with the help of statistics of different worldwide countries like Japan, Sweden, U.K, Philippines, etc. The author also enlighten the topic of planning and projection of population.

Bhende Asha and Kanitkar Tara (2010), 'Principles of population Studies'. The book is written by pair of author which mainly gives population change for the world and India from ancient time up to the present period. Author raises the questions, What are the changes taking place? Where and what kind of people found? These questions states that the study of population is concerned with size, structure, distribution and changes over a period of time. The book tried to throw light on growth and distribution world as well as Indian population. Even their structure, characteristics, mortality, fertility, migration and population policies. In the topic 'population growth and distribution in India', author has given more detailed information on population change and its measurements.

Hans Raj (2010), 'population Studies'. Author has divided the content of book in to three major headings as- 'Principles of Demography', 'World population Studies', and 'Population Studies in India'. The topic "Principles of Demography", gives concept, nature and scope of Demography. Author has also elaborated the interdisciplinary nature of Demography and methods and sources of data collection regarding the census of India. He examined statistical figures of population growth, composition, fertility, mortality, migration etc. to the World and Indian level. He observed that

growth rate of population in India is considerably neutralized. Author also attempted to introduce census of India. He assessed the methodology of data collection and how transition is made in this regard. He put forth some new concepts used in 1991 census as major worker, marginal worker, agricultural labor and other workers.

Chandna R.C. (2011), 'Geography of population'. The book reveals general introduction to the population geography and its approaches. It includes chapters on distribution, Density of population, Race, Religion, population change, Migration, Literacy, Urbanization and theories of population. Author examined multifaceted environmental problems caused by population growth. He assessed it under the heading of impacts of population growth on lithosphere, on atmosphere, on hydrosphere and miscellaneous impact.

Alka Gautam (2009), 'Advanced Geography of India'. The book covers the physical, demographic, economic, cultural and developmental features of India. The author mainly assessed the comprehensive topics of historical background, resources, settlements, economic activities, regional planning and development of the country. The topic 'population' contributes population characteristics of India, as Growth, Distribution, Density, Sex ratio, Age composition, Literacy, Urbanization, Occupational structure, Linguistic composition, Religious composition, Migration and problems and policies.

Datt Ruddar and Sundharam K.M.P. (2006), 'Indian Economy'. The content of the book is elaborated in five parts. Part first gives analysis of structure of Indian economy. Part second

relates with planning and economic development. Part entitled Agriculture in the national economy, the main sub-topic discussed here are, the productivity trends, land use and crop pattern. Part fourth as a 'Indian industries' deals with industrial patterns. Part fifth relates with 'The tertiary sector in the Indian economy', mainly deals with problems of transport and communication.

1.9 LIMITATION OF THE TOPIC :

The research work is restricted to the population of Ahmednagar district. The study period is 1961 – 2001. However, the recent information as well as provisional census data of 2011 is considered for purpose of research.

The Ahmednagar district includes 14 tehasils, however all tehasils were selected for the study purpose. The research work is concentrated on census record from 1961 to 2001 census of Ahmednagar district. The census data of 2011 is officially not yet published. But where ever provisional data is published, is added in the statistical analysis. In case of secondary data, researcher has faced printing mistakes in statistical data. While, sometimes same data is repeated periodically. For ex. Researcher could not get Age group wise population for 1991, because of this kind of difficulty.

1.10 STUDY AREA :

Ahmadnagar is the largest district in the Maharashtra state having 5.66% of the area of the state. Ahmadnagar district is located in the some what central part of Maharashtra lying between 18⁰² 'N to 19⁰⁹' North latitudes and 73⁰⁹'E to 75⁰⁵'East longitude. The district is bounded to the north by Nashik district, on the north-east by Aurangabad, to the east by Beed and Osmanabad, to the south by Solapur and on the south-west by Thana district. Ahmadnagar is

quite large district by geographical and a population in the Maharashtra. It leads the state in co-operative movements. It is in western Maharashtra but considered as gateway to 'Marathwada' and 'vidarbha' region. The district is also located in the centre of the triangle connecting Pune, Aurangabad and Nasik.

Geographical area of the district is 17412 sq. km which is 5.60% of the total area of the Maharashtra. The population as per 1991 census is 4040642 out of which 3236945 is rural and 803697 is urban population. As per 2011, it becomes 4543083 out of 3630012 rural and 913071 urban population. The area of the district is distributed among 14 sub divisions (Tahsil) for the administrative purpose.

Physiography is one of the dominant parameter of physical environment. The district includes the sahyadri and its three eastward offshoots as i) Kalsubai-Adala range in the north, ii) Baleshwar range in the middle, iii) Harichandragad range in the south. The vast Ahmadnagar plateau in the middle running with a north-west, south-eastern trend and the river basins of the 'Godavari' and 'Bhima' on either sides of the plateau. Therefore district can be divided into three broad physiographic divisions- i) Mt. and Hilly region. ii) Plateau region. iii) River Basins.

The district lies on the elevated tableland of the Deccan which has a general slope from west to east. Only the western corner of the district touches the sahyadris.

1.11 CHAPTER SCHEME :

The co-ordinate study is systematically carried out and divided into six chapters to get the coherent information on the selected topic.

-The **first** chapter introduces the statement of the topic along with its major aims and objectives on which the study base. This includes statement of topic, actual problem and its subdivisions, aim and objectives of the study, literature review, significance and justification, scope of the study, conceptual framework and limitation of the topic.

-The **second chapter** gives introduction to the region which includes-

1. Physical aspects such as location, relief, climate, geology, soils, drainage patterns and natural resources.
2. Cultural aspects such as Historical background, agriculture, irrigation, occupations, industries, urbanization, trade and transportation.

-The **Third chapter** deals with population characteristics such as growth of population, distribution of population, composition of population, economic composition, density and literacy of the population and resources available.

-The **fourth chapter** analyses the impact of Physiography, impact of resources and impact of co-operative movement on population characteristics of the district.

-The **fifth chapter** analyses the socio-economic development and impact of population characteristics on socio-economic development of the district.

-The **sixth chapter** deals with case studies for sample villages and their population characteristics.

-The **seventh chapter** gives conclusions, concluding remarks and suggestions.

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CHAPTER- II

PERSONALITY OF THE REGION

A| PHYSICAL ASPECTS:

- 2.1** LOCATION
- 2.2** RELIEF
- 2.3** CLIMATE
- 2.4** SOILS
- 2.5** DRAINAGE PATTERN
- 2.6** NATURAL RESOURCES

B| CULTURAL ASPECTS:

- 2.7** HISTORICAL BACKGROUND
- 2.8** AGRICULTURE
- 2.9** IRRIGATION
- 2.10** OCCUPATIONS
- 2.11** INDUSTRIES
- 2.12** URBANIZATION
- 2.13** TRANSPORTATION

Introduction :

This chapter is divided into two parts. The first part throw light on physical aspects such as location, relief, climate, geology, soils, drainage patterns and natural resources of Ahmadnagar district. The second part deals with cultural aspects such as historical background, agriculture, irrigation, occupations, industries, urbanization, trade and transportation.

It is essential to discuss the above mentioned factors from the view point of population characteristics and its impact on the socio-economic development of the Ahmadnagar district.

A] PHYSICAL ASPECTS :

2.1 Location, Boundaries and Area :

Ahmadnagar district lies between **18°2'** and **19°9'** north latitudes and **73°9'** and **75°5'** east longitudes is situated partly in the upper Godavari basin and partly in the Bhima basin, the interfluves in between forming the extensive Ahmadnagar plateau. The district is very irregular but compact in shape, somewhat resembling a slanting cross with a length of 200 km. and a breadth of 210 km. Ahmadnagar is quite large district in consideration of geography and a population in the Maharashtra state. Ahmadnagar is the biggest district of Maharashtra in terms of area and population. The total geographical area of the district is 17.41 lakh hec. It has 14 talukas. However, Rahata tahshil is new tahshil of the district (exist from 1999).

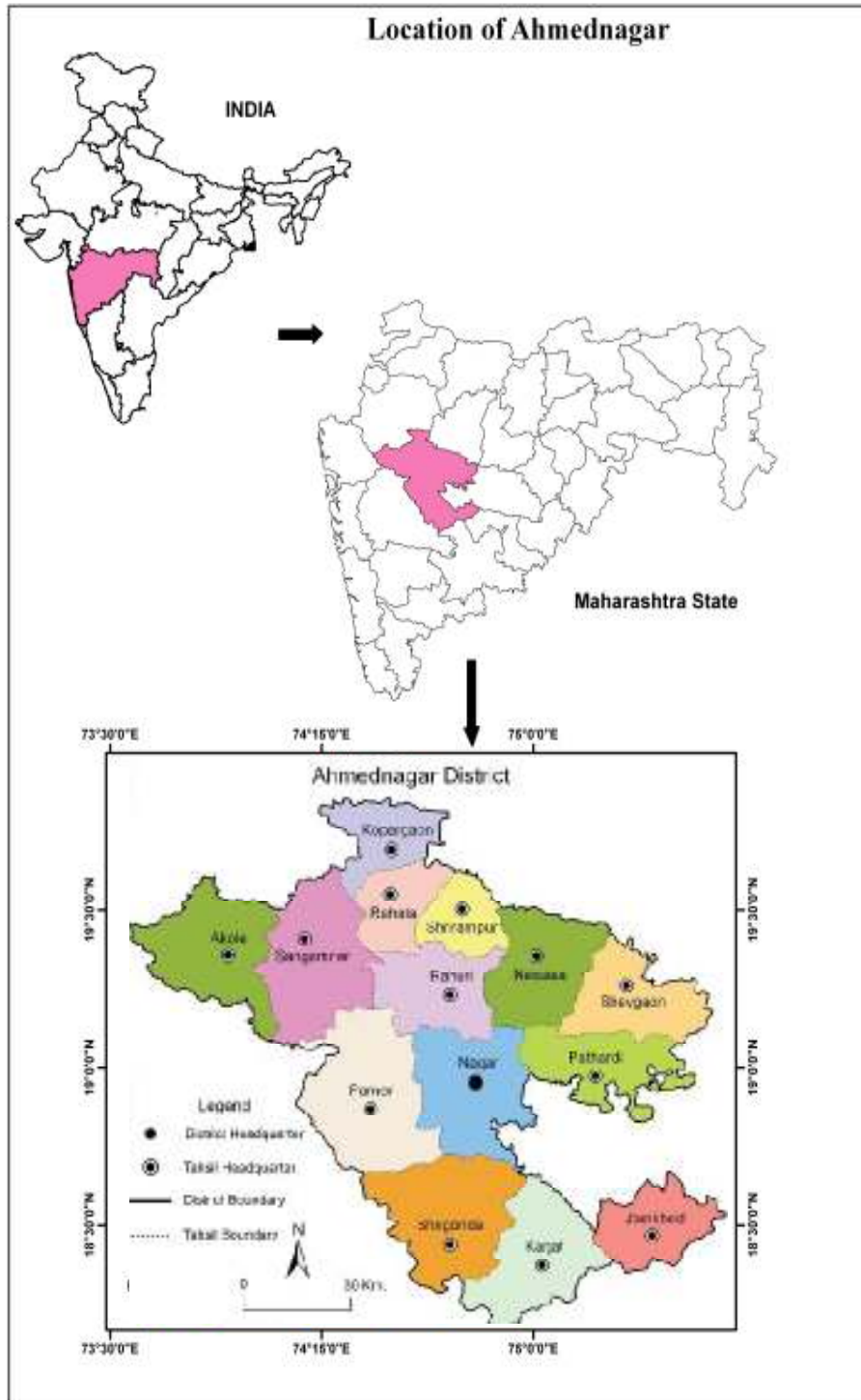
1. Ahmednagar	6. Pathardi	11. Akole
2. Rahuri	7. Jamkhed	12. Sangamner
3. Shrirampur	8. Karjat	13. Kopargaon
4. Newase	9. Shrigonde	14. Rahata
5. Shevgaon	10. Parner	

In above-mentioned talukas Rahata has come into existence on 26th June, 1999 under Re-organization of talukas.

It is situated centrally in western Maharashtra and in the gateway to Marathwada, Vidarbha region. It leads the state in sugar industry. It has central equidistance from pune metropolitan city and fast developing Aurangabad City.

Ahmadnagar district is bounded on the north by Igatpuri, Sinner and Yeola taluka at Nasik district on the North East by Vaijapur, Gangapur and Paithan *Tahesil* of Aurangabad district in Marathwada division on the East by Georai, Beed and Ashti *Tahesil* of Beed district. Bhum and Paranda Tahsil of Osmanabad district on the south and by the Karmala *Tahesil* of Solapur district and on the South west by Murmad and Shadapur Tahasil of Thane District.

Map No. 2.1



Boundries:

Ahmednagar district has occupied some what central position in the state of Maharashtra. 'It is surrounded by Nasik district to the north, Aurangabad district to the north-east, Bid district to the east, Osmanabad and Solapur district to the South, Pune district to the west and Thane district to the north-west².

The district is bounded by Thane district to the west with sahyadrian mountain ranges. This is the range of Harishchandragad where the highest peak 'kalsubai' is located. The district Nashik whose boundry runs to the north .The river Godavari is the major over Deccan plateau, which runs from north &north-east part of the district. The boundary to the north-east runs mid –stream in the bed of the Godavari which taking east turn continues on name of Godavari till it reaches to 'Paithan' in Aurangabad district. River enters in Aurangabad and join again to the district at the village 'Mungi'of tehsil Shevgaon which again mark the boundary of the Ahmaednagar and Beed. (Here Godavari leaves the district boundary and the district Beed continues the boundry to the east.)

The river Sina mark the district boundary of Nagar and the district Beed flowing towards Karmala taluka of the district solapur. The River Bhima runs between Solapur and Ahmednagar in the south, and the river 'Ghod' at the boundary between Pune and the river Kukadi to the south west of the district. Boundaries of the district is mostly bounded by the rivers to the north, east and south while Harishchandragad range to the west of the district.All mentioned rivers fall as a border of district .

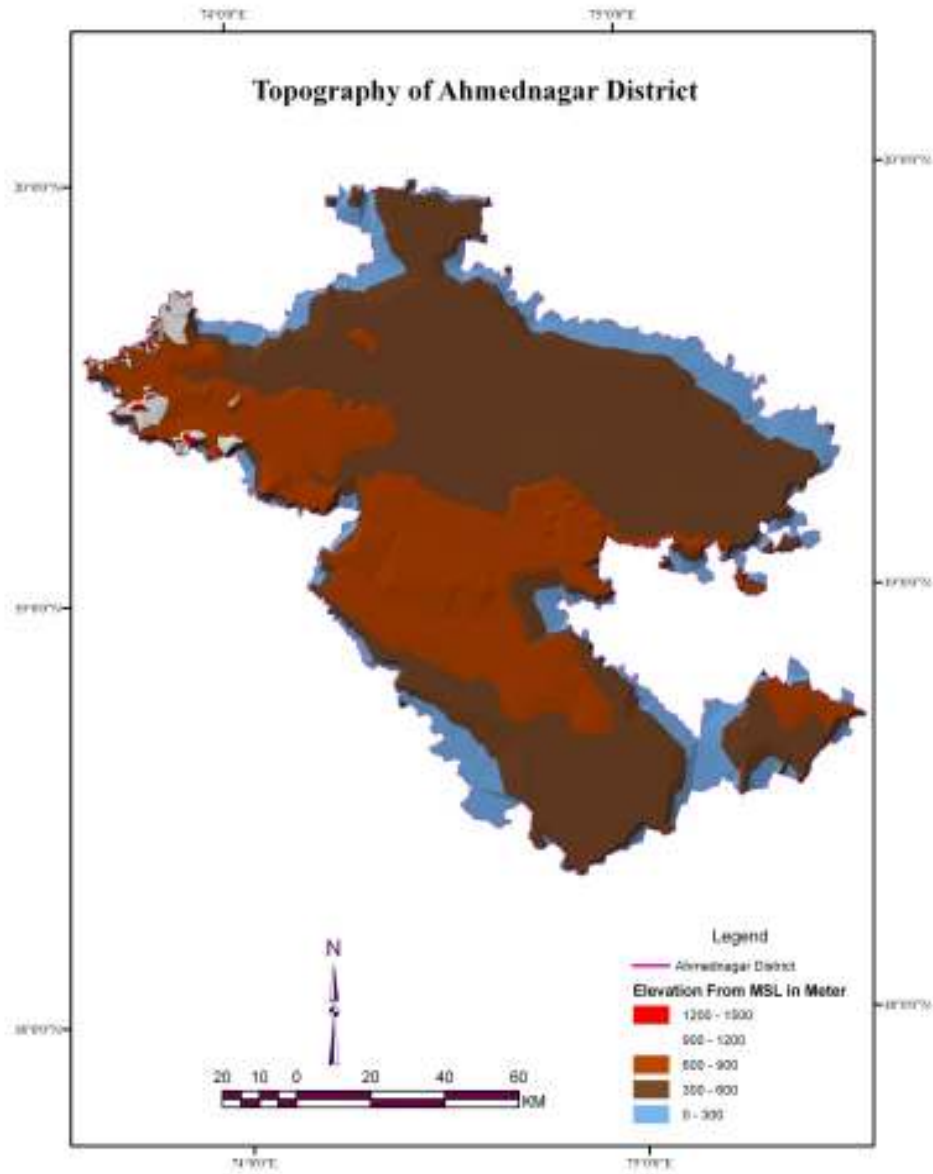
2.2 RELIEF FEATURES:

The relief of the district shows variety in its appearance (belongs to the extensiveness of the district. Mainly western part bounds with Sahyadrian offshoots. This western part is the highest part of the district. The whole district lies on the elevated tableland of the Deccan which has a general slope from west to east. The western sub-division of Akola which abuts on the Sahyadris, is the highest part of the district and indeed of the Deccan, averaging 2500 feet above the sea level. The plain of Shevgaon which lies to the extreme east of the district is not more than 1500 feet above the sea³.

The relief of the district has an immense variety. This is partly on account of its size and partly on account of its location immediately adjoining the crest of the sahyadries. The district as a whole is an elevated tableland with a number of plateau at various levels. One plateau merges into the other often through sharp-crested ridges. Topographically the district can be divided into three parts.

- 1) The Sahyadri hill range in the north -west and its three eastward offshoots namely the Kalsubai-Adula range in the north, the Baleshwar range in the middle and the Harishchandragad range in the south. Kalsubai with a height of 1646 meters is the highest peak in the state of Maharashtra.
- 2) The Plateaux: These are mainly the Akola Plateau, the Ahmednagar Plateau and the Jamkhed Plateau. The Plateaux in general, have an elevation of over 600 meters.
- 3) The Basins: In between the plateaux are the river basins. The two main basins are the Bhima basin in the south and the Godavari basin in the north. Which includes the pravara –mula basin. In general these basins have an elevation of between 500 and 600 meters⁴.

Map No. 2.2



The district has unique physical personality. This uniqueness includes Sahyadri and its three eastward off shoots, as The Kalsubai-Adala range in the north, the Baleshwar range in the middle and Harishchandra range in the south. The Ahmednagar plateau extended with north west –south-eastern trend, and the river basins of the ‘Godavari’ and ‘Bhima’ on either sides of the plateau. The district in short an elevated tableland. The Western Akola tehsil connected to Sahyadri offshoots. This region having more height, averaging about 800 met. While part of Godavari basin of Shevgaon tehsil lie below 450 met. from sea level.

The Mountains of Sahyadri formed the boundary between Thane and Ahmednagar district, about 60 km. to the east. The mountaineous Sahyadrian region is bounded by many isolated peaks ranging somewhat north-west to south-easterly trend .The hills Harishchandragad, Ratangad and Kulung as well as the Ajuba Dongar are the highest peaks of sahyadri locate in the district. These peaks bears, Harishchandragad 1424.met, Ratangad 1297met, Ajuba Dongar 1375.met and Kulang 1470.Met. But the district concerns mainly with the ranges of Kalsubai, Baleshwar and Harishchandragad .These ranges are the main mountain relief of the district.

Kalsubai Range: The name Kalsubai associate to the name of deity the Goddess ‘Kalsubai’ having the temple at the highest peaks mounting up 1646 met. in height, which is known as the highest peak of Maharashtra, covering 40km. Boundary between the Ahmednagar and Nashik district. ‘Other two smaller spurs which run in south-easterly direction enclosing the valley of Adula river branch off near Bitangad Pattagad. Further north, the Kalsubai range

takes a south –eastern direction running parallel with the first – mentioned spur and enclosing the valley of Mahalungi. This range after running through the southern part of Sinnar taluka of Nashik district, enters the Sangamner taluka of this district about 13 km. north of Sangamner and after a further course of 25 km. ends somewhat abruptly with the hill of Dudeshwar with 837 met’⁵.

Adula Hill: Adula branching from Kalsubai range near Patta peak and run southward with average height of 900 met. This range ends about 2km. northwards of Sangamner. The river Adula has formed its valley at the foot of this range.

Baleshwar Range: This range is somewhat large range of Sahyadri, branching off at Ratangad 11 km south-east of Kulung, and runs in Akola & Sangamner tahsils. This range formed the water-shed between river Pravara in the north and river Mula in the south.

Harshichandragad Range: This is the longest range in the district. which leaves the Sahyadri at Harishchandragad. This range has formed the main water-shed between major rivers of the district Godavari & Bhima. This Harishchandragad range runs eastward about 25 km, Then it turns south –east and enters in parner taluka. The summits of the hills here widen into the plateau of Kanhore of taluka Parner. This Harishchandragad range forms the boundary between Ahmednagar and Pune district. ‘The range near village Jamgaon in Parner the flat-topped ridge shoots to the north-east to form a watershed between the tributaries of the Godavari and the Bhima. The main ridge continues further south-east with widening summits and gradually widens, known as Balaghat, that extends far into the districts of Marathwada Region. The length of the hills from the mainline of the Sahyadri to the Balaghat is about 200 km. The

branch of this range leaving Kanhore plateau crosses the north-eastern corner of the Shrigonda taluka and enters Karjat taluka'⁶.

Ahmednagar Plateau :- The larger part of the district in between Baleshwar and Harishchandragad from Akola in the north-west to Jamkhed in the south-east is the Ahmednagar plateau. To the north of Ahmednagar city sloping range of Harishchandragad locally known as the 'Agargaon range'. The hills of 'Gorakshnath' comes in this range. This is also popular as 'Gorakshynathgad'. To the north, range slopes down and merge into the plain of Rahuri and Newasa in the Godavari basin. The overall plateau is spotted with hills all over especially at the margin of the plateau.

2.3 CLIMATE:

The climate of the District is mainly monsoon type. It is characterized with hot summers and dry winters. The term Monsoon is related with the kind of winds. Which has been given a peculiar character as a monsoon type of climate.

The year is divided into four seasons. As a Summer season- March to May, Winter-December to February, Rainy / Monsoon- June to September and Rainy with retreating Monsoon –October to November.

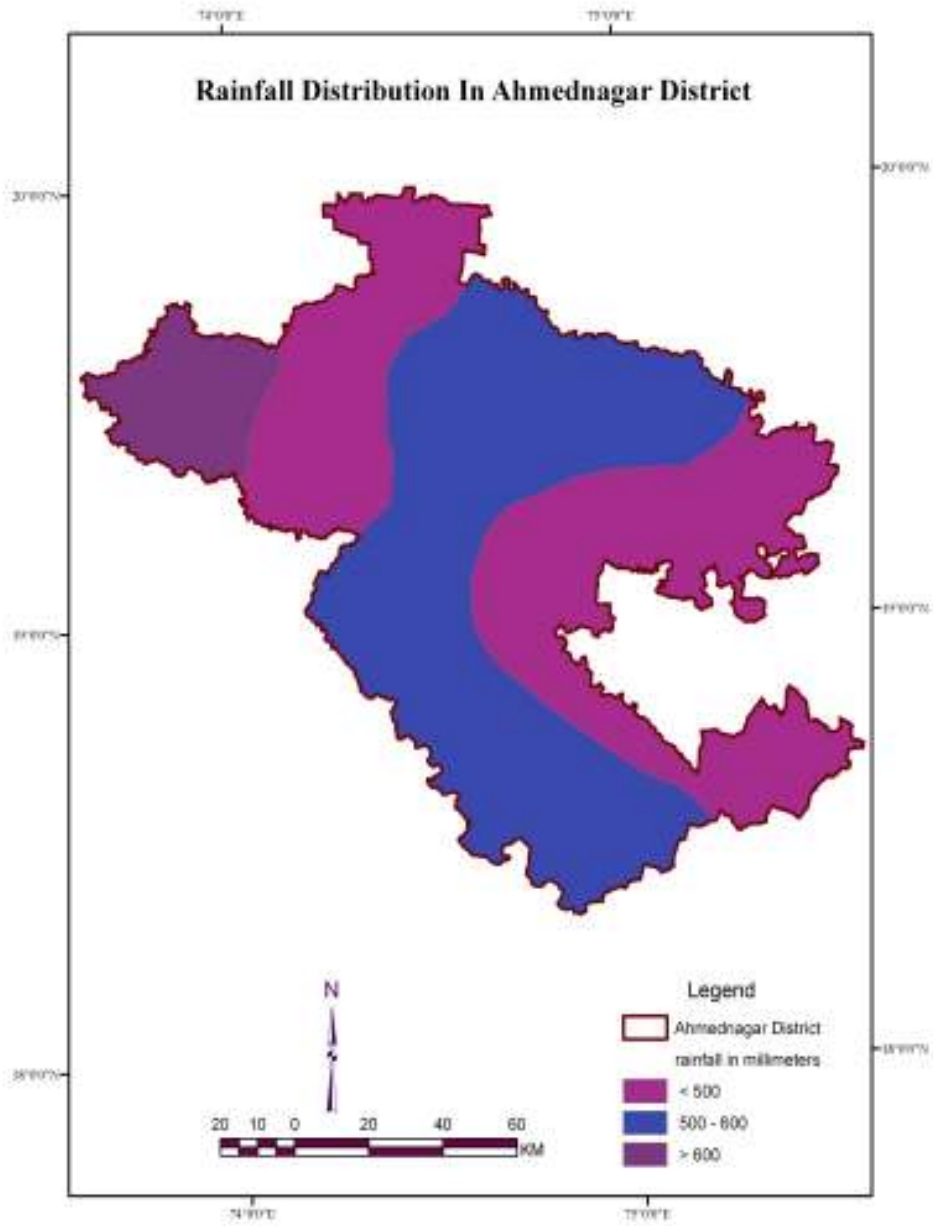
'The Climate of the district is on the whole extremely genial. The cold season which last to February, the air is dry and invigorating, A hot dry wind from the north-east then gradually sets in blowing with varying force till the middle of May. Till the middle of June, the south –west rains set in and the climate at once becomes temperate and pleasant. From February till may the sky as a rule is cloudless'⁷. It's location is to the west of Sahyadri and away from Arabian sea to the west, climate is characterized by hot and dry. In the hilly western part climate is slightly cool. The months from

March to first week of June is the hot season, June to September followed by rainy season due to south-west Monsoons. October and November also rainy season, considered as the post –Monsoon or the retreating south –west Monsoon season.

Rainfall: The district receives rain from south-west Monsoon and retreating of monsoons. That is due to north-east Monsoons. As the location of the district to the lowered side of Sahyadri, it receives scanty rainfall. ‘The average annual rainfall in the district is 578.8 mm. The distribution of rainfall is very uneven. The western part of Akola tehsil gets good rainfall and the rainfall is decreases as one proceeds towards east. The district mostly lies in rain shadow zone to the east of Sahyadries. September is the rainy month. About 77% of the annual rainfall is received during the south-west monsoon season. The variation in rainfall from year to year is large’⁸.

‘Ahmednagar district receives average 566 mm rainfall. The major rainfall received during month June to September. The average temperature ranges between 9⁰c (during December) to 41⁰c (during April and May)’⁹.

Map No. 2.3



Average Rainfall of Ahmednagar District for the period 1990-91 to 2011-12 :

Table No: 2.1

Sr.No.	Year	Rainfall in mm.	Sr.No.	Year	Rainfall in mm.
1.	1990-91	412	13.	2002-03	411
2.	1991-92	400	14.	2003-04	549
3.	1992-93	385	15.	2004-05	589
4.	1993-94	414	16.	2005-06	566
5.	1994-95	402	17.	2006-07	537
6.	1995-96	426	18.	2007-08	556
7.	1996-97	445	19.	2008-09	577
8.	1997-98	398	20.	2009-10	567
9.	1998-99	386	21.	2010-11	613
10.	1999-2000	427	22.	2011-12	560
11.	2000-01	566			
12.	2001-02	590			

Source: Socio Economic Review of Ahmednagar District from 1990-91 to 2011-12.

As per Socio Economic Review of Ahmednagar District 2011-12, the average annual rainfall in the district is 560.4 mm. (56.04 cm, 22.06"). Though heavy near the Sahyadris in Akola and plentiful in the hilly parts of Sangamner, Rahuri, Shevgaon and Jamkhed, while scanty in other part. The rainfall is uncertain in nature.

Talukawise Rainfall days and Total Rainfall in Ahmadnagar district: 2011

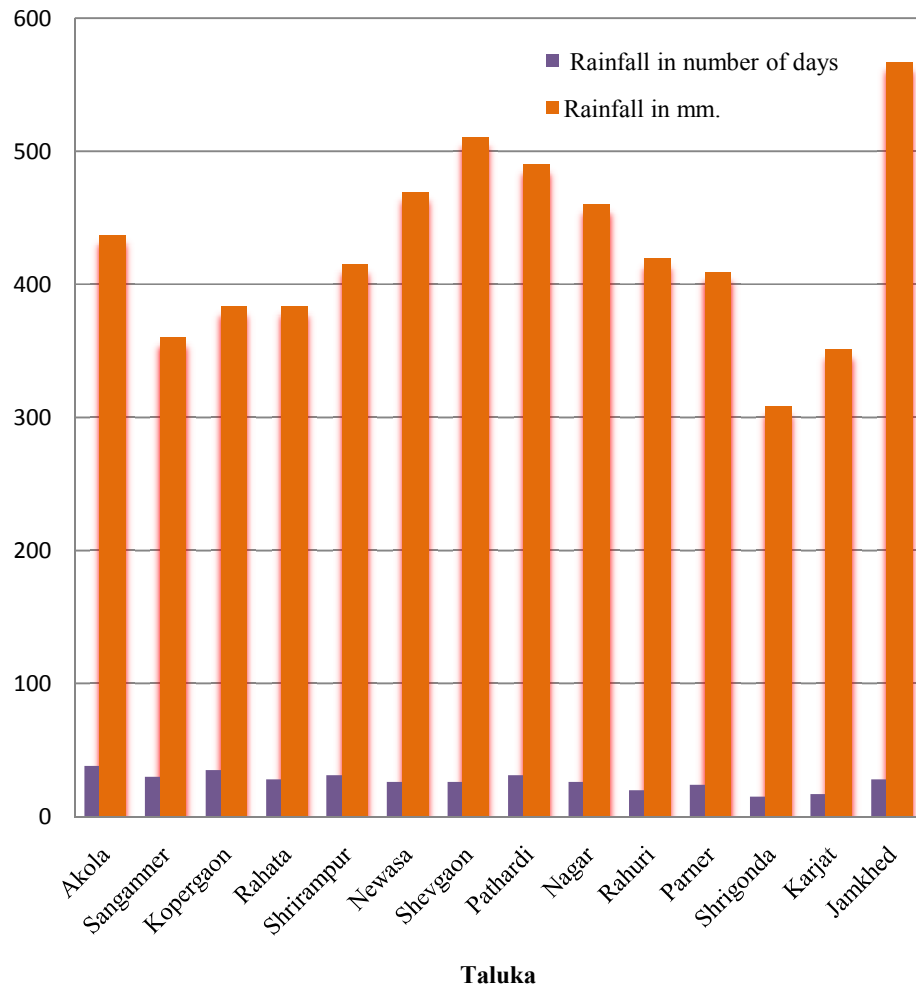
Table No: 2.2

Sr.No	Taluka	Average		Year 2011		Annual Rainfall in relation to the Average Rainfall.(in %)
		Rainfall in No. of days.	Rainfall in mm.	Rainfall in No. of days.	Rainfall in mm.	
1.	Akola	38	437	30	500	14.42
2.	Sangamner	30	360	29	240	-33.33
3.	Kopergaon	35	383	28	455	18.8
4.	Rahata	28	383	33	395	3.13
5.	Shrirampur	31	415	28	636	23.25
6.	Newasa	26	469	34	474	1.07
7.	Shevgaon	26	510	43	741	45.29
8.	Pathardi	31	490	29	614	25.31
9.	Nagar	26	460	30	374	-18,70
10.	Rahuri	20	419	35	589	40.57
11.	Parner	24	409	36	368	-10.02
12.	Shrigonda	15	308	30	316	5.84
13.	Karjat	17	351	25	413	17.66
14.	Jamkhed	28	567	40	712	25.57

Source : District Agriculture Development Officer, Z.P, Ahmadnagar.

The table shows highest average rainfall in Jamkhed Taluka (567mm) and lowest in Shrigonda Taluka (308mm). While rainfall of 2011 also shows highest rainfall in the taluka Jamkhed (712mm) and lowest in Shrigonda Taluka. There is not any relation with number of days and amount of rainfall because rainfall amount is related to its intensity and duration.

**Graph No:2.1
Talukawise Rainfall days and Total
Rainfall in Ahmadnagar District:2011**



**Town wise Rainfall distribution in Ahmadnagar District :
1961-1991**

Table No: 2.3

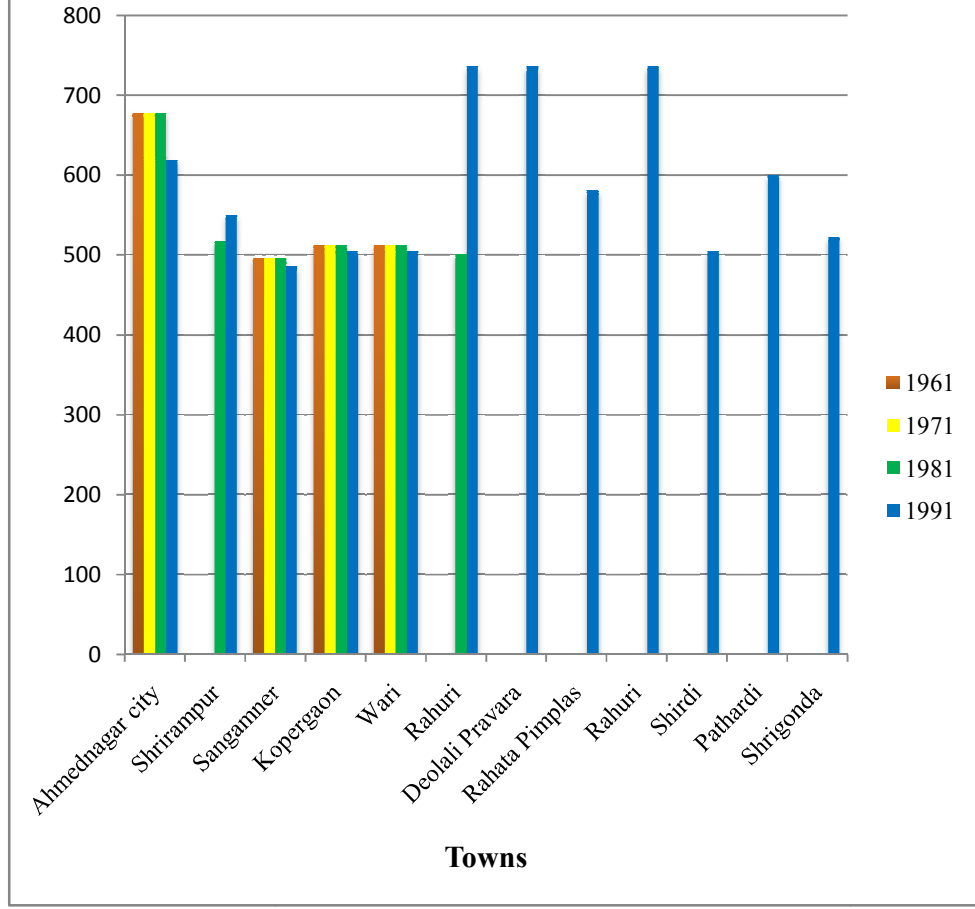
Sr. No.	Tours	Census Year (Rainfall in mm)			
		1961	1971	1981	1991
1	Ahmednagar city	677.7	677.7	677.7	619.0
2	Shrirampur	-	-	517.0	549.0
3	Sangamner	496.5	496.5	496.5	485.0
4	Kopergaon	512.0	512.0	512.0	504.0
5	Wari	512.0	512.0	512.0	504.0
6	Rahuri	-	-	500.9	735.6
7	Deolali Pravara	-	-	-	735.6
8	Rahata Pimplas	-	-	-	580.3
9	Rahuri	-	-	-	735.6
10	Shirdi	-	-	-	504.0
11	Pathardi	-	-	-	600.0
12	Shrigonda	-	-	-	522.0

Source: Ahmadnagar district census hand book 1961-1991.

Temperature: The Average temperature of the district is 41⁰c during April and May. 9⁰c during December. ‘Seasonal change in temperature is quite more in the district. May is the hottest month. While December is the coldest month of the year.

The table given below represents Maximum and Minimum temperature of the towns of the district.

Graph No:2.2
Town wise Rainfall distribution in
Ahmadnagar District:1961-1991



**Maximum and Minimum Temperature (c⁰) of the Towns in
Ahmadnagar district : 1961 - 1991**

Table No: 2.4

Sr.no.	Town	1961		1971		1981		1991	
		Max.	Min.	Max.	Min.	Max.	Min.	Max	Min.
1.	Ahmadnagar	41.9	7.0	41.9	7.0	41.9	19.1	39.7	12.5
2.	Shrirampur	41.9	7.0	41.0	7.0	41.9	20.5	41.8	20.4
3.	Sangamner	41.0	36.0	41.0	36.0	41.0	36.0	41.0	19.1
4.	Kopergaon	41.0	26.6	41.0	26.6	41.0	26.6	41.0	16.6
5.	Wari	32.2	26.6	32.2	26.6	32.2	26.6	41.0	16.6
6.	Devlali Pravara	-	-	-	-	-	-	42.8	15.1
7.	Pathardi							40.0	12.0
8.	Rahata Pimplas							41.0	19.1
9.	Rahuri							42.8	15.1
10.	Shirdi							41.0	16.6
11.	Shrigonda							41.1	19.1

Source: Ahmadnagar district census hand book 1961-1991.

Average Temperature (⁰c) of Ahmadnagar District in 2001:

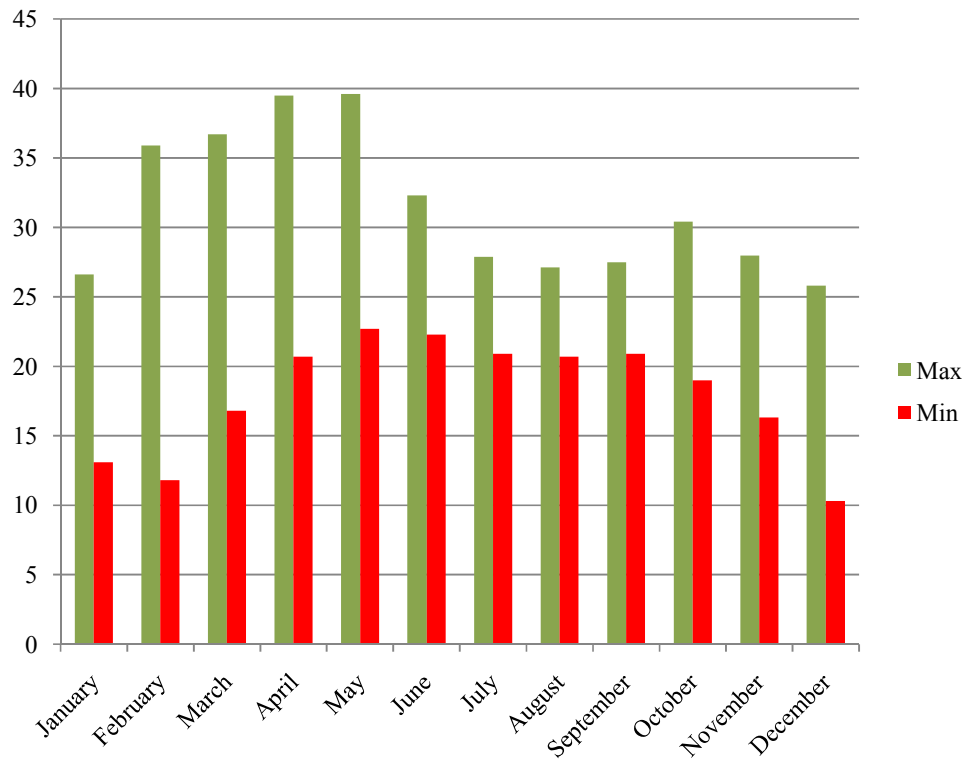
Table No: 2.5

Sr.No.	Month	Maximum	Minimum
1.	January	26.6	13.1
2.	February	35.9	11.8
3.	March	36.7	16.8
4.	April	39.5	20.7
5.	May	39.6	22.7
6.	June	32.3	22.3
7.	July	27.9	20.9
8.	August	27.1	20.7
9.	September	27.5	20.9
10.	October	30.4	19.0
11.	November	27.97	16.3
12.	December	25.8	10.3

Source: www.ahmadnagar.gov.in

Table 2.5 shows that there is gradual increase in average maximum temperature from January to the month of May, and decrease in temperature from May to December. Lowest temperature (25.8⁰c) is recorded in the month of December and highest (39.6⁰c) in May. Average minimum temperature does not show any significant trend, lowest minimum (10.3⁰c) is in the month of December and highest (22.7⁰c) in May.

Graph No:2.3
Average Temperature of Ahmadnagar District in 2001 (°c)



Average Temperature (⁰c) of Ahmadnagar District in 2012:

Table No: 2.5

Sr.No.	Month	Maximum	Minimum
1.	January	29	10
2.	February	32	13
3.	March	36	17
4.	April	38	21
5.	May	38	23
6.	June	33	23
7.	July	29	22
8.	August	28	22
9.	September	29	21
10.	October	32	19
11.	November	30	15
12.	December	28	11
	Year Average-	31.8 ⁰ c	18.1 ⁰ c

Source: www.weatherreport.com/india/ahmadnagar weather report.

Table 2.6 shows that there is gradual increase in average maximum temperature from January to the month of May, and decrease in temperature from May to October. Lowest temperature (28⁰c) is recorded in the month of August and December and highest (38⁰c) in April and May. Average minimum temperature shows increasing trend from January to June and decreasing from June to December.

2.4 SOILS:

The Soils of the district mainly bounded by black cotton soil (Regur) and Clay in the river tracts. It is classified into three groups as Black soil, Red or Tambat and Barad or gray including 'Pandhari' or white. These soils are subdivided into many more kinds with different names in different parts of the district such as proper black soil is known as black cotton soil.

Black Cotton Soil: It is formed due to weathering of basaltic rocks, characterized by deep black in color, rich in moisture holding, sticky, develops heavy, deep cracks in summer season. This soil is suitable for Cotton, wheat, Jowar and Sugarcane.

Clay loam or Khalga: It is slightly brown, some what skin color, sticky in nature, not too rich in water holding capacity. It is compact and slippery in rains.

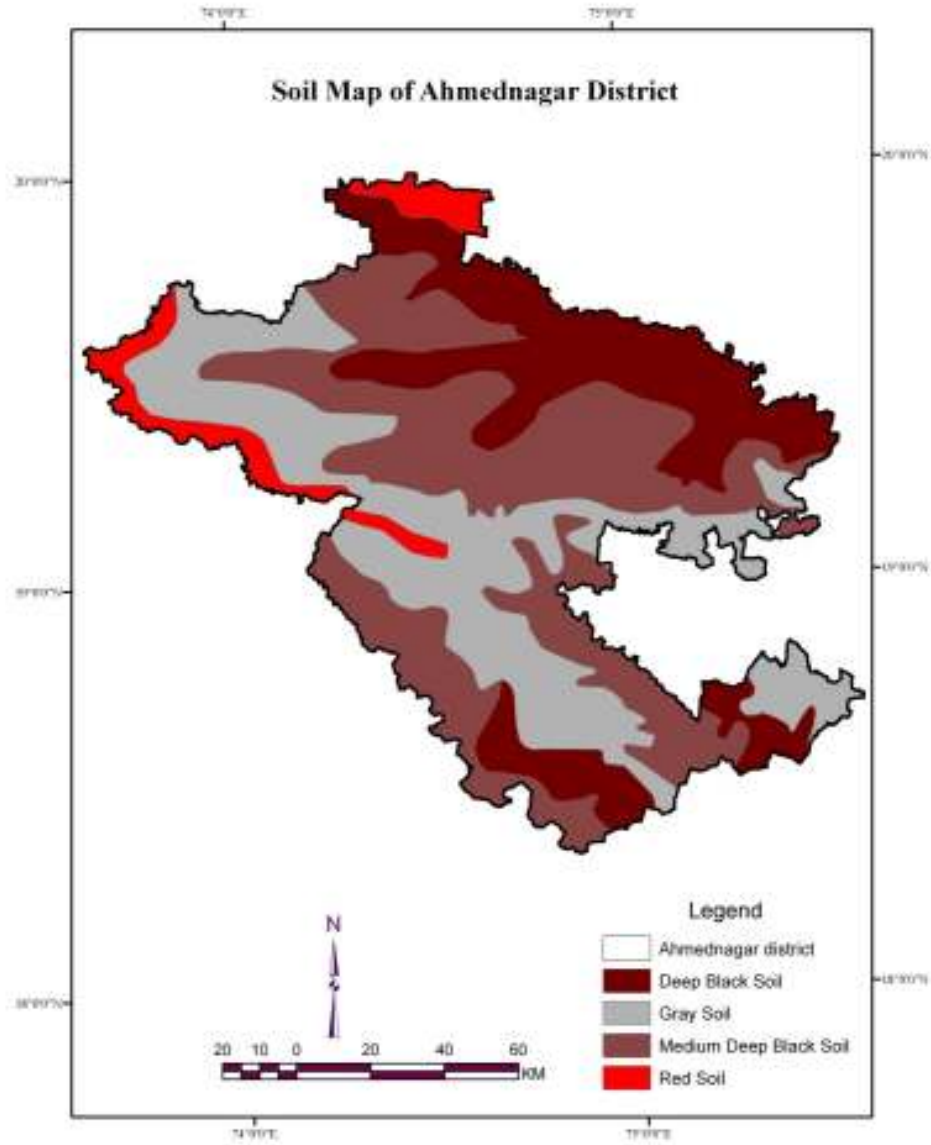
Sandy loam or Light Soil: Also known as 'Chopan' close to white variety less water holding capacity and less sticky in nature.

Red Soil: Reddish color, mainly found in hilly region. 'In the hilly west of Akola, A red soil which is usually deeper on the slopes than on the levels, grows magnificent trees'¹⁰.

Murum or gravelly and of Khadkal or stony Soil: This type is very unevenly distributed all over the district from the character as poor soil, infertile, barren in nature.

According to krishi vidnyan Kendra (KVK), Pravaranagar, 'The soil types of the district fall under four categories namely-1) Coarse Shallow black soil. 2) Medium black soil. 3) Deep black soil. 4) Reddish soil. Occupying about 38%, 41%, 13% and 8% of the cultivated area respectively'¹¹.

Map No. 2.4



2.5 DRAINAGE PATTERN:

The drainage of Ahmednagar district deals with two major rivers, the Godavari in the north and the Bhima in the south. Apart from these main rivers, number of tributaries has drained the district. Adula, Malungi, Pravara, Mula, Mandohol, Kalu to the north while Sina, Kukadi, Hanga, Khanduri, Inghana, Kautuki, are important one.

Godavari River: Godavari is the largest peninsular river also known as 'Dakshin Ganga'. Godavari originates at 'Trimbakeshwar' of Sahyadri hills fall under the district Nashik. After passing through Nashik city, it enters in the Kopergaon taluka of the district. It flows south-east covering many villages to right bank forming a continuous boundary between Aurangabad and Ahmadnagar districts. The Wadgaon is the village in kopergaon where Godavari enters in the district and Mungi is the village in shevgaon taluka, where river left the district and enters in the Marathwada region. Pravara, Adula, Mahalungi, Dhora are the main tributaries of Godavari with in the district boundary.

Pravara River: Pravara is the important tributary of Godavari originate at Ratangad of Sahyadri and meets at Pravarasangam to the right bank of Godavari after travelling the distance of 200 km. At the beginning river run from hilly region from valley and enters over Desh, part of the Akola taluka. After Akola town it receives on the left the Adula river and Mahulungi to the left bank. It travels through Shrirampur, Rahuri tahsils and meets to Godavari in Newasa taluka at Pravarasangam village.

Adula River: Adula is the tributary of the river pravara. Adula originates at Patta and Mahakali peaks, which is to the northern part of Akola taluka. Then it flows towards east covering the distance of

25 km. passing from narrow samsherpur valley. Finally it turns towards south and meets to the Pravara 5km. west of Sangamner city.

Mahalungi River: Mahlungi is also a tributary of Pravara. It originates to the north of Akola over the slopes of Patta-range. After a journey of 5-6km. it passes east into the Sinner sub-division of Nasik, here flowing to the north and some what parallel to the river Adula. At last it joins to the river Pravara at Sangamner.

Mula River: The river Mula is the tributary of Pravara. It originates in the ranges of Sahyadri between Ratangad and Harishchandragad. It covers the part of Sangamner and Parner tahsil and enters in the Rahuri taluka, where a dam is constructed known as Mula Dam to the west of Rahuri town. From the town Rahuri river flows to north-east and meets to the Pravara near the village Pachegaon of the taluka Newasa.

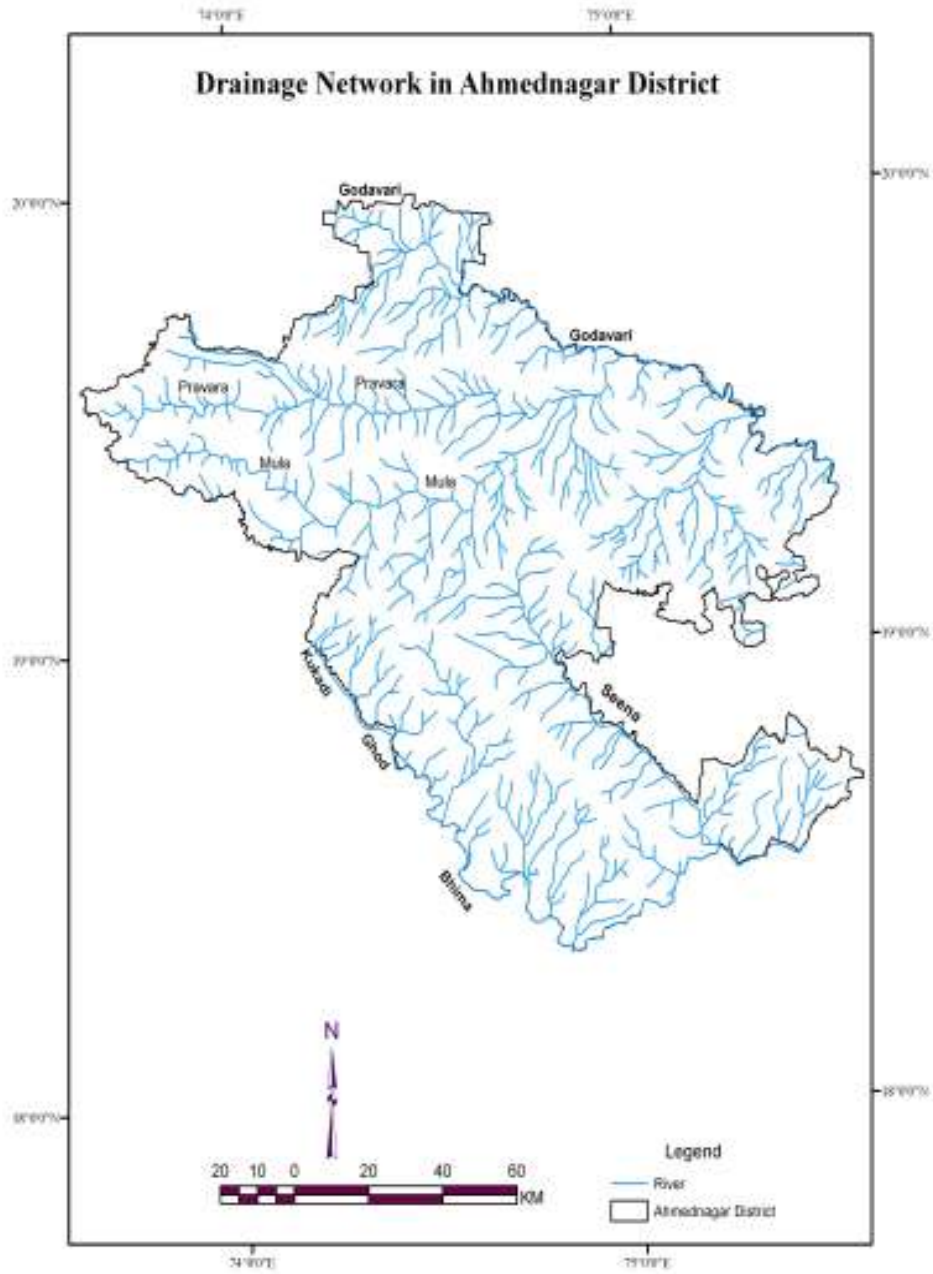
Dhora River: Dhora is the tributary of Godavari, which rises on hills of east of the city Ahmadnagar. River flows nort-east and covers the part of Shevgaon and Newasa taluka and meets to the Godavari about seven km. west of the town Paithan of Aurangabad district.

Bhima River: Similar to the Godavari, Bhima is the major river of the district. But Bhima covers southern part of the district. Bhima drains part of Parner, Nagar taluka, Srigonda, Karjat and Jamkhed talukas. Bhima enters in to the district near the village Sangavi Dumala in the Shrigonda taluka and flows at the boundary of Pune district to the south-east of the district. Further Bhima run along the western boundary of Solapur district. The main tributaries of the Bhima in the district are Ghod and Sina river.

Ghod River: Ghod is the main tributary of the river Bhima. Ghod originates on the slopes of Sahyadri in Junnar taluka of the Pune district. Ghod flows at the boundary to the south-west between Pune (near town Shirur) and Ahmadnagar district. The Ghod meets to Bhima near the village Sanavi Dumala of Shrigonda taluka.

Sina River: Sina is the tributary of Bhima, which originates at the hilly region to the east of Ahmadnagar city. The Ahmadnagar city, a head quarter of the district is located on the right bank of Sina. Sina has formed the boundary between the Ahmadnagar and the district Beed. Sina meets to Bhima at the Karnataka state border.

Map No. 2.5



2.6 NATURAL RESOURCES :

Minerals, especially of economic importance are not available in the district. The hard and compact basalts, however, are used extensively as building material and road metal as they are hard, dense and durable. Especially blackish basalt available at Newasa is used for constructions of temples, idols of god and goddess.

The calcareous rocks is burnt in lime kilns and is responsible for a regular "lime industry" around Ahmadnagar town.

The district has 17413 sq. km. area as a land resource. Out of 14795 sq. km. is suitable for agriculture and 11796 sq. km. is presently used for production of different crops.

Fishes available in the river water is also important natural resource of the district. The major rivers of the district are generally run along the boundary. Fisherman in the district take advantage of the riverine fisheries mainly in the river Ghod, Godavari, Pravara, Mula and their tributaries. Fisheries also made in the lakes as pimpalgaon lake, Visapur lake, Kapurwadi lake and reservoirs like Mula, Bhandardara and Nathsagar.

The sand available in the rivers is also a major natural resource of the district, which is mainly utilized for the construction purposes. Now a days it became a important main revenue asset of the district.

Forest cover in the district is 1994 sq. km. which specially gives fire wood, constructional wood, grass, tendu leaves and hirda.

Water resource is get through monsoon, and district receives 561 mm. average rainfall, which is used for irrigation, industrial and household purposes. The district has major projects as Mula, Bhandardara and Nathsagar at the northern boundary. Medium projects are visapur, Adhala, Paragon, Ghatshil, Mandohal, Bhojpur, Mahesangavi, Sina. This water is utilized for 227000 hectors of land irrigation.

B] CULTURAL ASPECTS :

2.7 Historical Background : As usual name of the district is given from the headquarter of the district, Ahmadnagar. The name is related to its founder 'Malik Ahmed', who built it in 1494.

'Ahmednagar district popularly called Nagar and came into existence in 1818. In 1822 its boundaries spread between Vani in Dindori sub-division of Nasik and Karmala in Solapur district. In 1830 Solapur sub-collectorate was inducted in the district and continued as such till it gained the status of an independent collectorate in 1838. During 1837-38, Nasik sub-collectorate comprising of sub-divisions of Sinnar, Chandor, Dindori, Nasik, Igatpuri and Paint tahsils were under Ahmadnagar district. Subsequently Nasik was abolished in 1856 and the area reverted to Ahmadnagar district. 1869 witnessed the declaration of Solapur and Nasik as independent districts thus leading to the shaping and emergence of present Ahmadnagar district'.¹² 'In 1956 the district become a part of bilingual Bombay state and in 1960 became a part of Maharashtra when the Linguistic state came into existence for administrative purposes. The present districts is divided into 14 tahasils. There are 1561 rural and 18 urban settlements in Ahmednagar'.¹³ The historical record shows that after the death of Alauddin , his son Kutbuddin Shah became a new Sultan who marched to Devgiri in 1317, and troops were sent against Harpaldev. He was taken into prison and brought to Devgiri, where he was first flayed alive and then beheaded. Ahmadnagar district for the first time came under Mughal rule.

History says that, 'In 1650, Shivaji preferred a claim on the part of his father or of himself to the Deshmukh's dues in the Ahmadnagar district to which he alleged they had an hereditary right. As was probably foreseen Shivaji's agent at Agra did not

succeed in obtaining a promise of the Deshmukh's share, but he brought back a letter from Shah Jahan, promising that the claim should be taken into consideration if Shivaji came to court. In the year 1653 prince Aurangzeb was appointed viceroy of the Deccan for the second time. For several years he devoted his talents to perfecting the revenue settlement and protecting and encouraging travellers and merchants. He established his seat of government at Malik Ambar's town of Khadki, which, after his own name, he called Aurangabad.

In 1706, the grand Mughal army under Zulfikar Khan, on its way from Sinhgad ten miles south of Pune towards Ahmadnagar was attacked by the Marathas. In spite of a gallant charge led by Khan Alam a great part of the Moghal army was defeated. On pitching his camp in Ahmadnagar, on the same spot which it had occupied in such splendour twenty-one years before, Aurangzeb said: "I have ended my campaigning, my last earthly journey is over." He died at Ahmadnagar on the 20th of February 1707 in the eighty-ninth year of his age. On hearing of the death of his father Aurangzeb's second surviving son Azam hastily returned to Ahmadnagar and performed the funeral rites. He then moved northwards, taking Shahu, the son of Sambhaji, with him. Since his father Sambhaji's execution on 11 March 1689, when he was a boy of seven years, Shahu had been brought up by Aurangzeb with care and kindness. In the hope that his influence might make the Marathas less hostile, Aurangzeb before his death intending to set Shahu free. Shahu did not leave Ahmadnagar until circumstances forced him and would even have preferred to rule from that town itself if it were possible. He had to give up this thought as Ahmadnagar which had figured for centuries as a Muslim possession and more recently as the seat of Aurangzeb's government was not suited to the requirements of a Maratha king. He therefore

moved from Ahmadnagar southwards towards Pune and halted at Khed where in the battle fought on October 12, 1707 with Tarabai's forces, Shahu emerged victorious. From there he marched to Satara where he was crowned king on January 12, 1708. He appointed Balaji Vishwanath to the post of Sena Karte (organiser of forces) and later due to his acumen in winning over friends and destroying the enemies of the kingdom he appointed him to the Peshwaship of the Maratha State.

Shortly after, Balaji Vishwanath died and was succeeded by his son Bajirao as Peshwa. The district of Ahmadnagar was one of the parts of the Deccan which became subject to the Nizam. The district remained with the Nizam, Nizam-ul-Mulk, Asaf Jah till his death in 1748. On 11 February 1760 the whole of the present district of Ahmadnagar was gained by the Marathas. In 1761 after the great Marathas' disaster at Panipat, Nizam Ali who still suffered from the ignominy of the defeat at Udgir marched directly upon Pune at the head of the powerful army of 60,000 men. He carried fire and desolation throughout his march and destroyed Toka and Pravara-Sangam, the two great centres of Hindu religious sanctity.

In 1801, Yashwantrao Holkar descended upon Ahmadnagar now a possession of Shinde, with the greatest fury. In June 1817, the English imposed another treaty on Bajirao with stricter terms, thus depriving him of all power and authority. Under the terms of the treaty known as the treaty of Pune the Peshwa ceded the fort of Ahmadnagar to the English. Thus the Great Maratha confederacy came to be finally and publicly dissolved. The whole of the dominions of the Peshwa and those of the Holkar in the Deccan were taken possession of by the British government. Shinde had held half of Shevgaon and the Shrigonda pargana. The greater part

of the Korti pargana including the present sub-divisions of Karjat and part of Shrigonda was under Rao Rambha Nimbalkar till 1821 when it was given to the English. Ahmadnagar with the country between the Chandor hills and the Bhima was placed under Captain Pottinger.

During the 1857 risings Ahmadnagar was the scene of considerable disturbance. The rebels were about 7,000 Bhils of south Nasik and north Ahmadnagar. Detachments of troops were stationed to guard the frontier against raids from the Nizam's dominions, and to save the large towns from the chance of Bhil-attacks. The work of scattering the Bhil gatherings and hunting the rebels was left almost entirely to the police who were strengthened by the raising of a special Koli corps and by detachments of infantry and cavalry. The first gathering of Bhils was under the leadership of one Bhagoji Naik.

Although Ahmadnagar district was created as early as in 1818, modern history of Ahmadnagar may be said to have commenced from 1869, the year in which parts of Nasik and Sholapur which till then had comprised Nagar were separated and the present Nagar district was formed. Ahmednagar District was created after the defeat of the Maratha war in 1818. The district was remained a part of Bombay Presidency till independence in 1947, when it became a part of Bombay state and in 1960 the new state of Maharashtra.

2.8] AGRICULTURE :

Agriculture forms the backbone of the Indian economy. 'Being the largest industry in the country, agriculture provides employment to around 65% of the total work force in the country.'¹⁴

As per 1981 census there was 47.43% Cultivators and 28.33% Agricultural laborers. In 1991, 47.35 % cultivators and 26.59% Agricultural laborers in the district.

As per PLP report (Potential Linked Credit Plan report 2007-08) 'The total geographical area of the district is 17.41 lacks hectares. Out of this gross cropped area is 13.17 lack hectare and the net sown area at 12.15 lakh hectares constitute 70% of geographical area. As per land holding pattern area aggregating 4.4 lakh hectare belong to farmers holding less than two hectare. Kharif crops are cultivated in about 8.53 lakh hectares and Rabbi in 5.03 lkh hectare. The major part of net irrigated area (3.14 lakh hectare) is under Sugercane and horticulture crops followed by Wheat, Groundnut, Soyabean.¹⁵

The Area Under Major Crops in Ahmadnagar District:

2003-04 to 2005-06

Table No: 2.7

Sr.No.	Crop	2003-04	2004-05	2005-06
1.	Bajara	245700	240500	225700
2.	Paddy	8400	8000	8800
3.	Maka	11200	14000	19400
4.	Nagali	2700	2400	2700
5.	Tur	10200	12200	13800
6.	Mug	6300	13100	5900
7.	Urad	3300	3100	3300
8.	Groundnut	3300	5300	4400
9.	Sunflower	7000	5800	8900
10.	Soyabean	25700	51800	35000
11.	Cotton	11000	26700	18200
12.	Sugarcane	75900	100800	61500
13.	Wheat	65700	100200	97300
14.	Jawar	530300	553100	554100

Note: Crop area is in hectare.

Source: PLP Report 2007-08 for Ahmadnagar district.

The cropping pattern of the district consists Bajara, Soyabeen, Tur, Sunflower, Groundnut in Kharip season and Jowar, Wheat, gram etc. in Rabbi season. The area under fruit crops is gradually increasing on account of Horticulture schemes implemented by the state government. Grapes are mainly cultivated in Kopergaon Rahata, Shirampur and Sangamner taluka. Summer crops like groundnuts, Sunflower and vegetables as tomato, onion, bhindi etc. are grown in irrigated pockets of the district.¹⁶

The Kharip and the Rabbi are main agricultural seasons in the district. Kharip starts with monsoon that is from the month of June and Rabbi from the month of October. Bajara, Groundnut, Cotton and Rice are the main crops of Kharip season while Jowar, Wheat are the main crops of the Rabbi season.

2.9] IRRIGATION :

Irrigation itself implies the availability of the source of water supply to the crops as per their needs. The wells, tube-wells, canals and tanks are the main sources used for the irrigation in the district. Following statistics of the census 1991 gives area irrigated by different sources in the district.

As per 1991 census, the irrigated area under canal and well is highest, and is 43.66% and 55.03% respectively.

As per PLP report 2007-08, Out of the net sown area of 12.15 lakh hectares, 3.14lakh hectares (26%) is under irrigation out of which 2.55 lakh hectares (81%) was irrigated through ground water resources and 0.59lakh hectares by canals. 'The major projects like Mula and Bhandardara, the canals of Gangapur dist. Nasik, Ghod and Kukadi of Pune district with command area of 2.08 lakh hectares. Visapur, Adhala, Partgaon, Ghatseel, Mandohol,

Bhojpur, Mahesangvi and Sina medium projects with command area of 0.71 lakh hectares, and 90 minor irrigation projects with capacity to irrigate 0.23 lakh hectares are the sources of irrigation in the district. Further there are large number of lift irrigation schemes (400) on canals on Bhandardara and Mula Dams. There are also lift on Godavari river where the water has been stored by KT weir type bandharas'.¹⁷

2.10] OCCUPATIONS : Occupations basically are of three types, as primary, secondary and tertiary. Agriculture, mining, fishery, animal husbandry etc. are considered as primary occupations. Manufacturing industries are secondary one, while Transport, communications, banking, finance, services are tertiary in nature.

Peoples of the district are engaged in agriculture, public administration, professions like law, medicine, education, religion and fine arts, tailors, barbers, tin-smiths, gold-smiths, hotels and restaurants, laundries, tailoring, lodging-boarding and saloons, parlours and so many. Also in useful services to the people of the district such as providing food, shelter, clothing, educational and medical facilities.

2.11] INDUSTRIES :-

Ahmadnagar is well-known due to co-operative sugar industries. District having MIDC's at district headquarters as well as tahsil headquarters. These MIDC's contains industries like automobile, electronics, heavy industries, agriculture equipment, pharmaceutical, engineering works etc. many more are distributed all over the district as bidi rolling, jaggery making manufacturing mopeds, engines, pump and T.V. sets, ginning and pressing, cotton spinning and weaving, oil extraction and engineering works and sugar factories.

Ahmadnagar have a number of co-operatives such as sugar, milk and bank co-operatives. It is home to 22 sugar factories and is also the birthplace of the co-operative movement. Ahmadnagar has the maximum number of sugar factories in India. The foremost cooperative sugar factory in Asia was established at Pravaranagar.

2.12] URBANIZATION :

The total population of the district is 4040642 (2001), out of 80.1 % i.e. 3236945 people live in rural area and 19.89 % means 803697 live in urban area. As per 2011 census, district population is 4543083, out of 3630012 (80 %) people live in rural area and 913071 (20 %) people live in urban area.

There are 18 urban centers in the district at present. It was 05 in 1971 and 08 in 1981. Now 18 from 1991. These urban centers and their population is as given below.

Urban centers in the Ahmadnagar district:1991

Table No: 2.8

Sr. No.	Name of Urban Centre.	Population
01	Nagar City	307615
02	Shrirampur	81255
03	Sangamner	61958
04	Kopergaon	59970
05	Rahata	19019
06	Rahuri	34476
07	Dewlali Pravara (Rahuri)	30340
08	Pathardi	22827
09	Shrigonda	26324
10	A'Nagar Cantonment	39934
11	Ghulewadi (Sangamner)	19367
12	Shinganapur (Kopergaon)	10860
13	Shrди	26184
14	Shrirampur Rural	7506
15	Nagapur (Nagar)	7064
16	Nagardevale (Nagar)	13724
17	Bhingar (Nagar)	7620
18	Jamkhed	27654
	Total-----	803697

Source: District Census Hand Book 1991.

2.13] TRANSPORTATION :

The district possesses 197 km. of central railway route with 24 stations. That is Daund-Manmad railway route. The length of all kinds of roads contributes 13859 km, which has connected 1506 villages in the district.

The total length of roads which stood at 3,026 kilometers at the end of 1960-61 increased to 4199 kilometers at the end of 1970-71. Of this a length of 61 kilometers was accounted for by the Pune-Nasik national highway which passes through Sangamner taluka. One more national highway is added recently, as New Kalyan-Nanded- Hyderabad National highway No.222. Which passes through Parner, Nagar and Patherdi tahsils and its length is 114 km. in the district.

The length of village roads had increased from 449 kilometers in 1960-61 to 1,405 kilometers in 1966-67. Length of municipal roads increased from 72.76 kilometers in 1960-61 to 85.10 kilometers in 1966-67. The following table shows the surface-wise classification of roads in the district in 1971-72.

Length of Roads in Ahmadnagar District:

Table No: 2.9

Particulars	Length in Km.	
	2006	2012
(1) Category-		
(i) National highways	202	2011
(ii) State highways	1636	1715
(iii) Major District roads	2685	2557
(iv) Other District roads	3346	4951
(v) Village roads	4527	4425
(Vi) Other	334	
Total	12731	13859

Source: Socio-Economic review of Ahmadnagar district 2005-06.

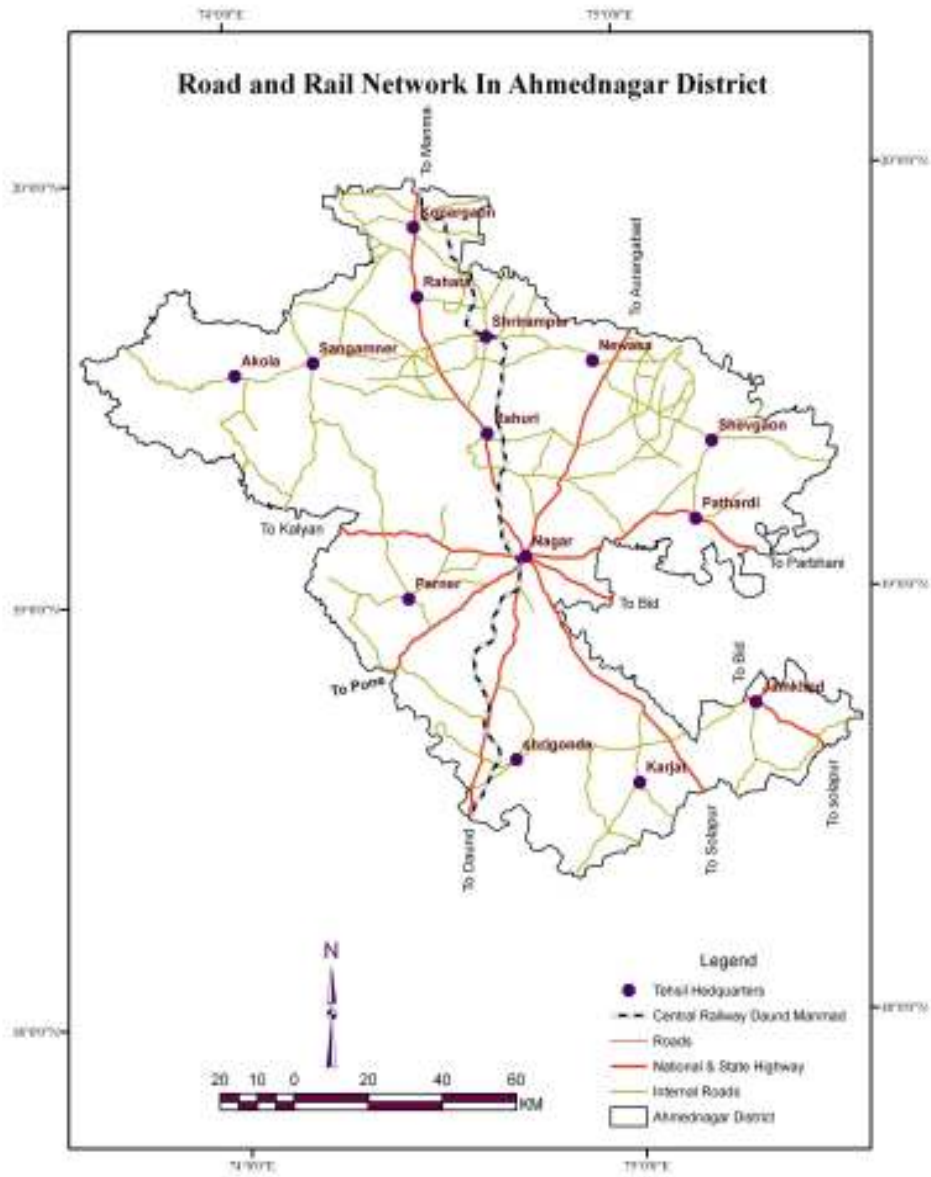
Road Length in Ahmadnagar District 1961 to 2012:

Table No: 2.10

	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2011-12
Road Length (inKm.)	3026	4199	11631	12892	12396	12975	13859

Ahmadnagar yet does not have the facility of air transport service. The work is in progress at the village Kakadi, near Shirdi.

Map:2.6



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CHAPTER- III

POPULATION CHARACTERISTICS

- 3.1** GROWTH OF POPULATION
- 3.2** DISTRIBUTION OF POPULATION
- 3.3** DENSITY OF POPULATION
- 3.4** COMPOSITION OF POPULATION
 - 3.4.1** AGE COMPOSITION
 - 3.4.2** SEX COMPOSITION
 - 3.4.3** RELIGIOUS COMPOSITION
 - 3.4.4** ECONOMIC COMPOSITION
 - 3.4.5** LITERACY RATE

INTRODUCTION:

This chapter deals with population characteristics of the Ahmadnagar district, which mainly includes Growth of population, Distribution of population and Composition of population. The quality of the population is important aspect of population and which is contributed by the elements of population as growth, distribution, composition of population. Even literacy is also determines the quality of the population. Let us see these population characteristics.

3.1 GROWTH OF POPULATION :

Population growth is the change in population over time, and can be determined as the change in the number of individuals in a population using per unit time for measurement. The term population growth more often termed as population growth rate.

Population is a changing phenomena, its change in number implies growth in size, but not only its size is important but also nature of its change is important. 'Population growth rate is generally obtained by dividing the change by the period of time elapsed during the change. Thus, growth rate of a population is the number of organisms added to the population per time'.¹ A rate is generally obtained by dividing the change by the period of time elapsed during the change. Thus growth rate of a population is the number of organisms added to the population per time.

Population growth rate :

Population growth rate (PGR) is the change in the number of individuals in a population increase. Specifically, PGR ordinarily refers to the change in population over a unit time period, often

expressed as a percentage of the number of individuals in the population at the beginning of that period. This can be written in the formula:

$$\text{Growth Rate} = \frac{\text{Population at end of the period} - \text{Pop. At beginning of period.}}{\text{Population at beginning of the period.}}$$

$$1775969 - 1410873$$

$$\text{For ex. Growth rate} = \frac{\text{Population at end of the period} - \text{Pop. At beginning of period.}}{\text{Population at beginning of the period.}}$$

$$\text{of A'Nagar(1951-1961)} \quad 1410873$$

$$= 0.258773$$

$$\text{Growth in \%} = 0.258773 \times 100$$

$$= + 25.88 \%$$

The best way which is used to express population growth as a ratio, not as a rate because the change in population over a unit time period is expressed as a percentage.

$$\text{Growth Rate} = \text{Growth rate} \times 100$$

This ratio of population growth may either positive (+ve) or negative (-ve). A positive (+ ve) growth ratio/ rate indicates that the population is increasing, while a negative (- ve) growth ratio/ rate indicates population decline. A growth ratio of zero indicates that there were the same number of people at the two times. Population grows due to natural increase of population is calculated as-

Decadal Growth of Rural and Urban population in Ahmadnagar District:

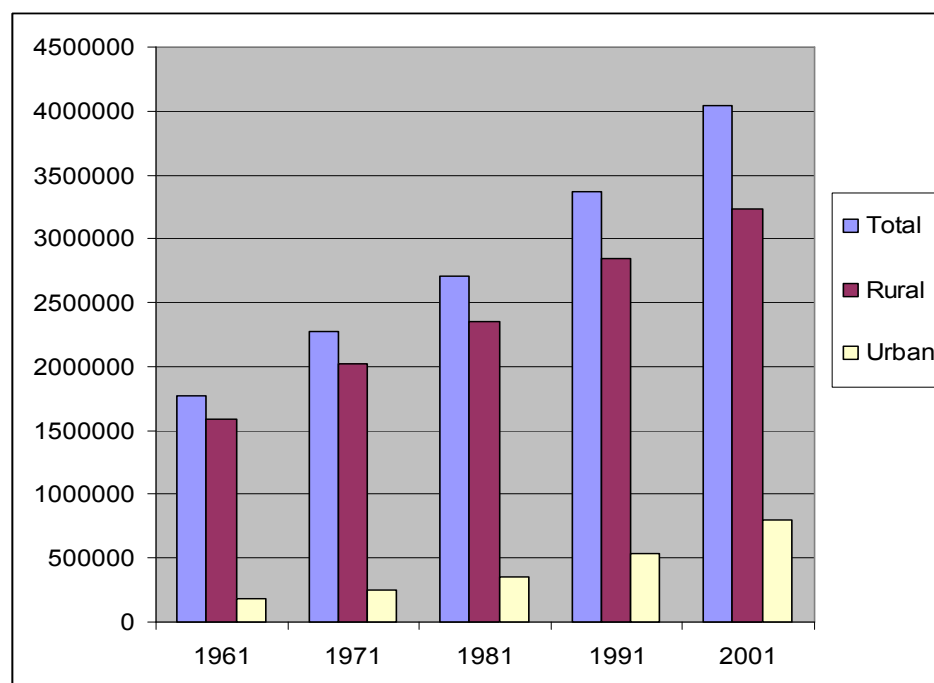
Table No: 3.1

Year	Population			Decadal Growth		
	Total	Rural	Urban	Total	Rural	Urban
1961	1775969	1588654	187315	+25.88	+32.81	-12.81
1971	2269117	2017617	251500	+27.76	+27.00	+34.27
1981	2708309	2356941	351368	+19.32	+16.79	+39.71
1991	3372935	2839454	533481	+24.35	+20.26	+52.14
2001	4040642	3236945	803697	+19.79	+15.67	+50.56

Source- Socio-Economic review of Ahmadnagar district 2005-06.

**Total, Rural and Urban population of Ahmadnagar district:
1961-2001**

Graph No. 3.1



Source- Socio-Economic review of Ahmadnagar district 2005-06.

Decadal Growth of population in Ahmadnagar District:

Table No: 3.2

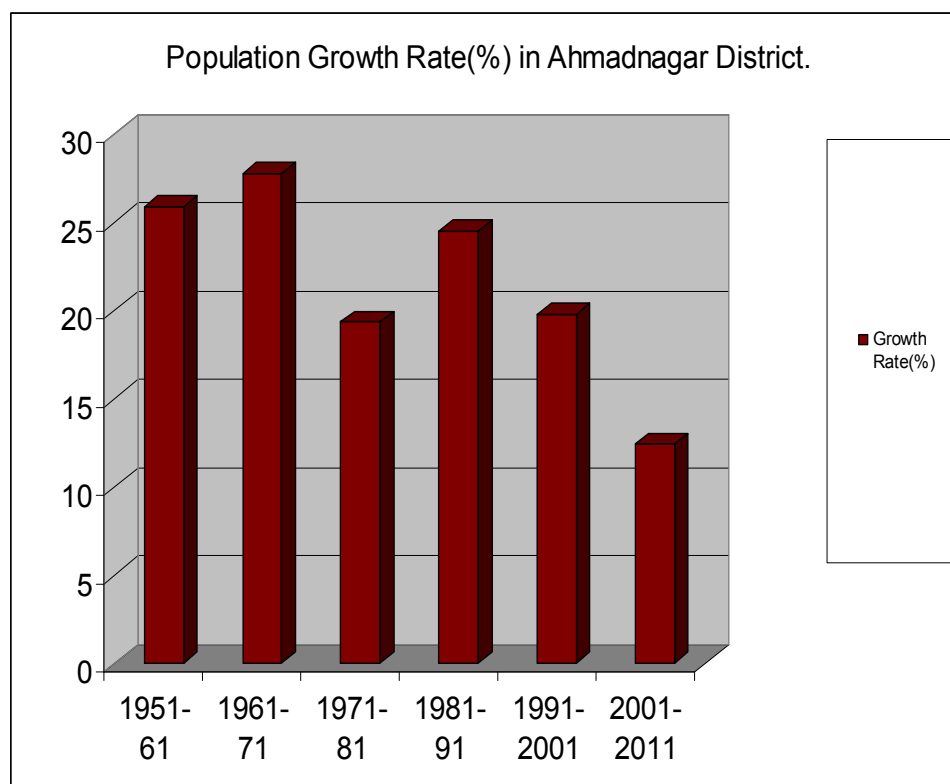
Year	Population	Population Growth	Rate of variation-%
1961	17,75969	+365,096	+ 25.88
1971	22,69117	+493,148	+ 27.76
1981	2,708,309	+439,192	+ 19.32
1991	3372935	+664626	+ 24.35
2001	4040642	+667707	+ 19.79
2011	4543083	+502441	+ 12.43

Source: Computed by Research.

Decadal Growth of population in Ahmadnagar District:

1961-2011

Graph No. 3.2



The decadal population during 1901-11 in the district had increased by 12.86 per cent. The very next decade shows fall by 22.33 percent. This is due to the severe influenza epidemic of 1918. In the following decade of 1921-31, the population increased by 34.77 percent. From 1941-51 to till 1961-71 trend is increasing one. The 1961 population was two and half times that of 1921. During 1981-91 district registered a growth rate of 24.54 percent. After 1991 growth rate shows decreasing trend. This is due to literacy level improvement and adaptation of family planning program. The growth of population in any region is an index of its economic development, social awaking and many other character.² The trends of population growth are basic to the changes in the overall geographic personality of any area. The following table 3.3 gives growth in population since 1961 in the study area.

Growth rate of population since 1961 to 2011 in Ahmadnagar district:

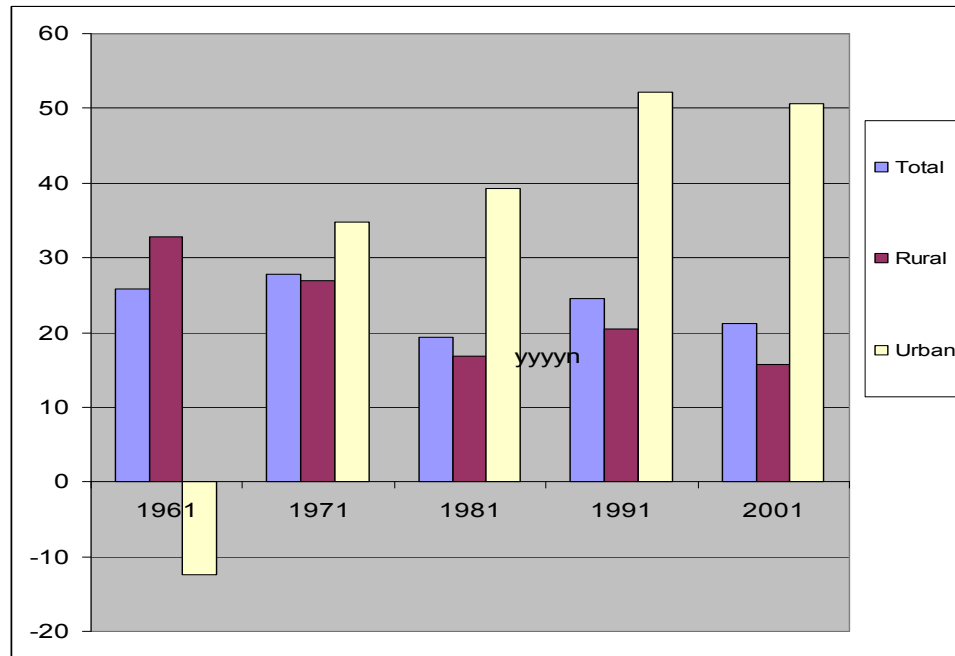
Table No : 3.3

Sr. No.	Decade	General	Rural	Urban
1	1951-61	+25.88	+32.81	-12.81
2	1961-71	+27.76	+27.00	+34.27
3	1971-81	+19.36	+16.79	+39.71
4	1981-91	+24.54	+20.26	+52.14
5	1991-2001	+19.79	+15.67	+50.56

Source- Socio-Economic review of Ahmadnagar district 2005-06.

Decadal Total, Rural and Urban population Growth in Ahmadnagar district: (1961 to 2001)

Graph No. 3.3



Decadal growth rate of population in Ahmadnagar district-1951-61 to 1991-2001.

Graph No: 3.4

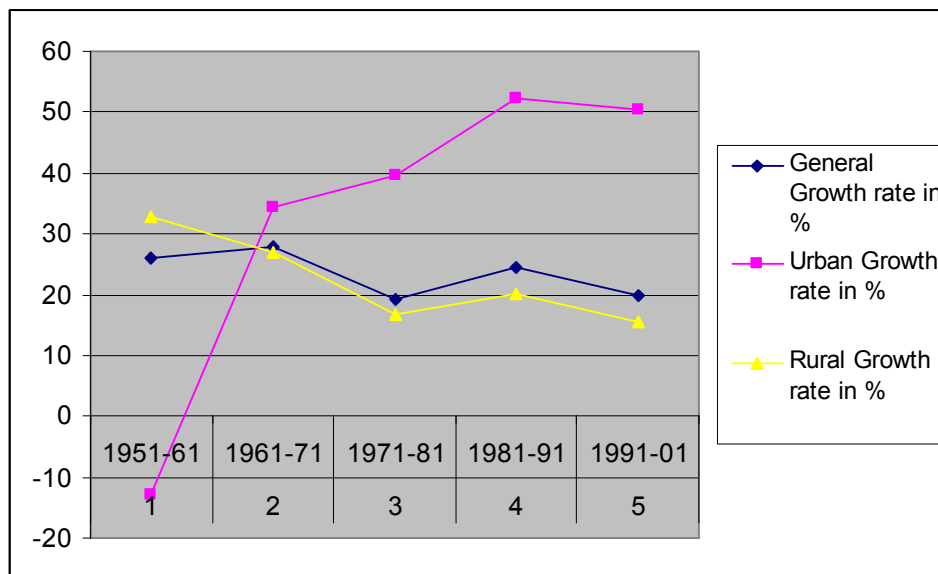


Table No.3.3 shows us that the trend of general rural and urban population growth rate which vary from the one another during the span of fifty years. The trend of general population is increased from 25.88% to 27.76% from 1951 to 1971. Then it was decreased up to 19.36% and then increased up to 24.54% and then decreased up to 21.20% in 2001. Rural population was decreased by 32.83% to 16.82 till 1981, it is increased by 20.47% in 1991 and decreased to 15.67% in 2001. Urban population growth rate increased. From-12.41% to 52.14% from 1951 to 1991. Again growth rate decreed up to 50.56% during the decade of 1991- 2001.

Table 3.3 predicts that the trends of general, urban and rural population growth rate varies from one decade to another. During the 1961 to 2001, the trends of general and rural population growth rate shows remarkable ups and downs. But the rate of urban growth shows continuous increasing trend till 1981-1991. But it was decline in next decade, 1991-2001.

The general trend of population growth from 1961 to 1971 shows increasing trend as 25.88 % to 27.26 %. It was decreased in the decade of 1971-1981, which became 19.32 %. It was again increased in 1981-91 as 24.35 %. And then decreased as 19.79 % in 1991.

Urban population shows continuous growth from 1961-71 to 1981-1991 as 34.27, 39.71, 52.14 respectively. It decline in 2001 from 52.14 % to 50.56 %. Again decline in 2011 from 50.56 % to 13.61 %.

Urban population of the district shows –ve growth rate during 1951-61 because the population of 08 urban places was minus from the list of urban centers due to change in the definition of urban area.

Therefore the population of Rahuri(Bk), Vambori, Shevgaon, Patherdi, Shrigonda, Karjat, Jamkhed and Kharda were rejected from the list of urban population. Hence urban population was decreased by 64874 and it influenced the urban growth rate to –ve trend during the 1951-61 decade.

POPULATION GROWTH IN MAHARASHTRA-

Table No: 3.4

Census	Population	Growth Rate %
1961	39554000	
1971	50412000	+ 27.45
1981	62784000	+ 24.54
1991	78937000	+ 25.73
2001	96752000	+ 22.57
2011	112372972	+ 16.14

Source: Source: Computed by Researcher.

As per the 2011 census, Maharashtra has a population of 112372972 and for 2001 census it was 96,752,247. In this recent decade population is increased by 15620972 inhabitants making it the second most populous state in India.

DECADAL POPULATION GROWTH RATE (%):

MAHARASHTRA AND INDIA.

Table No: 3.5

1961-71		1971-81		1981-91		1991-2001		2001-2011	
Maha.	India	Maha.	India	Maha.	India	Maha.	India	Maha.	India
27.45	24.80	24.54	25.00	25.73	23.85	22.57	21.35	16.14	17.58

Source: Economic survey of Maharashtra.

Maharashtra bears population 9.67 crores (census 2001) and 11.23 crore (census 2011) is 9.39 % and 9.28 % respectively of the total population (102.9 and 121.0 crores) of India. During the decade 1991-2001 the population of the state is increased by 22.6 %. While in 2001-2011 it is 16.14 %. The corresponding growth during the earlier decade was 25.7 % and 22.6 %. The decadal growth rate in 1991-2001 was less by 3.1% and in 2001-2011 by 6.43 % points. The decadal population growth rate of the state during the six decades has been higher than that of India except for the decade 1971-81.

**Taluka-wise Natural and decadal population growth in
Ahmadnagar district:1961-2001**

Table No: 3.6

	1961	1971	1981	1991	2001
A'Nagar	1775969 (+25.88)	2269117 (+27.77)	2708309 (+19.36)	3372935 (+24.54)	4040642 (+19.79)
Nagar Tal	245581 (+19.13)	303606 (+23.63)	365957 (+20.54)	482884 (+31.95)	606690 (+25.63)
Kopergaon	197512 (+38.26)	262619 (+32.96)	291604 (+11.04)	337387 (+15.70)	277170 (-17.84)
Akola	117795 (+22.61)	147702 (+25.39)	176385 (+19.42)	222153 (+25.95)	266638 (+20.02)
Sangamner	164564 (+24.76)	218797 (+32.96)	280408 (+28.16)	354808 (+26.53)	441439 (+24.41)
Shrirampur	178174 (+32.90)	247551 (+38.94)	291672 (+17.82)	340327 (+15.03)	256458 (-24.64)
Rahuri	117728 (+35.36)	159343 (+35.35)	204093 (+28.08)	252570 (+23.75)	294924 (+16.76)
Newasa	117706 (+27.89)	150393 (+27.77)	211237 (+40.46)	273075 (+29.27)	326698 (+19.63)
Shevgaon	104207 (+18.29)	128841 (+23.64)	138275 (+7.32)	170507 (+27.31)	203676 (+19.45)
Parner	131039 (+23.53)	154890 (+18.20)	177501 (+14.60)	214064 (+20.60)	246552 (+15.17)
Pathardi	110905 (+13.66)	138590 (+24.96)	147837 (+6.67)	185845 (+25.71)	214872 (+16.15)
Shrigonda	118313 (+24.53)	146581 (+23.89)	181418 (+23.77)	235706 (+29.92)	277356 (+17.67)
Karjat	99292 (+33.00)	123612 (+24.49)	146618 (+18.81)	184331 (+25.72)	205674 (+11.57)
Jamkhed	73153 (+23.16)	86592 (+18.79)	95304 (+10.06)	119278 (+25.16)	134216 (+12.52)
Rahata					288279

Source: Census hand books of Ahmadnagar district.

Note: Rahata is newly formed taluka, existed on 26th June 1999.

The table 3.6 of population and decadal change in tahsils of Ahmadnagar district shows indefinite trend. A negative trend is shown during 1991-2001 decade for Kopergaon and Shrirampur taluka due to formation of new Rahata taluka in 1999, contributing most of the villages from these two talukas.

Stages of Demographic Transition in Study Area:

- 4 Phases of growth for India's population-

Table No: 3.7

Stages of Demographic Transition	Period	Stage	Population	Population Growth.	Pop. Growth Per Annum.
I	1891-1921	Stagnant population.	236-251 million.	15 million.	0.5 million
II	1921-1951	Steady Growth. (Moderate)	251-361 Million.	110 million.	3.67 million
III	1951-1981	Rapid High Growth.	361-683 million.	322 million.	10.73 million
IV	1981-2011	High growth With definite Signs of slowing down.	683-1210 million.	527 million.	17.57 million

- 4 Phases of growth for Maharashtra's population-

Table No: 3.8

Stages of Demographic Transition.	Period	Stage	Population	Population Growth.	Pop.Growth Per Annum.
I	1891-1921	Stagnant population.	24.04-26.36 million.	2.32 million.	0.07 million
II	1921-1951	Steady Growth. (Moderate)	26.36-32.00 million.	5.64 million.	0.18 million
III	1951-1981	Rapid High Growth.	32.00-62.78 million.	30.78 million.	1.03 million
IV	1981-2011	High growth With definite Signs of slowing down.	62.78-112.37 million.	49.59 million.	1.65 million.

- 4 Phases of growth for Ahmadnagar's population-

Table No: 3.9

Stages of Demographic Transition.	Period	Stage	Population	Population Growth.	Pop.Growth Per Annum.
I	1891-1921	Stagnant population.	7.19 lakh.		
II	1921-1951	Steady Growth. (Moderate)	7.19-14.10 lakh.	6.91 lakh.	0.23 lakh
III	1951-1981	Rapid High Growth.	14.10-27.08 lakh.	12.98 lakh.	0.43 lakh
IV	1981-2011	High growth With definite Signs of slowing down.	27.08-45.43 lakh.	18.35 lakh.	0.61 lakh

The problem of rapid population growth is one of the most serious confronting mankind and it has gradually assumed frightening proportions. Some thinkers even regard the problem of explosively population growth as one of the three major obstacles to the progress of the world – the human bomb, over population and the gap between the rich and the poor³. In our country even a small increase in percentage of population matters much, particularly when birth rate is very high which means addition of non-productive percentage of population every year. Since in the country there is increase in the number of children because of declining infant mortality⁴. There fore birth and death rate plays important role in the growth of population of any geographical area. Population growth is also affected by social and political factors. ‘Social and political factors may predispose towards population growth. Such social customs as ancestor worship among the Chinese, polygamy among the Moslem peoples and early marriage among the Hindus have encouraged population growth’.⁵

‘From the point of view of over-all population growth, there is only one possible practical solution : birth control. This is not an easy matter, for it has to meet the challenge of religious, social and even economic and political factors. It is not likely to be easy to educate people to practice birth control, although there is a gleam of hope is that birth control is beginning to make headway in such over-crowded countries as Japan and India. However it must be remembered that, in any event, birth control must be looked upon as a slow and a long – term method and slowing down population growth’.⁶

3.2 Distribution of population :

The Distribution of population is important aspect of population characteristics. It is a geographical phenomena and is uneven over the surface of the earth. It is mainly related to the location and area. The concept of distribution of population is concern with aerial variation and aggregative parts of the statistical units. 'The concept of distribution of population though not identical are so intimately related to each other that there is a genuine reason to discuss them simultaneously under the same chapter. In the earlier years of history of human settlement when the distribution were not difficult to discover with the spread of population into vast aerial units of irregular administrative sine, the controls of such patterns have become more and more complex defying an easy interpretation. The analysis of population distribution holds immense significance for population geographers as its successful understanding holds the key to the analysis of entire demographic character of an area. First of all a distinction must be made between population distribution and density. The distribution of population is more location while the density is more proportional. The former refers to the spatial pattern in which the population finds its location such as linear, dispersed, nucleated, agglomerated etc. and the latter is concerned with the ratio between the size of population and area. Thus when one is dealing with distribution the concern is more for the pattern of spread of population and when one is dealing with density the concern is more for some kind of man land ratio'.⁷

Population of the every geographical area is increasing one. It is increasing rapidly in some places while slowly in some geographical area. 'It shows rapid trend in areas where there is scope for economic development and where several factors favors human

settlements. In areas where conditions are favorable for the development of agriculture, Industries, transportation and trade, the carrying capacity of land is high and such areas can accommodate more people'.⁸

There are several ways to describe the spatial distribution of population and many devices have been developed to depict population distribution. Geographers, demographers, sociologists, statisticians have all made their contribution in developing the ways to describe population distribution and concentration. One of the simple way applied to measuring population is percentage distribution, where by the percentage of people living in the geographic areas can be calculated. For instance in order to have an idea of spatial distribution of our India's population one can simply calculate the percentage of country's population living in each state and union territory. The sum of all such percentage comes 100. Similarly another method is under practice is rank order. A further comparison of ranking from census to census can highlight the temporal trends in distribution and the redistributive tendencies. The geographers have also shown some interest in calculating some sort of an average point for population distribution with in a country or an area. The most popular measures in this regard have been the medium point the mean point often called. The center of population. The median point of population in any area can be calculated with the help of median lines. The median lines are two orthogonal lines each of witch divides the concerted area into two parts each having equal number of inhabitants. The median lines are drawn conventionally perpendicular to each other in north south and east west directions and their point of intersection is known as the median point. Such a median points can be calculated for a country

at different points in time with a view to understanding the re-distributional tendencies in its population through time.

The centre or the mean point of population may be defined as the centre of gravity of population of an area imply the point upon which the plane would balance if it were a plane without weight and the population distributed thereon each individual being assumed to have equal weight and to exert pressure on the central point proportionate to his distance from the point. Thus, mean point unlike the median point is influenced by the distance of an individual from it. The centre of population need not fall in a densely settled part of the country. Some times this centre may actually fall in the sea especially in case of an archipelago. This is one of the circumstances which stimulated Stewart and Warntz (1959)⁹ to regard this concept as more misleading than useful. 'The concept of population potential as developed by Stewart and Warntz applies to accessibility of a point to the population. If the influence of each individual at a point is considered to be inversely proportionate to his distance from it, the total potential of population at the point will be sum of the reciprocals of the distance of all individuals from the point. Thus Stewart refers to population potential as a measure of nearness of people to a point. It assumes that the influence or accessibility is inversely proportional to the distance. Thus, using this technique, contours of population potential can be computed and drawn for a country.'¹⁰

3.2.1 Population Distribution in India :

As per as distribution of population in India, it has certain typical characteristics with respect to physical, social and economic factors. It includes huge population, ethnic multiplicity, rural bias

and unevenness in its distribution. Mostly population size is considered as a problem, but when youth population is more, it remain productive and supportive for economic growth of the country. There fore we looking towards population size as a asset of our country. The country has diversity in ethnic groups. So always said that, 'India have unity with diversity'. This unity with diversity is the unique characteristics of Indian population.

The rural-urban population distribution in India shows more percentage of rural population than urban. As per 2011 census 31.16% people live in urban areas and remaining 68.84% in rural areas. Urbanization in India is increasing and will reach 40.70 % till 2030. Urbanization is increasing due to rural-urban migration. Among the metropolitan city's, Mumbai show large scale rural-urban migration. The present urbanization rate is 4.1 % in Delhi, 3.1 % in Mumbai and 1 % in Kolkata. U.P, Maharashtra, Bihar, West Bengal, A.P, M.P, Tamil Nadu, Karnataka are the states of thickly populated. While Sikkim, Nagaland, Meghalaya, Manipur, Tripura, H.P, J & K, Haryana having less population. Physical factor make an effect over population distribution. Obviously we experienced that the hilly states to the north-east and north-west are thinly populated. While thickly populated states are favorable for agriculture, availability of cultivable land, fertility of soil, availability of water for irrigation etc. which promote population. Secondly major rivers as Mahanadi, Godavari, Krishna and Kaveri promoted more population due to improvement in irrigation and associated development in the field of agriculture. Which also attracts in-migrants from the neighboring areas.

The development process taking shape in the less developed countries under the stress of explosive state of demographic

transition have often initiated redistributive tendencies in the spatial patterns of employment opportunities. Consequently, there are qualitative changes in the distributional pattern of population in these countries. It is in this context that the studies concerning population distribution assume significance for less developed countries.

Unfortunately in India not much attention has been paid to the analysis of this attribute of population. Geddes (1942)¹¹ and Ahmads (1941)¹² studies of the pre- independence era notwithstanding Chatterjee (1962)¹³ using the 1951 census data, stands out as the solitary, attempt during the post- independence period dealing with this aspect of Indian population at national level. However some sporadic attempts made at regional level include those of Kuriyan (1938)¹⁴ Verma (1956),¹⁵ Chatterjee (1961),¹⁶ Sinha (1958),¹⁷ Krishan (1968),¹⁸ Ghosh (1970),¹⁹ Prakash (1970),²⁰ and Mehta (1973)²¹ which covered only Kerala, Punjab, West Bengal, Orissa, Bihar, Uttar Pradesh and Rajasthan. Gosal and Chandna (1979)²² while taking stock of research work done in population geography during 1969-72 stressed the need for examining the patterns of population distribution and density in the country by using the latest census date.

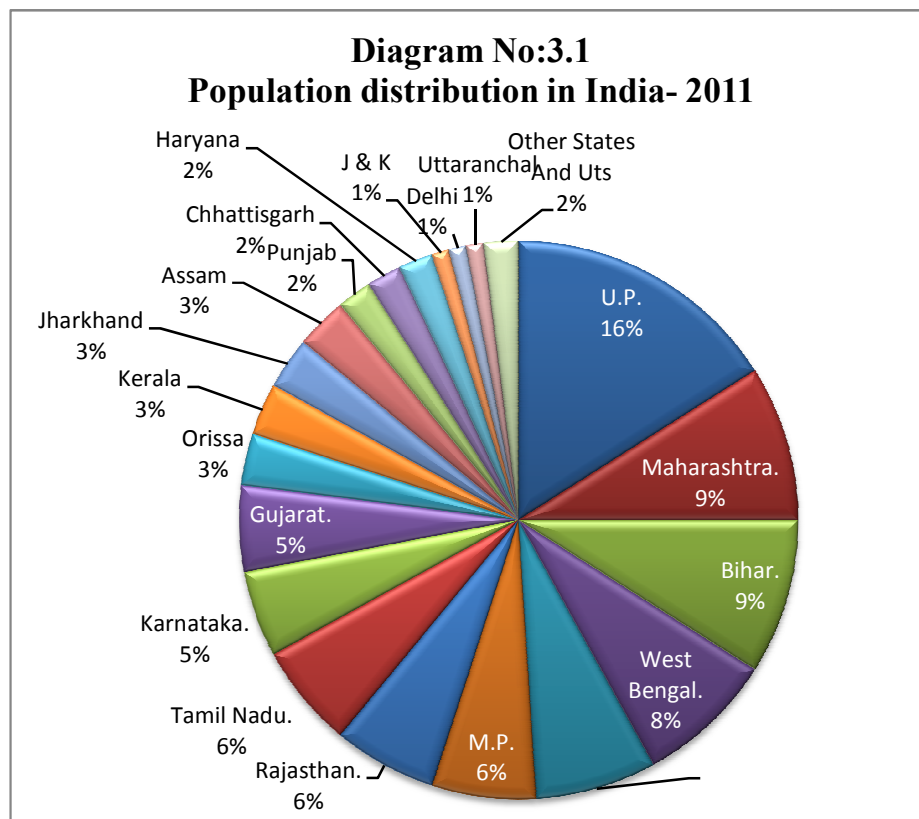
Current Population of India – The census 2011 recorded India, with 1,210,193,422 (1.21 billion) people is the second most populous country in the world, while China is the ranking with over 1,350,044,605 (1.35 billion) people. The figures show that India represents almost 17.31% of the world's population, it means one out of six people on this planet is Indian. More than 50% of India's current population is below the age of 25 and over 65% below the age of 35. About 72.2% of the population lives in some 638,000 villages and the rest 27.8% in about 5,480 towns and urban centers.

Population distribution in India: 2011

Table No: 3.10

Population distribution in India:			
State	Population in %	State	Population in %
U.P.	16	Orissa.	03
Maharashtra.	09	Kerala.	03
Bihar.	09	Jharkhand.	03
West Bengal.	08	Assam.	03
Andhra Pradesh.	07	Punjab.	02
M.P.	06	Chhattisgarh.	02
Rajasthan.	06	Haryana.	02
Tamil Nadu.	06	J & K.	01
Karnataka.	05	Delhi.	01
Gujarat.	05	Uttaranchal.	01
Other States and Uts.	02		
		Total	100 %

Source: Census of India.



The table of distribution of population in India-2011 shows that about 34% population is concentrated in three states only. These states are U.P, Maharashtra and Bihar. While 33% population is contributed by five states as West Bengal, Andhra Pradesh, M.P, Rajasthan and Tamil Nadu. Remaining all the states contribute 33% of population in India.

Population distribution in Maharashtra: As per the 2001 census, Maharashtra has a population of 96,752,247 inhabitants making it the second most populous state in India. As per 2011, Maharashtra bears population of 112,372,972 keeping second position in India. Which contributes 9.42 % and 9.29 % in 2001 and 2011 census.

According to the 2011 census. Population of Maharashtra is 112,372,972 , is the second largest state in India. U.P. at first and Bihar is at third rank. Only eleven countries of the world have a population greater than Maharashtra. Its density is 365 inhabitants per square kilometer. Males constitute 50.3 million and females, 46.4 million. Its growth rate between 1991–2001 was 22.57 % and 16.14 % in 2001-2011. Maharashtra retained its share little over 14% in the total urban population in India.

District wise Population Distribution in Maharashtra: 2001

Table No: 3.11

Sr. No.	District	Population- 2001	Percent to the State
1	Ahmadnagar	4,040,642	4.22%
2	Akola	1,818,617	1.68%
3	Amravati	2,606,063	2.69%
4	Aurangabad	2,897,013	2.99%
5	Beed	2,161,250	2.23%
6	Bhandara	1,135,835	1.17%
7	Buldhana	2,232,480	2.3%
8	Chandrapur	2,071,101	2.14%
9	Dhule	1,707,947	1.76%
10	Gadchiroli	970,294	1%
11	Gondia	1,200,151	1.24%
12	Hingoli	987,160	1.02%
13	Jalgaon	3,679,936	3.8%
14	Jalna	1,612,357	1.66%
15	Kolhapur	3,515,413	3.63%
16	Latur	2,080,285	2.15%
17	Mumbai City	3,326,837	3.43%
18	Mumbai Suburban	8,587,000	8.86%
19	Nagpur	4,051,444	4.18%
20	Nanded	2,876,259	2.97%
21	Nandurbar	1,309,135	1.35%
22	Nasik	4,993,796	5.15%
23	Osmanabad	1,486,586	1.53%
24	Parbhani	1,527,715	1.58%
25	Pune	7,224,224	7.46%
26	Raigad	2,207,929	2.28%
27	Ratnagiri	1,696,777	1.75%
28	Sangli	2,583,524	2.67%
29	Satara	2,796,906	2.89%
30	Sindudurg	868,825	0.9%
31	Solapur	3,849,543	3.97%
32	Thane	8,131,849	8.39%
33	Wardha	1,230,640	1.27%
34	Washim	1,020,216	1.05%
35	Yavtmal	2,077,144	2.14%
	Total-----	96752247	

Source: Census of India.

Tahsil-wise Distribution of population in Ahmadnagar District :

According to the 2001 census the total population of **Ahmadnagar** district is 4040642 having 3236945 rural population and 803697 urban population and 2083053 male population and 1957589 female population. According to the 2011 census the total population of **Ahmadnagar** district is 4543083 having 3630012 rural population and 913071 urban population and 2348802 male population and 2194281 female population. Thus Ahmadnagar has 4.27% of state population over 5.66 percent of its area. Among the 14 Tahsil of the district, Nagar Tahsil (606690) is the most populated and **Jamkhed** Tahsil (134216) the least. Other tahsils in order of their size of population are (1) Sangamner (441439), (2) Newasa (326698), (3) Rahuri (294924), (4) Rahata (288279), (5) Shrigonda (277356), (6) Kopergaon (277170), (7) Akola (266638), (8) Shirampur (256458), (9) Parner (246552), (10) Patherdi (214872), (11) Karjat (205674), (12) Shevgaon (203676).

‘According to the 2001 census **80.11%** (3236945) peoples lives in rural areas. This percent per village rural population is 2047. This proportion is highest in Shirampur tahsil, that is 4749 people. And lowest in Jamkhed tahsil. Out of total population of the district **19.89%** (803697) people lives in urban areas. The proportion of urban population is highest in Nagar tahsil and lowest in Patherdi tahsil’.²³ According to 2001 census the district population percentage is **4.27** in Maharashtra. Ahmadnagar district is 6th in rank according to Maharashtra population 2011. The district has 1581 inhabited villages of 14 tahsil. Out of the total villages 02 are uninhabited. The region of the district partially comes under drought prone area. Thus the rural population is distributed among 1581

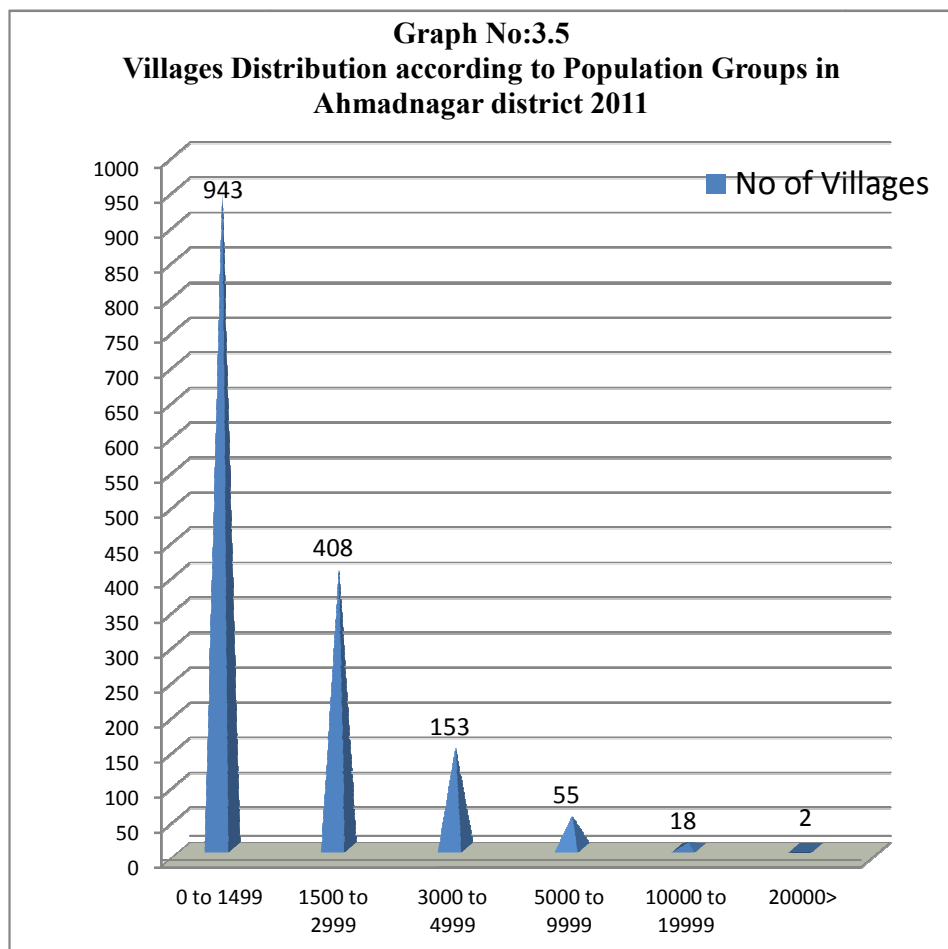
inhabited villages of 14 Tahsil. The average number of inhabited villages per tahsil comes to above 112.

Villages Distribution According to Population Groups in Ahmadnagar district 2011 :

Table No: 3.12

Sr.No.	Population Group	No. of Villages	Percentage
01.	0 to 1499	943	59.65
02.	1500 to 2999	408	25.81
03.	3000 to 4999	153	9.68
04.	5000 to 9999	55	3.48
05.	10,000 to 19999	18	1.14
06.	20,000 >	02	0.13
	Total -----	1581	100.00 %

Source: Ahmadnagar District Socio-Economic Report- 2012.



As per village wise population distribution more than fifty percent (59.65%) villages having population up to 1500 only. About quarter percent (25.81%) villages bears population in between 1500 to 3000. It means that 1351 villages out of 1581 villages having population below 3000, which contribute 85.46%.

Tahsil wise Rural and Urban Population in Ahmadnagar

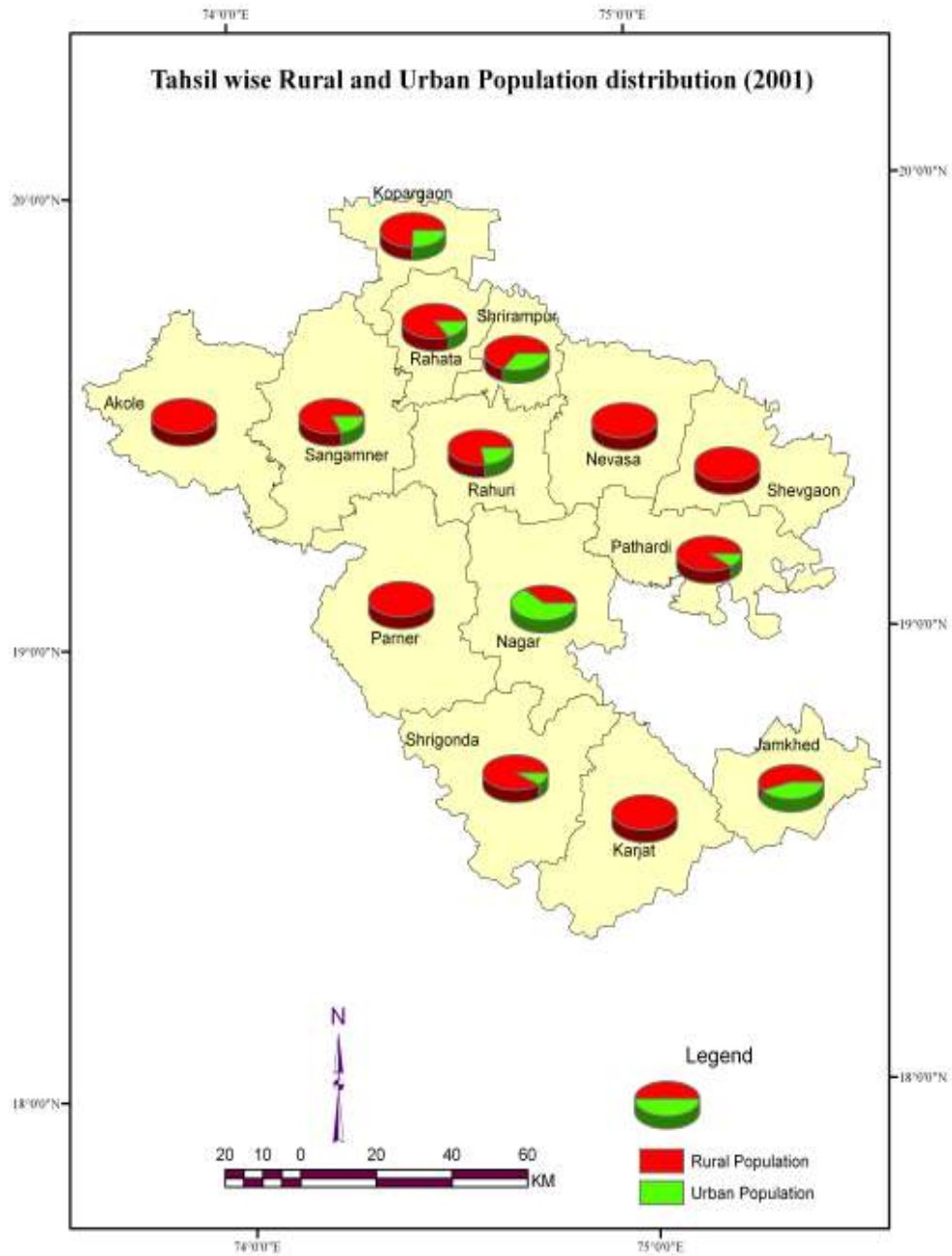
District 2001:

Table No: 3.13

Tahsil	Rural Population			Urban Population		
	Person	Male	Female	Person	Male	Female
Akola	266638	135062	131576	-	-	-
Sangamner	360114	184615	175499	81325	42337	38388
Kopergaon	206340	106872	99468	70830	36778	34052
Rahata	243076	125207	117869	45203	23577	21626
Shrirampur	167697	86396	81301	88761	45208	43553
Newasa	326698	168624	158074	-	-	-
Shevgaon	203676	104299	99377	-	-	-
Patherdi	192045	98139	93906	22827	11977	10850
Nagar	230733	119980	111453	375957	199840	176117
Rahuri	230108	118817	111291	64816	33647	31169
Parner	246552	124041	122511	-	-	-
Shrigonda	251032	129445	121587	26324	13620	12704
Karjat	205674	106420	99254	-	-	-
Jamkhed	134216	68852	65364	106562	54594	51968

Source :- Socio- Eco Abstract of Ahmadnagar district 2005-06.

Map No. 3.1



Tahsil-wise Population, Number of Villages and Town in Ahmadnagar District: 2001

Table No: 3.14

Tahsil	Total Population			No. of Village	No. of Towns
	Person	Male	Female		
Akola	266638	135062	131576	191	-
Sangamner	441439	226952	214487	169	02
Kopergaon	277170	143650	133520	79	02
Rahata	288279	148784	139495	58	02
Shrirampur	256458	131604	124854	54	02
Newasa	326698	168624	158074	129	-
Shevgaon	203676	104299	99377	112	-
Patherdi	214872	110116	104756	134	01
Nagar	606690	319120	287570	104	05
Rahuri	294924	152464	142460	96	02
Parner	246552	124041	122511	131	-
Shrigonda	277356	143065	134291	114	01
Karjat	205674	106420	99254	121	-
Jamkhed	134216	68852	65364	86	01
District in all total-	3236945	1661811	1575134	1578	18

Source :- Socio- Eco Abstract in Ahmadnagar district 2001.

Table No. 3.14 reveals that the district population distribution shows in clear that the distribution of population is uneven. In terms of population and number of inhabited villages Akola tahsil holds the first (191), Sangamner holds second (169) during the period of investigation. There are 18 towns in the district 'Ahmadnagar' is the largest populous towns. According to 2001 census the urban population of the Nagar Tahsil is 375957 out of them total male population is 199840 and female population is 176117. In Nagar Tahsil total population is 606690 out of them male population is 319120 and female population is 287570.

Tahsil-wise Percent of population in Ahmadnagar district -1961 to 2001

Table No: 3.15

Sr. No.	Name of Tahsil	Total Rural Urban	1961%	1971%	1981%	1991%	2001%	Average
1	Akola	Total	6.67	6.50	6.50	6.60	6.60	6.57
		Rural	6.67	6.50	6.50	6.60	6.60	
		Urban	0.00	0.00	0.00	0.00	0.00	
2	Sangamner	Total	9.27	9.64	10.35	10.60	10.90	10.15
		Rural	8.04	8.38	8.90	9.10	8.90	
		Urban	1.22	1.26	1.50	1.50	2.00	
3	Kopergaon	Total	11.12	11.57	10.80	10.00	6.85	10.07
		Rural	9.80	10.03	9.10	7.40	5.10	
		Urban	1.34	1.54	1.70	2.60	1.75	
4	Rahata	Total	-	-	-	-	7.10	7.10
		Rural	-	-	-	-	6.00	
		Urban	-	-	-	-	1.10	
5	Shrirampur	Total	10.03	10.90	10.80	10.10	6.35	9.64
		Rural	8.75	9.16	8.80	7.80	4.15	
		Urban	1.28	1.54	2.00	2.30	2.20	
6	Newasa	Total	6.63	6.62	7.80	8.10	8.10	7.45
		Rural	6.63	6.62	7.80	8.10	8.10	
		Urban	0.00	0.00	0.00	0.00	0.00	
7	Shevgaon	Total	5.88	5.67	5.10	5.05	5.05	5.35
		Rural	5.88	5.67	5.10	5.05	5.05	
		Urban	0.00	0.00	0.00	0.00	0.00	
8	Patherdi	Total	6.24	6.10	5.45	5.50	5.30	5.72
		Rural	6.24	6.10	5.45	4.90	4.75	
		Urban	0.00	0.00	0.00	0.60	0.55	

9	Nagar	Total	13.82	13.37	13.50	14.30	15.00	14.00
		Rural	7.02	6.83	6.80	7.70	5.70	
		Urban	6.80	6.54	6.70	6.60	9.30	
10	Rahuri	Total	6.63	7.02	7.55	7.50	7.30	7.2
		Rural	6.63	7.02	6.50	5.90	5.70	
		Urban	0.00	0.00	1.00	1.60	1.60	
11	Parner	Total	7.38	6.82	6.55	6.35	6.10	6.64
		Rural	7.38	6.82	6.55	6.35	6.10	
		Urban	0.00	0.00	0.00	0.00	0.00	
12	Shrigonda	Total	6.66	6.45	6.70	6.95	6.85	6.72
		Rural	6.66	6.45	6.70	6.35	6.20	
		Urban	0.00	0.00	0.00	0.60	0.65	
13	Karjat	Total	5.60	5.44	5.40	5.45	5.10	5.40
		Rural	5.60	5.44	5.40	5.45	5.10	
		Urban	0.00	0.00	0.00	0.00	0.00	
14	Jamkhed	Total	4.12	3.81	3.50	3.50	3.30	3.65
		Rural	3.81	3.50	3.50	3.50	2.60	
		Urban	0.00	0.00	0.00	0.00	0.70	
	District Total	Total	100	100	100	100	100	
		Rural	89.36			84.20	80.15	
		Urban	10.64			15.80	19.85	

Source : Ahmadnagar district census hand book 1961 to 2001.

The table No.3.15 shows distribution of population in percentage in the district. The tahsils of north Ahmadnagar shows more percentage of population. While tahsils of south Ahmadnagar shows less percentage of population. Sangamner (10.15%), Kopergaon (10.07%), Shrirampur (9.64%), Newasa (7.45%), Rahuri (7.2%) are the tahsils in north Ahmadnagar. These tahsils are characterized by well developed irrigation facility, well developed co-operative sector, well established communicative systems etc. reflected in distribution of population. That is why tahsils of north Ahmadnagar shows more percent of population. The tahsils of south Ahmadnagar as shevgaon (5.35%), Pathardi (5.72%), Karjat (5.40%), Jamkhed (3.65%) shows less percent of population. Akola (6.57%) and Shrigonda (6.72%) shows some what moderate percentage as compared to other tahsils. Akola is well developed by irrigation but affected by physiography as sahyadrian mountain ranges. While Shrigonda is facilitated by kukadi and Bhima irrigation projects.

3.3 DENSITY OF POPULATION

3.3.1 Introduction :-

The general density of population is the concept mainly related to the number of the peoples and land area. Which gives pressure of population over the resources available in unit area. Therefore density of population is important element, which studying population characteristics of an geographical area. It gives direct relation between the size of population and the geographical land area. The Singh I, Author of the “*Population Geography*”, elaborated this concept in this book as, ‘It is simple concept of relating population size to the land area with a view to assessing crudly the pressure of population upon the resources of the area. Thus, it is the measurew of the incidence of population concentration and is generally expressed in terms of persons per square kilometer or per square miles of land area rather than of gross area (land and water)’.⁴² In short population density gives the pressure of population over a land area, which can be measured in sq. km. or miles. Thus it is a measurement of persons per sq. km. or per sq. miles of land area. In this arithmetic ratio calculation, numerator is population number and denominator is area. So the general density is also known as ‘Arithmetic Density’. It is calculated with the help of following equation.

$$\text{Density of population} = \frac{\text{Total population.}}{\text{Total Area.}}$$

3.3.2 Types of Density :- various densities are concern with their utility in various types of analytical studies, so they are calculated as

3.3.2.1 Arithmetic Density :- It is a ratio between total population and total area of the region. It is expressed in terms of persons per

sq. km. or persons per sq. miles. It is useful in understanding the man-land relationship.

$$\text{Density of population} = \frac{\text{Total population.}}{\text{Total Area.}}$$

3.3.2.2 Physiological or Nutritional Density :- It is a ratio between total population and area under agriculture. It is expressed in terms of population per acre of area under agriculture. It is quite useful for the countries who's economy is based on agriculture.

$$\text{Nutritional Density} = \frac{\text{Total population.}}{\text{Land under Agriculture.}}$$

3.3.2.3 Agricultural Density :- It is ratio between people engaged in agriculture and area under agriculture.

$$\text{Agricultural Density} = \frac{\text{Number of people engaged in Agriculture.}}{\text{Total area under Agriculture.}}$$

‘Therefore , the agricultural density is expressed in terms of agricultural population per unit of cultivated area. It has proved to be a useful index of man land relationship in primarily an agrarian context’.⁴³

3.3.2.4 Critical Density :- It is a measure of number of people that can be supported by a region with the present land-use system. It gives the maximum density of population that the region can support continuously without damaging land in the existing environment.

$$\text{Critical Density} = \frac{A}{B} \times \frac{C}{D}$$

Where as **A**= Proportion of land under agriculture.

B= Proportion of unused land.

C= Per person area under agriculture.

D= Area of the land that can be cultivated with traditional methods of agriculture.

3.3.2.5 Economic Density :- It is ratio between total requirements of population of a region and total productivity of the region. It is obtained with the help of following equation.

$$\text{Economic Density} = \text{NK}/\text{SH}$$

P = Total population.

K = Requirements per person.

Therefore NK = Total population X Requirements per person.

= Total requirements of the population of the Region.

S = Total Area.

H = Productivity per sq.km.of area.

SH = Total area X productivity per sq.km. of area.

= Total productivity.

When this ratio is one, then the balance between total requirements of the region and total productivity of the region is ideal.

When the ratio is less than one, it means productivity of the land is more than its total requirements.

When this ratio is more than one, then it means the productivity of land is less than its total requirements.

“Geographers, by way of manipulating the numerator or denominator, have devised various types of densities having a varying degree of utility in different situations. The objective, of course, has been to arrive at a better understanding of the population-resource relationship. These ratios have been called as Arithmetic density, Economic density etc”.⁴⁴ Out of these densities,

population density is very useful tool in the analysis of density of mans distribution in the surrounding. ‘However (clark 1972, p-29) rightly observed that , the concept of density of population is most divulging and is a useful tool in the analysis of diversity of man’s distribution in space. Demko (1970 p-22) recognizes that the land and people constitute the few significant elements of an area and, therefore, the ratio between the two is of fundamental interest to all scholars concerned with population analysis’.⁴⁵

The recent census records of population density shows increase in number by 29 persons per sq.km.in the district. It was 106 in 1961, and now became 237 and 266 in 2001 and 2011 census respectively.

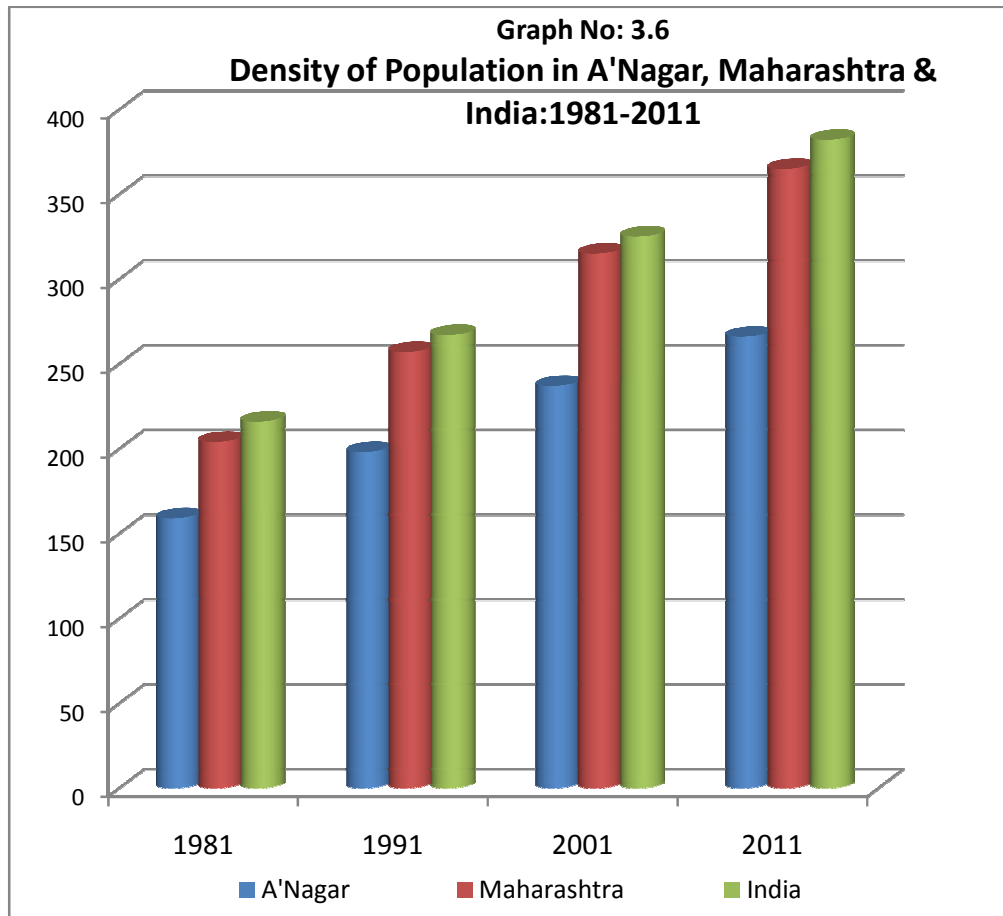
Density of population of Ahmadnagar, Maharashtra & India:

1981-2011

Table No: 3.16

Census year.	Admadnagar Density /sq.km.	Maharashtra Density /sq.km.	India Density /sq.km.
1981	159	204	216
1991	198	257	267
2001	237	315	325
2011	266	365	382

Source: district census handbook.



As per comparative chart, density of population in the district, state and the country is increased because of increase in population. It was 159 (1981) to became 266 (2011), which is increased by 107 per km.² during 30 years. Accordingly increased by 161 and 166 in Maharashtra and India respectively.

Population density of Ahmadnagar district-

In 2001 = Total population/Total area.

$$= 4040642/17048$$

$$= 237/\text{km}^2$$

In 2011 = Total population/Total area.

$$= 4543083/17048$$

$$= 266/\text{km}^2$$

Tahsil wise population density of the Ahmsdnagar district-comparative chart: 1961 and 2001:

Table No: 3.17

Tahsil	Census 1961	Census 2001
Kopergaon	189	382
Akola	79	181
Sangamner	98	262
Shrirampur	221	450
Rahuri	113	289
Newasa	95	254
Shevgaon	92	198
Parner	73	128
Nagar	162	427
Pathardi	101	178
Shrigonda	74	173
Karjat	68	138
Jamkhed	84	153
Rahata.	-	437
District Total-	106	237

Source: Census handbooks.

The census record of 1961 shows that the density below 100 per sq.km. was recorded in Akola, Sangamner, Newasa, Shevgaon, parner, Shrigonda, Karjat, Jamkhed and in between 100 to 200 per sq.km. was found in Kopergaon, Rahuri, Nagar and pathardi. While above 200 sq.km. density was observed in Shirampur tahsil only.

Similarly, 2001 census shows the density record as, there is not a single tahsil belongs the group below 100 per sq. km. and in between 100-200 group includes Akola, Shevgaon, Parner, Pathardi, Shrigonda, Karjat, Jamkhed. And above 200 per sq.km. was found in Kopergaon, Sangamner, Shirampur, Rahuri, Newasa, Nagar and Rahata.

**3.3.3 Tahsil wise population density in Ahmadnagar district:
1961-2001.**

Table No:3.18

Tahsil	1961	1971	1981	1991	2001
Kopergaon- Total	189	251	279	312	382
Rural		226	244	249	292
Urban		931	1115	1075	4026
Akola- Total	79	99	119	137	181
Rural		99	119	137	181
Urban	-	-	-	-	-
Sangamner- Total	98	130	167	210	262
Rural		114	144	183	216
Urban		1754	2456	3006	4077
Shrirampur- Total	221	307	362	393	450
Rural		267	303	306	310
Urban		1468	2066	5808	3031
Rahuri- Total	113	153	196	247	289
Rural		153	180	212	246
Urban	-	-	458	624	755
Newasa- Total	95	121	170	212	254
Rural		121	170	212	254
Urban	-	-	-	-	-
Shevgaon- Total	92	114	122	156	198
Rural		114	122	156	198
Urban	-	-	-	-	-
Parner- Total	73	87	99	114	128
Rural		87	99	114	128
Urban	-	-	-	-	-
Nagar- Total	162	200	241	307	427
Rural		105	125	169	198
Urban		4667	5706	7359	2838
Pathardi- Total	101	126	134	144	178
Rural		126	134	132	163
Urban	-	-	-	581	815

Shrigonda-	Total	74	92	113	145	173
	Rural		92	113	138	165
	Urban	-	-	-	259	307
Karjat-	Total	68	88	101	124	138
	Rural		88	101	124	138
	Urban	-	-	-	-	-
Jamkhed-	Total	84	99	109	135	153
	Rural		99	109	135	125
	Urban	-	-	-	-	938
Rahata-	Total	-	-	-	-	437
	Rural	-	-	-	-	400
	Urban	-	-	-	-	877
Disrtict -	Total	106	133	159	198	237
	Rural		119	140	170	194
	Urban		2235	1984	1543	2325

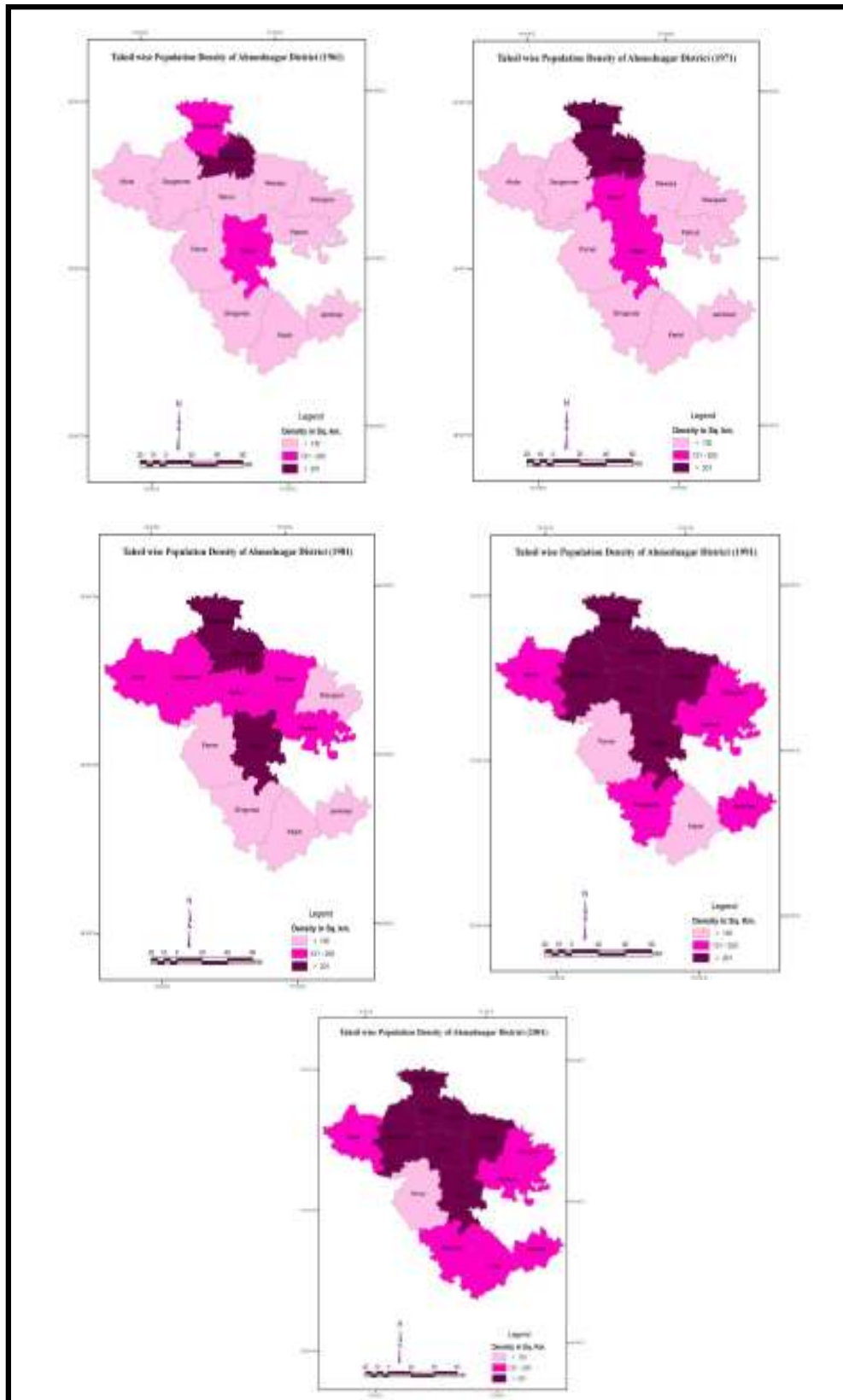
Source: Computed by Researcher.

The district has an average density of 106, 133, 159, 198 and 237 persons per km² from 1961 to 2001, which is less than the average density of the state and the national average. Out of 14 tahsils Shrirampur is the most thickly populated tahsil with 221, 307, 362,393 and 450 persons per km.² While parner is having least density 73, 87, 99, 114 and 128 persons per km.² Kopergaon, Nagar, Rahuri, Newasa and Sangamner are the tahsils which have density more than the average density of the district.

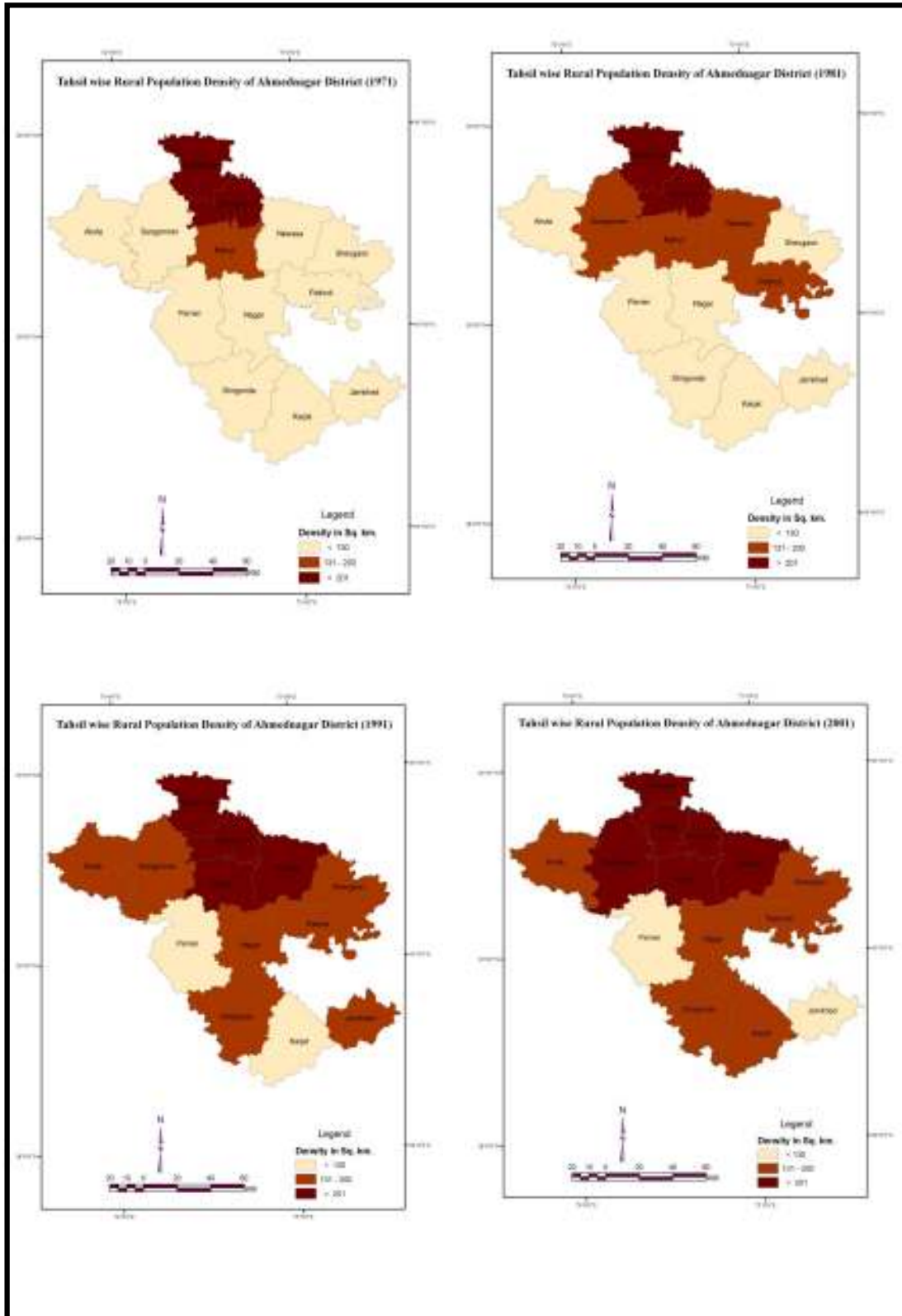
As per urban density, highest in nagar tahsil as 4667, 5706, 7359, 2838 persons per km.² and least in Shrigonda tahsil. Rural density is highest in Rahata (400) and least in Jamkhed (125) tahsil. The northern tahsils of the district are well irrigated and economically sound than southern tasils of the district. The density also more in northern than the southern tahsils of the district.

Map No. 3.2

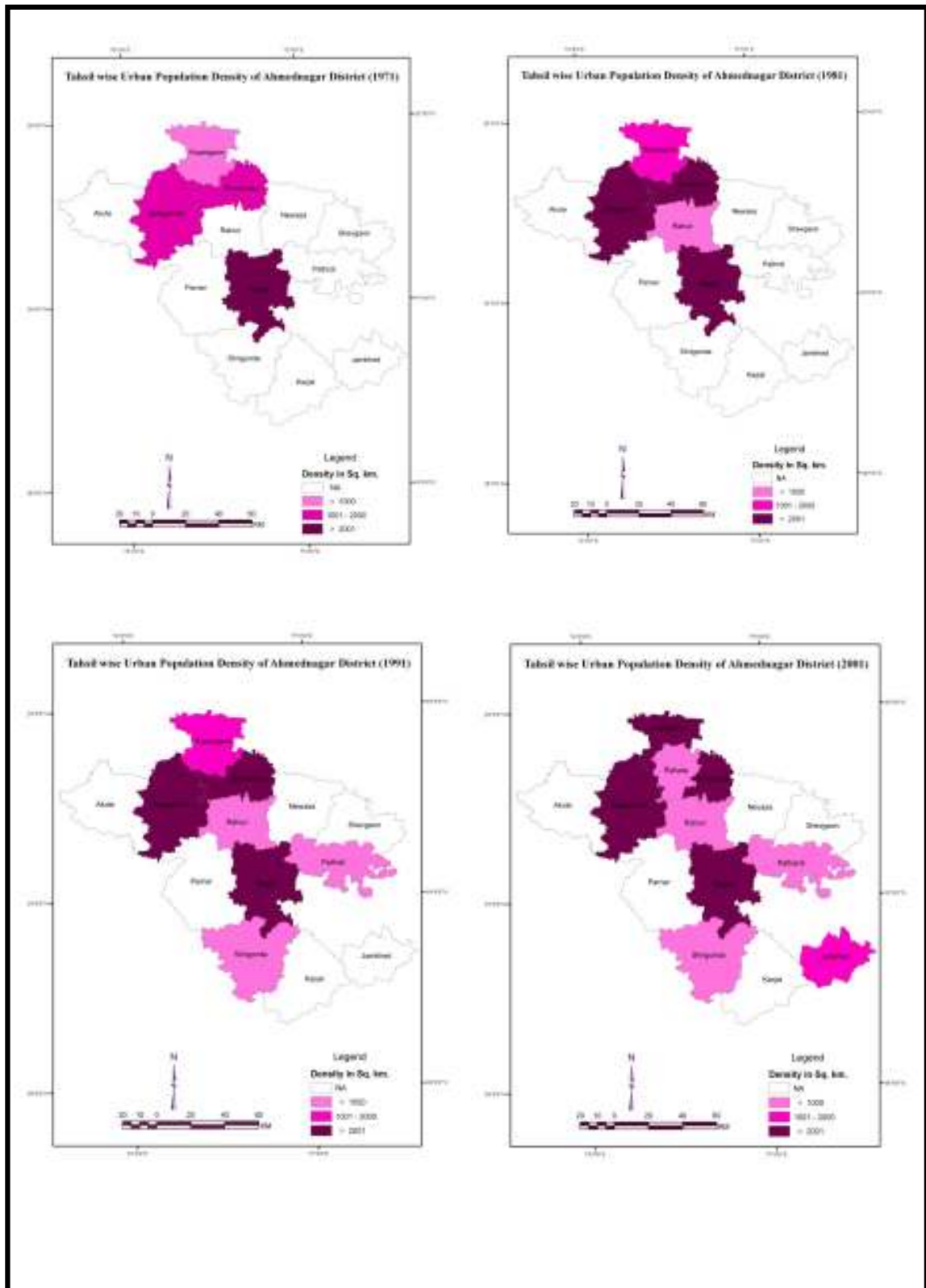
Tahsil wise population density in Ahmadnagar district: 1961-2001



Map No. 3.3
Tahsil wise Rural Population Density in Ahmadnagar
District: 1971-2001



**Tahsil wise Urban Population Density in Ahmadnagar
District:1971-2001
Map No. 3.4**



3.4 COMPOSITION OF POPULATION :

A study of composition of population is an important aspect of the study of population characteristics. The study of population, among other things, attempt to answer the questions; what kind of people are fund in any given population and haw do those in one group differ from those in another? The study of characteristics of population and composition of population covers this aspect of population studies.

It is necessary to study the changes in population characteristics, population composition also take in to consideration that the attributes and their composition at a point of time. It is of course, not enough only to study the composition of any population. It is necessary to seek explanations for any changes which may have occurred and visualize the consequences of these changes.²⁴

The population of a species generally arises as a result of reproduction, active transport of individuals or their passive transport by such agencies as wind, water etc. All the three means of population growth are influenced by several factors of the environment as well as by the characteristics of the individuals of the species itself. Under favorable conditions, the group of individuals increases in number. However environment is never static and keeps on charging from time to time, that is dynamic. Thus, environment act as natural check on population. An increase in the number of individuals of a species results in the consequences of concern to the species itself. And also to other interdependent species graving in the area such as increase brings about harmful as well as beneficial effects on the species. The harmful effects is mainly due to increased competition, particularly, intra-specific for

nutrition, space etc. The beneficial effects include the protection, influences an reproduction and origin of division of labour.²⁵

Population composition forms important aspect of Age composition, Sex composition Economic composition etc. Equally important are marital status, educational and religious composition of population.

3.4.1 Age Composition :- Age composition gives description of age wise population. The Age composition of any population is support for social relations within a community. It also helpful for the many types of planning, especially for services and labor supply.

‘Age is an important variable in measuring potential school population, potential voting population, potential manpower, future population projections and projections for the requirements of teachers, doctors, technical hands, armed personnel etc. Age is also an important variable in the studies pertaining to mortality, fertility and other demographic characteristics, like dependency ratio’.²⁶

Age composition of a population is influenced by fertility, mortality, migration and wars. Fertility rate determines the proportion of population in different age groups. mortality rate at different ages affects the age composition. The percent of population in the younger age group and in the older age group affects an increase or decline in particular population. The impact of migration is some what different than that of fertility and mortality because migrants have their own typical age pattern as well as pattern of natural increase. As the migrants tend to be relatively younger and having high rate of natural increase, their usual short term impact is the decline in the proportion of adult and aged population. This kind of effect over age structure may continue if the volume of migration is constant. Therefore the impact of migration upon age structure is

largely because of the fact that migration tends to be age-selective as people in the working age group of 15- 34 are more mobile than the people in the younger and older age groups, the age structure of the respective areas get affected significantly.

The age structure of a population is also affected by wars, Natural calamities and national government policies. The impact of wars is most pronounced over the age distribution as it is effective for young males. The depletion of males of a particular age group also affects the fertility, which influence the age distribution. The irregularities in the age distribution of a population may arise due to wars. Similarly, the natural calamities, catastrophe, as and when they come, leave their own impact over the age distribution. The population policies make their impact upon the age distribution of country's population.

Age Analysis: Generally age composition is analyzed by three methods as- Age pyramids and Age groups. Age pyramid is more commonly known as age & sex pyramids. age pyramids are the demographic representation of male female population according to the age.

Population pyramids can be used to find the number of economic dependents being supported in a particular population. In general Economic dependents are defined as those under 15 (children who are in full time education and therefore unable to work) and those over 65 (those who have the option of being retired). This definition is not universal but provides an approximation. In many countries, the government plans the economy in such a way that the working population can support these dependents. This number is useful to calculate the dependency ratio in that population. Population pyramids can be used to observe the natural increase in the population.

**3.4.1.1 Age-group wise Population in Ahmadnagar District:
1961-2001**

Table No:3.19

Age Group	1961 Popu.	1961 %	1971	1971 %	1981 ('00')	1981 %	2001 Popu.	2001 %
0-9	547926	30.85	695716	30.66			848859	21.00
10-14	202942	11.43	286030	12.61	10693 (0-14)	39.48	505413	12.51
15-19	152220	8.57	191535	8.44	2526	9.33	395250	9.78
20-24	147740	8.32	170867	7.53	2160	7.98	347766	8.61
25-29	146170	8.23	166188	7.32	1957	7.23	307491	7.61
30-34	120731	6.80	143924	6.34	1725	6.37	290367	7.19
35-39	103182	5.81	138711	6.11	1672	6.17	279454	6.92
40-49	160588	9.04	205655	9.06	2695	9.95	409145	10.13
50-59	101854	5.73	133309	5.87	1770	6.54	250822	6.21
60 +	91669	5.16	136866	6.03	1831	6.76	398979	9.87
Age not stated	947	0.05	300	0.01	54	0.19	7096	0.17
All ages	1775969		2269117		27083		4040642	

Source: Social and Economic Abstracts of the Ahmadnagar District.

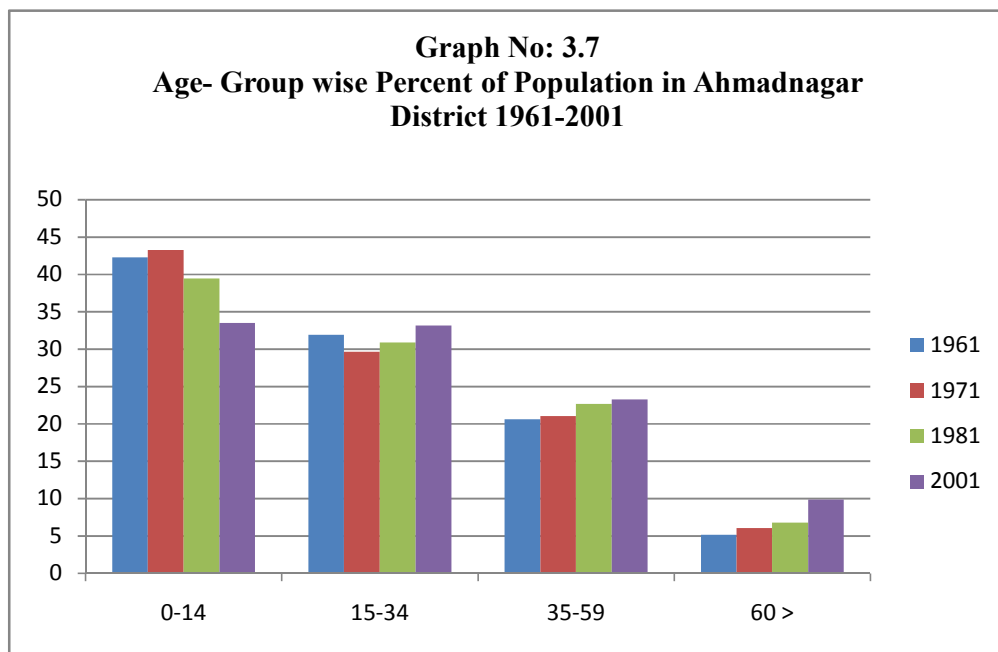
3.4.1.2 Age- Group wise Percent of Population in Ahmadnagar District 1961-2001:

Table No:3.20

Age Group	Population in %			
	1961	1971	1981	2001
0-14	42.28	43.26	39.48	33.52
15-34	31.92	29.64	30.90	33.18
35-59	20.59	21.05	22.66	23.25
60 >	5.16	6.03	6.76	9.87

Source: Computed by Researcher.

The population in the age group 0-14 is increased during 1961-71 decade by 0.98 %. Then it shows decreasing trend. The 15-34 age group was decreased during 1961-71 by 2.28 %. In the next decades it shows increasing trend. The 35-59 age group shows continuous increasing trend. In 1961 it was 20.59 % and became 23.25 % in 2001. Which increased by 2.66 %. The population 60 and above age group shows increasing trend in the district. Which is increased by 4.71 %.



3.4.1.3 Age Groups: Age group as a element which is used to analyze age composition.

In general population of any region is categorized in to three age groups-

- I] The Young- 0-14 years of age.
- II] The Adults- 15-59 years of age.
- III] The Old- 60 > years of age.

I] The Young age group (0-14 years of age.)-This age group includes children's of 0-14 age group, that is below 15 years of age. The proportion of population in this age group in any country is determined by the stage of demographic transition through which it is passing. This proportion is large in a country throughout the first or second stage of demographic transition.

The young population (0-14 age) of Ahmadnagar district :

1961-2001:

Table No:3.21

Year	Population %
1961	42.28
1971	43.26
1981	39.48
2001	33.52

Source- Computed by Researcher.

II] The Adult age group (15-59 years of age.)- This age group includes adult's of 15-59 age group. This group is known as active population group. This group is biologically the most reproductive, economically the most productive and demographically the most mobile one. It supports to the other two age groups. It carries the burden of feeding, clothing, educating the young age group and of looking after the old age group.

The adult age group is sometimes divided in to two sub-groups as

1] 15-34 age.

2] 35-59 age. The first sub-groups of young adults is considered economically more active than the second sub-groups of older adults.

The adult population (15-59 age) of Ahmadnagar district 1961-2001:

Table No:3.22

Year	Population %
1961	52.51
1971	50.69
1981	53.56
2001	56.43

Source- Computed by Researcher.

III] The old age group (60 and above years of age.)-This age group includes people of old age group, that is above 59 years of age. They are also termed as ‘Senior citizens’ or older. In general females of this age group are more in number, who are economically most non-productive and biologically non-reproductive. The males belonging to this age group usually remain economically productive and biologically reproductive. ‘The proportion of population of old age group also varies regionally. Significantly, it is low in case of less developed regions and high in more developed regions. This age group is an economic burden upon the adult age group as it is to be provided with food, clothing and sufficient health care’.²⁸

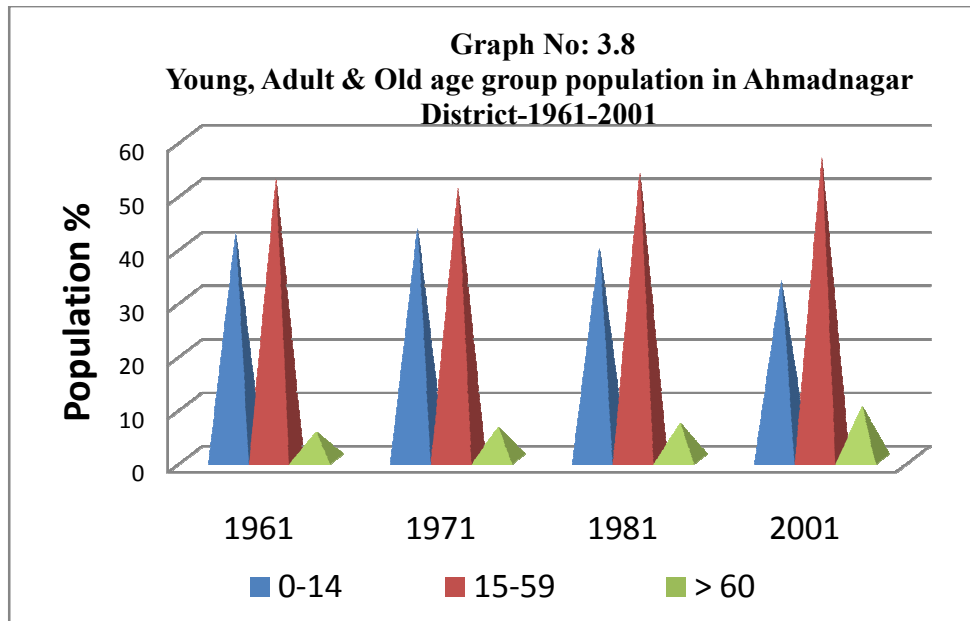
The old age population (60 and above age) of Ahmadnagar district 1961-2001:

Table No: 3.23

Year	Population %
1961	5.16
1971	6.03
1981	6.76
2001	9.87

Source- Computed by Researcher.

The young population of the district is decreased by 8.76 %. While adult population shows increasing trend, which is increased by 3.92 %. The old age population of the district is increased by 4.71 %. The increase in adult population is the sign for economic development of the district.



The graph clearly shows that the population in the age group 15-59 is more than other age groups and also it shows an increasing trend during the study period. Population percentage in 0-14 is decreasing while 60 and above age group is increasing one.

3.4.2 Sex Composition:

The numerical measurement of male and female is a sex composition of the population. Which is an important aspect of study of population characteristics. In other words the proportion of males and females or ratio between them is a sex composition. It can be said that, sex composition is the simple count of males and females. Normally it is expressed by number of females per 1000 males. For example sex ratio of the world is 986. that is 986 females per 1000 males.

Sex Composition in the World, India, Maharashtra and Ahmadnagar.

Table No. : 3.24

	Sex ratio (females per 1000 males)
world	986
India	940
Maharashtra	925
Ahmadnagar	934

Source: census of India 2001.

It is an important indicator to measure the extent of prevailing equality between males and females in a society at a given point of time. This separate data males and females are important for various types of planning and for the analysis of other population characteristics such as Fertility, Mortality etc. Sex composition directly influences proportion of married persons in a population. It indirectly influences supply of labor. If proportion of males in the total population is larger than that for females, the supply of labor is more. If proportion of males in a population is large, age at marriage for girls declines. Because of this, difference in age between husbands and wives increases. Because of this, number of widows is likely to increase. If age at marriage for females declines, birth rate increases and total population starts growing. If proportion of males in total population is large, generally death rate is high. While if the proportion of female is large, the death rate is normally low. Proportion of females in total population influences status of females in the society and participation of females in the labor force.

‘At the time of birth, normally male children outnumber female children. This proportion is generally found 1050 to 1060 males children per thousand female children. Mortality among male children is high up to first four years of their age. This is because biologically female children have got more immunity than that for male children’.²⁹

Sex composition get affected by Fertility, Mortality, Maternal mortality, Wars, Famines and inadequacy of medical facility. Under nutrition mortality among males is higher than that among females. Infant mortality rate for males is higher than that males in all age groups. Generally sex ratio among migrants is not balanced. Males predominate among long distance migrants and also among those who move due to economic reasons.

Franklin(1956, p-168) rightly observes that sex ratio was an index of economy prevailing in an area and was useful too for regional analysis. The profound effect of the proportion of the two sexes upon the other demographic elements like population growth, marriage rates, occupational structures, has also been well-recognized (shyrock,1976,p-105). Thus, the knowledge of sex ratio is essential for understanding the employment and consumption patterns and social needs etc. of a community. Trewartha (1953) rightly remarked that the proportion of two sexes is fundamentals to the geographic analysis of an area. Because it is not only an important feature to the landscape but it also influences the other demographic elements significantly and such provides an additional means for analyzing the regional landscape.

The numerical measurement of sex composition of a population is often expressed in terms of sex ratio. Sex ratio is

defined as the number of females per thousand males. It is an important and useful indicator to assess relative excess or deficit of men or women in a given population at that point of time. This ratio can be calculated in different ways-

$$1] P_m / P_t \times 100.$$

‘or’

$$P_f / P_t \times 100.$$

$$2] P_m / P_f \times 100.$$

The sex ratio is expressed in terms of number of males per 100 females.

$$3] P_f / P_m \times 100.$$

$$4] P_f / P_m \times 1000.$$

The sex ratio is expressed in terms of number of females per 1000 males.

The sex ratio may be distinct into Primary sex ratio, Secondary sex ratio and Tertiary sex ratio.

The primary sex ratio denotes the ratio between two sexes at the time of conception. It is a documented fact of genetics, differs greatly from the theoretically expected equality of one to one. Primary sex ratio has been estimated at 125 to 135 males to each hundred female conceptions (Stern, 1968 P.429). Some estimates have also gone to as high as 170 males and as low as 107 males. Whatever the estimate, there seems to be little doubt that more eggs are fertilized with Y-sperm than with X-sperm.

It was thought for quite some time that primary sex ratio was quite high. But more recent data do not suggest so.

The secondary sex ratio, which is also known as natural sex ratio (at the time of birth), is also different from the theoretically

expected one to one ratio. More males are born than the females in case of all the mammals including human beings and in all areas of the world.

The tertiary sex ratio is nothing but a sex ratio of a population at the time of enumeration. It is determined by three basic determinants, which includes the sex ratio at the birth, the sex ratio at the death and the sex ratio of the migrants.

Differences in mortality rates of the males and females also give rise to differences in the tertiary sex ratio. It has been observed that more males die than the females not only at birth but also at all ages. Mortality rate is also closely linked with the socio-economic development, therefore, the developed countries where the maternity deaths are absent and where the children of both sexes are equally cared for, the male mortality rate is higher than the female mortality rate at all ages and more so among the infants (Franklin,1956,P-163.). Since the male mortality rate is higher than the female mortality rate among the infants (United nations,1949-50, PP.338-410), the sex ratio becomes almost balanced at the age of four and it continues to become more in favor of females so as to reach a level of 50 males for every 100 females at the age of about 95 years. In contrast to the developed countries, the condition in the less developed countries are such that more females die in comparison to the males. Relatively high female mortality in these countries is to be seen in the context of their socio-economic set up. In such societies female suffers a neglect in their infancy, childhood and old age (Gosal, 1961,p-124). Also during the reproductive period frequent births not only result in maternal mortality rate but also reduce the life expectancy of the females in general.

3.4.2.2. India: As per provisional population figures of census 2011, out of a total population of 1,21,01,93422 persons, 62,37,24,248 are males and 58,64,69,174 females. Accordingly, the sex ratio of India is 940 females per 1000 males.

$$\begin{aligned}
 & \text{Total No. of Females.} \\
 \text{Sex Ratio} &= \frac{\text{Total No. of Females.}}{\text{Total No. of Males.}} \times 1000. \\
 & \text{58,64,69,174} \\
 &= \frac{\text{58,64,69,174}}{\text{62,37,24,248}} \times 1000. \\
 &= \text{0.940269960452} \times 1000. \\
 &= \text{940 Females per 1000 Males.}
 \end{aligned}$$

According to 2001 census the figures of Indian population are 1027,015,247 total persons. Out of 53,12,77,078 Males and 49,77,38,169 Females. For these population, sex ratio was 933 females per 1000 males.

$$\begin{aligned}
 & \text{Total No. of Females.} \\
 \text{Sex Ratio} &= \frac{\text{Total No. of Females.}}{\text{Total No. of Males.}} \times 1000. \\
 & \text{49,77,38,169} \\
 &= \frac{\text{49,77,38,169}}{\text{53,12,77,078}} \times 1000. \\
 &= \text{0.933} \times 1000. \\
 &= \text{933 Females per 1000 Males.}
 \end{aligned}$$

Sex ratio of India: 1901-2011.

Table No: 3.25

Census Year	India	Maharashtra
1901	972	978
1911	964	966
1921	955	950
1931	950	947
1941	945	949
1951	946	941
1961	941	936
1971	930	930
1981	934	937
1991	927	934
2001	933	922
2011	940	925

Source: Census Handbook of Ahmadnagar district.

As per figures depicted in the above chart, sex ratio of India is continuously decreased from 1901 to 1941. In the very next decade 1951, it was increased by one unit and became 946 from 945 females per 1000 males. Again it was decreased by 05 and 11 units in the next 1961 and 1971 census. After 1971 census, trend did not remain constant but increases in one decade and declines in next decade, 1971-930; 1981-934; 1991-927; 2001-927. From 1991 the sex ratio of India shows trend of improvement as 927, 933, 940 ratio in 1991, 2001 and 2011 census respectively.

3.4.2.3 Maharashtra- According to provisional figures of census 2011, out of total population 11,23,72,972 persons, 5,83,61,397 males and 5,40,11,575 females, forms the sex ratio of Maharashtra 925 females per 1000 males.

As per above population sex ratio figures of Maharashtra, general trend of sex ratio is declining one. It was 978 in 1901 and now 925 in 2011. Which is decreased by 53 units. This declining trend is broken in between to form increasing in one decade and declines in cluster decades. As declines continuously from 1901 to 1931 and then increased in next decade by 02 units in 1941. Sex ratio again declined till 1971 and increased in next census by 07 units in 1981. Again declined till 2001 and increased by 03 units in 2011.

3.4.2.3.1 Child Sex Ratio in the age group 0-06 years:

Table No: 3.26

	1991	2001	2011	Difference 1991-2011
India	945	927	919	-26
Maharashtra	946	913	894	-52
Ahmadnagar	949	884	852	-97

Source: Census handbook of Maharashtra.

The sex ratio in the age group 0-06 years shows negative trend, which is rapidly declining in Ahmadnagar than the state of Maharashtra and the country India. In 1991 child sex ratio was 949, 946 and 949 in the country, state and district respectively. The difference was very minute. As per 2011 census sex ratio became 919,894 and 852 respectively. It is drastically declining. As

compared to 1991, In 2011 India's child sex ratio is reduced by 26 Girls per thousand Boys. In Maharashtra it is reduced by 52, while in the district it is reduced by 97. This negative trend is because of male dominating culture in our society. Secondly, preference is given to the son in every field as well as day to day life. And thirdly sex selective abortion is commonly practiced in the private hospitals. The sex selective abortion is the main cause behind declining child sex ratio. So, to overcome this problem 'Two Child policy' with the combination of one son and one daughter should be applied. And to create awareness regarding consequences of the problem is also important one. The improvement in the status of the women in the society is also important one. For this issue Sharma Rajendra quoted that, ' In the humidayan region a pair of bullocks toil annually for 1064 hrs, a man for 1212 hrs and a women for 3485 hrs on a one hector of farm. Globally, women do two-third of the work, earn one-third of the income'.³¹ This is the status of women in the society.

Ahmadnagar District: According to the provisional figures of census 2011, out of total population of 4543083 persons 2348802 are males and 2194281 females. To these figures sex ratio of Ahmadnagar district is 934 females per 1000 males.

As per 2001 census, Ahmadnagar bears total population 4040642 persons, in which 2083053 males and 1957589 females forms sex ratio 940 females per 1000 males.

3.4.2.4 Sex Ratio in Ahmadnagar District: 1901-2011.

Table No: 3.27

Census year	Sex ratio
1901	1005
1911	983
1921	978
1931	971
1941	969
1951	971
1961	962
1971	956
1981	959
1991	949
2001	940
2011	934

Source: Census handbook of Ahmadnagar District.

The 2011 census recorded a sex ratio of Ahmadnagar district 934. This is much higher than that of the state ratio of 925 females per 1000 males. When districts of Maharashtra are arranged in the descending order of sex ratio, Ahmadnagar occupies 22nd rank in the state. The sex ratio of the district shows continuous declining trend except 1951 and 1981 census. In 1901 sex ratio of the district was 1005 and now in 2011, it became 934. Which is declined by 71 points. In 1951, it is increased by 02 units and in 1981 by 03 units than the respective previous decades.

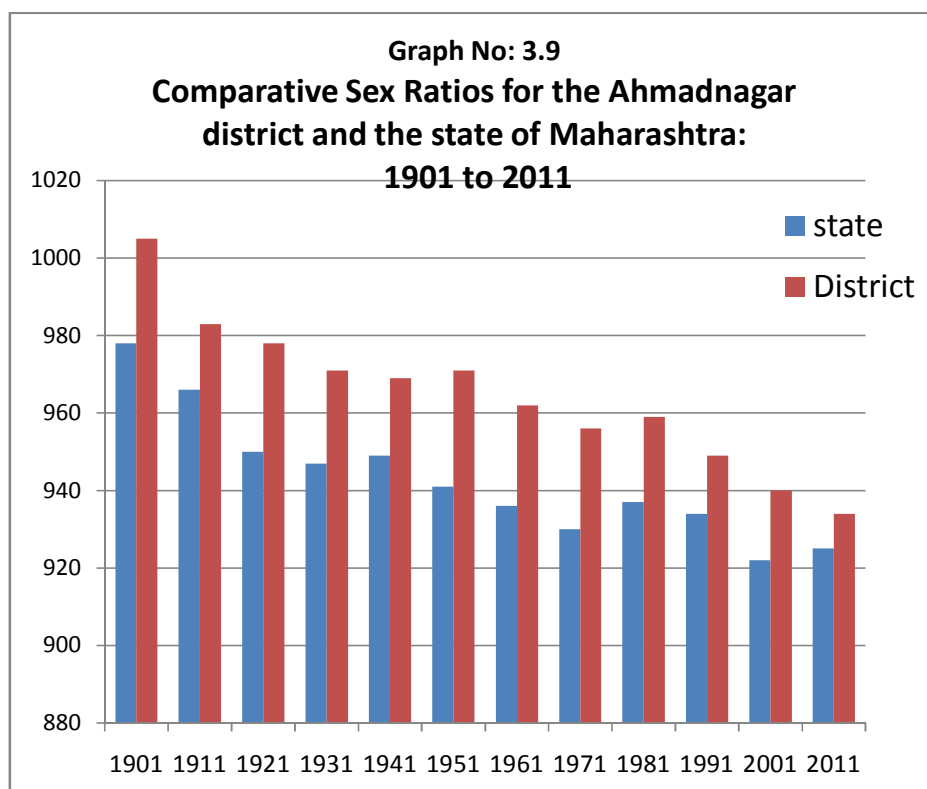
Comparative Sex Ratio: Ahmadnagar and Maharashtra. The following table shows the comparative sex ratios for the Ahmadnagar district and the state of Maharashtra since 1901 to 2011.

Comparative Sex Ratios for the Ahmadnagar district and the state of Maharashtra: 1901 to 2011.

Table No: 3.28

Year	state	District	Difference in District over the state
1901	978	1005	+ 27
1911	966	983	+ 17
1921	950	978	+ 28
1931	947	971	+ 24
1941	949	969	+ 20
1951	941	971	+ 30
1961	936	962	+ 26
1971	930	956	+ 26
1981	937	959	+ 22
1991	934	949	+ 15
2001	922	940	+ 18
2011	925	934	+ 09
Difference in points.	-53	-71	- 18

Source: Census handbook of Ahmadnagar District.



‘The census 2011 recorded a sex ratio of 934 in the Ahmadnagar district. This is higher than that of the state average, that is 925. The sex ratio in the district has remain higher than that of the state since 2001. As regards total areas, sex ratio at the state and district level declined by 53 points and 71 points respectively during the last 110 years. When difference in sex ratio of district and state in points is compared, it is observed that there was a gap of 27 to 22 points during 1901 to 1981, which has reduced to only 15 points in 1991’.³² from 1901 to 2011 the sex ratio in the district fluctuated between 1005 and 935 exhibiting generally declining trend end the state ratio also indicating declining trend between 978 to 925. The following table shows comparative sex ratios of the district, state and nation from 1901 to 2011.

Tahsil-wise Sex Ratio in Ahmadnagar District: Census-1961-2001.

Table No: 3.29

Tahsil	Total Rural Urban	1961	1971	1981	1991	2001
Akola	T	1020	1000	1007	996	974
	R	1020	1000	1007	996	974
	U	-	-	-	-	-
Sangamner	T	987	975	973	953	945
	R	996	986	980	955	951
	U	909	986	980	955	951
Kopergaon	T	943	944	945	939	929
	R	944	954	950	938	931
	U	902	882	918	943	926
Shrirampur	T	929	929	943	941	949
	R	935	932	942	937	941
	U	886	912	946	956	963
Newasa	T	973	975	953	945	937
	R	973	975	953	945	937
	U	-	-	-	-	-
Shevgaon	T	976	975	984	954	953
	R	976	975	984	954	953
	U	-	-	-	-	-
Pathardi	T	973	968	994	957	951
	R	973	968	994	964	957
	U	-	-	-	899	906
Nagar	T	935	901	894	912	901
	R	983	960	942	939	934
	U	886	844	847	881	881
Rahuri	T	953	952	952	943	934
	R	953	952	951	948	937

	U	-	-	958	927	926
parner	T	1008	1026	1042	1017	988
	R	1008	1026	1042	1017	988
	U	-	-	-	-	-
Shrigonda	T	945	949	958	949	939
	R	945	949	958	951	939
	U	-	-	-	935	933
Karjat	T	950	947	953	939	933
	R	950	947	953	939	933
	U	-	-	-	-	-
Jamkhed	T	963	976	981	955	949
	R	963	976	981	955	952
	U	-	-	-	-	940
Rahata	T	-	-	-	-	938
	R	-	-	-	-	941
	U	-	-	-	-	917
Dist.Total	T	962	956	959	949	940
	R	970	968	970	956	949
	U	890	866	889	915	909

Source: Computed by Researcher.

According to the 1961 census sex ratio of the district was 962 females per 1000 males. This ratio is higher than the ratio of the state 936. In between the Tahsil of the district, ratio varies 1020 of Akola and 929 of Shrirampur Tahsil. 06 tahsil shows lowest ratio than the district total 962. And remaining posses more than the district total. The rural sex ratio of the district is 970. With in the district, for this trend, 06 tahsil have lower ratio for the district and remaining posses more than district total 970. The Urban sex ratio of the district is 890. With in the district for this trend, 02 have lower and 02 of more than district total.

As per 1971 census sex ratio of Ahmadnagar district is 956. Which is higher than state ratio 930. Within the district, the sex ratio varies from 1026 in Parner Tahsil to 901 in Nagar Tahsil. The sex ratio in 06 Tahsil is below the district sex ratio of 956. Remaining Tahsil are above the district value. In rural areas of the district, have a higher sex ratios than the urban areas. The urban sex ratio of the district is 866, out of 04 urban centers 03 have more than this value, while one has below this value. It is noted that highest sex ratio in urban is of 912 in Shrirampur. And lower is of 844 in Nagar Tahsil.

The census 1981 recorded a sex ratio of 959 females per 1000 males in the district. This is higher than the state sex ratio of 937. Within the district, sex ratio differs strikingly. Parner Tahsil bears highest sex ratio of 1042. Which ranks at the top and Nagar Tahsil remain at the bottom with 894 ratio. The urban sex ratio of the district in 1981 census is 889, which is higher than that of the state sex ratio of 850. The rural sex ratio of the district is 970. Out of 05 Urban Tahsil, 04 Tahsil shows sex ratio above the district value of 889 and only one Tahsil Nagar bears 847, which is below the district value. The Rural sex ratio shows that 06 Tahsil bears value more than the district value and remaining 07 Tahsil are below the level of district value. Parner Tahsil shows highest ratio of 1042 while Shrirampur and Nagar Tahsil shows least one of 942 ratio.

As per 1991 census, the district as a whole bears a sex ratio of 949 females per 1000 males. This is higher than that of the state value of 934. When we see the sex ratio of the other districts in the state, Ahmadnagar occupies the 14th rank in the state. Within the district, the ratio varies from 1017 in Parner Tahsil to 912 in Nagar Tahsil. The sex ratio in 06 Tahsil are below the district value of 949.

Shrigonda Tahsil indicates the same sex ratio as of the district value and remaining Tahsil bears more than the district value. In comparison of Rural and Urban sex ratios of the district, Rural areas shows higher ratio than that of Urban areas. But Shrirampur and Kopergon Tahsil shows lower Rural ratio than the urban ratio. The Rural and Urban sex ratio for the district is 956 and 915 as compared to the state ratio is 972 and 975 respectively. In Urban areas sex ratio in 05 Tahsil are above the district value of 915 and remaining 02 are below the district value. It is seen that the Rural sex ratio in 10 Tahsil are below the district value of 956 and sex ratio of 03 Tahsil are above the district value. The highest sex ratio is found in Parner Tahsil of 1017 and lowest in Shrirampur Tahsil of 937.

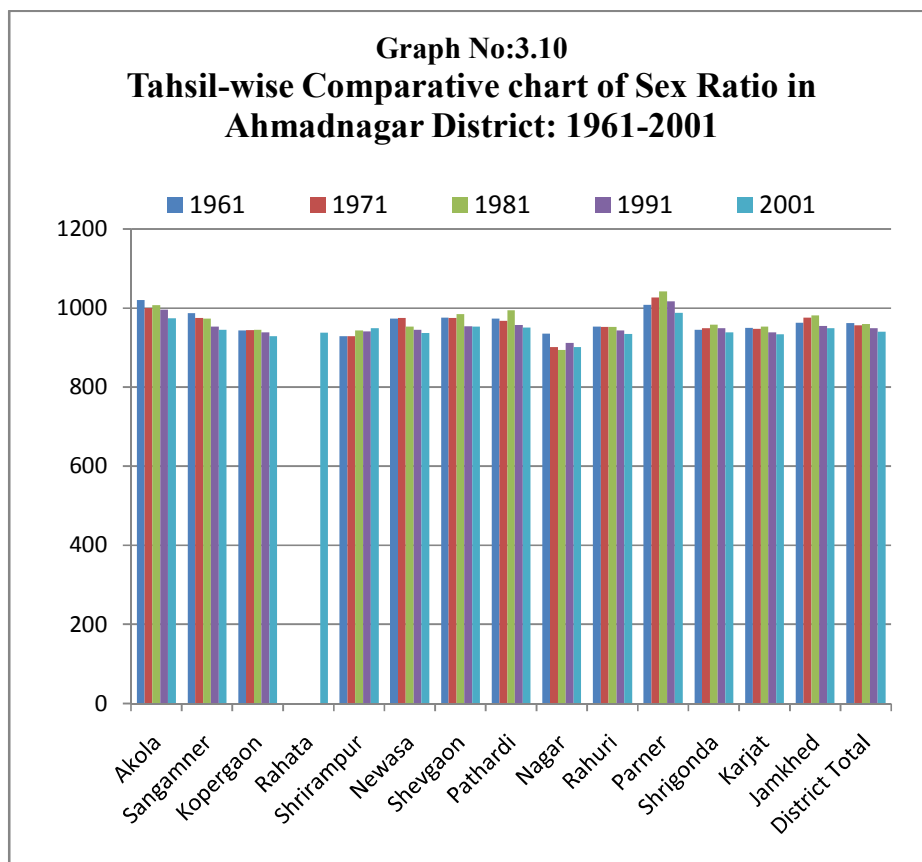
According to 2001 census the district bears a sex ratio of 940. Within the district, the ratio varies from 988 in Parner to 901 in Nagar Tahsil. The 07 ratios are below the district value. The remaining half Tahsil are above the district value. It is found that Rural sex ratios are higher than the Urban areas. It is observed that the Rural sex ratio in 08 Tahsil are lower than the district value and sex ratio of 06 Tahsil are above the district value of 949. The highest sex ratio in rural areas is seen in Parner Tahsil of 988 and lowest in Kopergaon Tahsil of 931.

Tahsil-wise Comparative chart of Sex Ratio in Ahmadnagar District: 1961-2001.

Table No: 3.30

Tahsil	1961	1971	1981	1991	2001
Akola	1020	1000	1007	996	974
Sangamner	987	975	973	953	945
Kopergaon	943	944	945	939	929
Rahata	----	----	----	----	938
Shrirampur	929	929	943	941	949
Newasa	973	975	953	945	937
Shevgaon	976	975	984	954	953
Pathardi	973	968	994	957	951
Nagar	935	901	894	912	901
Rahuri	953	952	952	943	934
Parner	1008	1026	1042	1017	988
Shrigonda	945	949	958	949	939
Karjat	950	947	953	939	933
Jamkhed	963	976	981	955	949
District Total	962	956	959	949	940

Source: District Census Hand book of 1961,1971,1981,1991 and 2001.



According to the census records from 1961 to 2001, the general trend of sex ratio in all the tahsils of the district shows a descending one. 'Akola' and 'Parner' are the tahsils with the highest ratios of 1020 and 1008 in 1961 respectively. Both ratios declined drastically till the 2001 census to become 974 and 988, which declined by 46 points in Akola and 20 points in Parner Tahsil.

The 'Sangamner' and 'Rahuri' are the only tahsils that show a continuous decline in their sex ratio from 1961 to 2001 census. Which are in Sangamner as 987, 975, 973, 953, 945. And in Rahuri 953, 952, 952, 943, 934.

In overall tahsils, it is observed that the sex ratio declined continuously from 1981 to 2001 census except Shrirampur tahsil. This exception is formed due to the formation of new Rahata Tahsil, which contributed some villages from Shrirampur tahsil in 2001

census. Tahsil Akola, Shevgaon, Pathardi and Karjat shows alternate trend in sex ratio like decline and again rise in ratio. More value in 1961, it decline in next 1971 and rises in next 1981 census.

Census --	1961	1971	1981
Akola ---	1020 –	1000 --	1007
Shevgaon-	976 --	975 --	984
Pathardi –	973 --	968 --	994
Karjat ---	950 --	947 --	954

Tahsil of Kopergaon, Parner, Shrigonda and Jamkhed shows increasing trend till first three census from 1961 to 1981 and then decreasing trend in 1991 to 2001 census.

Increasing Trend --	1961	1971	1981	Census.
Kopergaon ---	943 –	944 --	945	
Parner-----	1008 --	1026 --	1042	
Shrigonda ----	945 --	949 --	958	
Jamkhed -----	963 --	976 --	981	

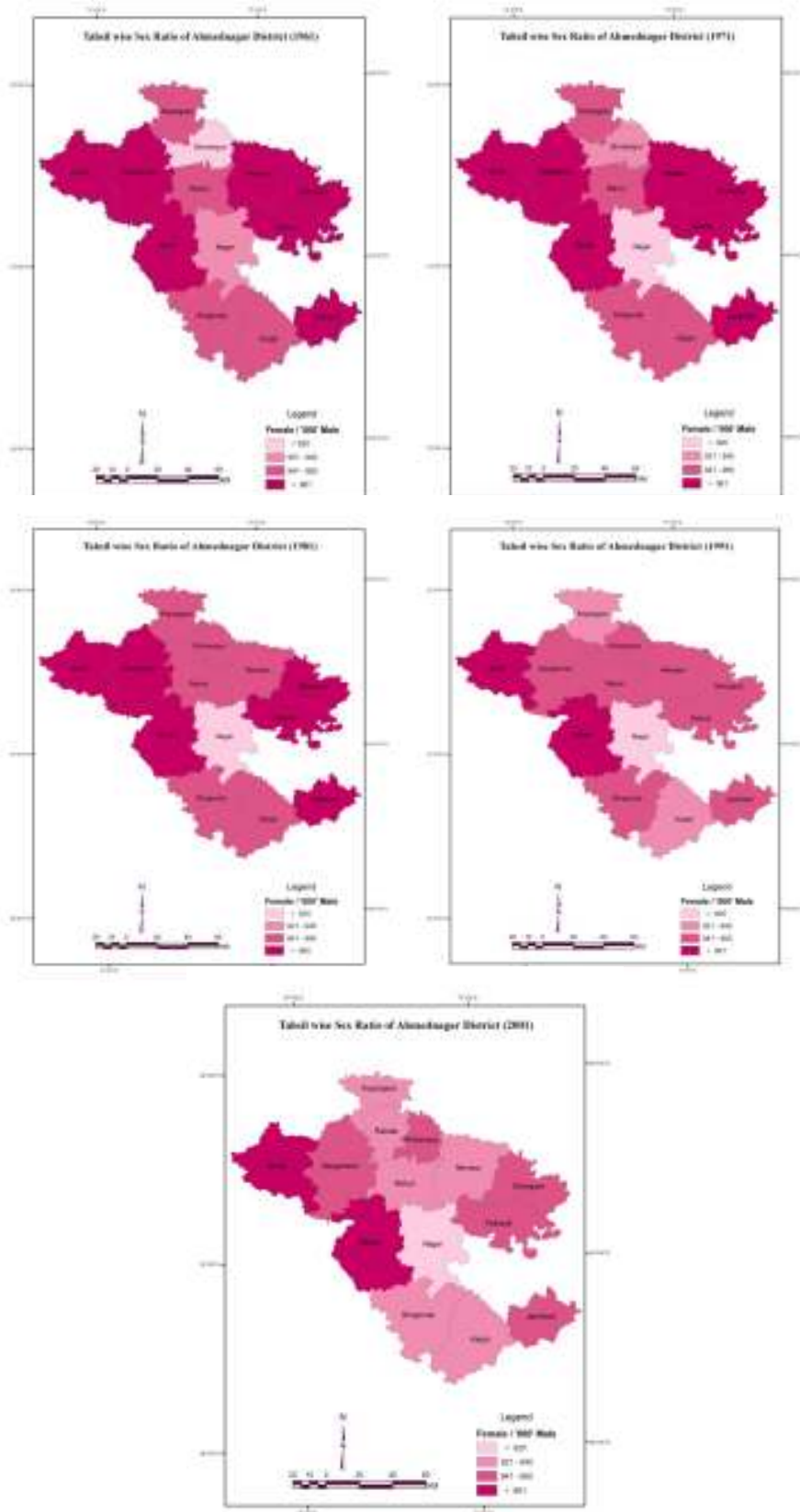
Decreasing Trend --	1991	2001	Census.
Kopergaon ---	939 –	929	
Parner-----	1017 --	988	
Shrigonda ----	949 --	939	
Jamkhed -----	955 --	949	

Newasa Tahsil shows alternate rise and fall trend of sex ratio in the earlier census from 1961 to 1981 and then decreasing trend in 1981 to 2001 census.

Alternate Trend --	1961	1971	1981	Census.
Newasa ---	973 –	975 --	953	

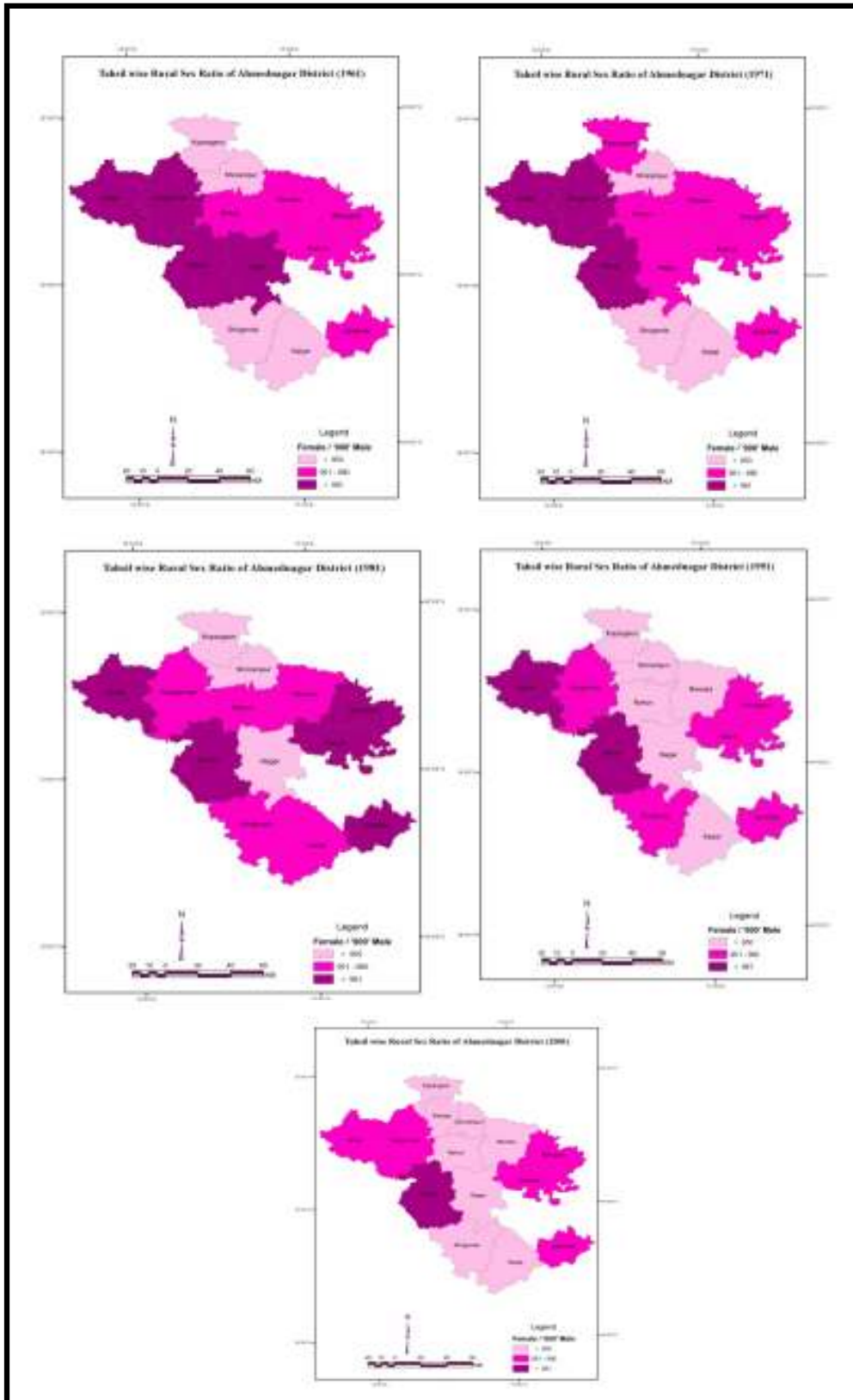
Decreasing Trend --	1981	1991	2001	Census.
Newasa ---	953 –	945 --	937	

Map No:3.5
Tahsil Wise Sex Ratio in Ahmadnagar District: 1961-2001



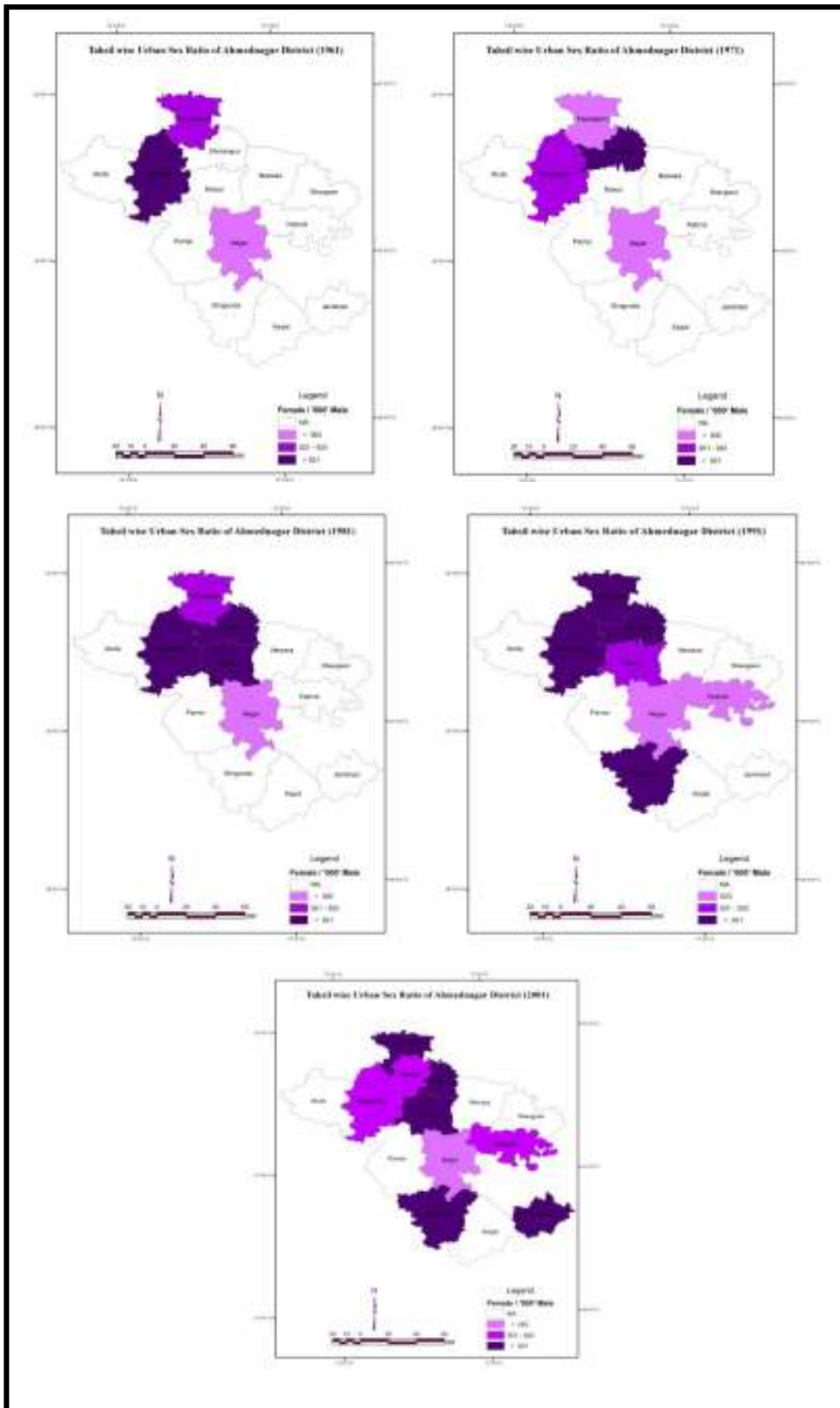
Map No. 3.6

Tahsil Wise Rural Sex Ratio in Ahmadnagar District:1961-2001



Map No. 3.7

Tahsil Wise Urban Sex Ratio in Ahmadnagar District:1961-2001



3.4.3 RELIGIOUS COMPOSITION.

3.4.3.1: Introduction:

Religion is the belief in the existence of the god of the community and which concerned with particular religion is nothing but religious. Every religion has its own life philosophy and its code of conduct for their followers. Daniel Defoe described that, 'Religion is properly the worship given to God, but it is also applied to the worship of Idols and false Deities'.³³ The various religious groups of population are therefore exist in the world.

Religion influences growth of population, migration and economic activities of the population. Many religions are against family planning, which influence growth of population. Religion influences migration since people of one religion normally prefer to live together. Economic activities are indirectly influenced by religious considerations. Since Muslims do not consume pork, piggery could not flourish in India. Religion therefore influences food habits, living conditions and economic activities of the people.

Major religions of the world are 1] Christianity 2] Islam 3] Hinduism 4] Buddhism. While other religion group include Jews, Sikhs, Janis etc.

3.4.3.2: Religious Composition of population in India:

Multiple religious composition is the unique characteristic of Indian population with dominant Hindu population. 'Multiplicity of religious faith is an important aspect of India's population. However, Hinduism is numerically the largest and oldest of the Indian religions and its imprint on the cultural landscape is the strongest. It originated during the pre-vedic era inheriting elements of tribal religious faith, and later got modified in the Vedic period.

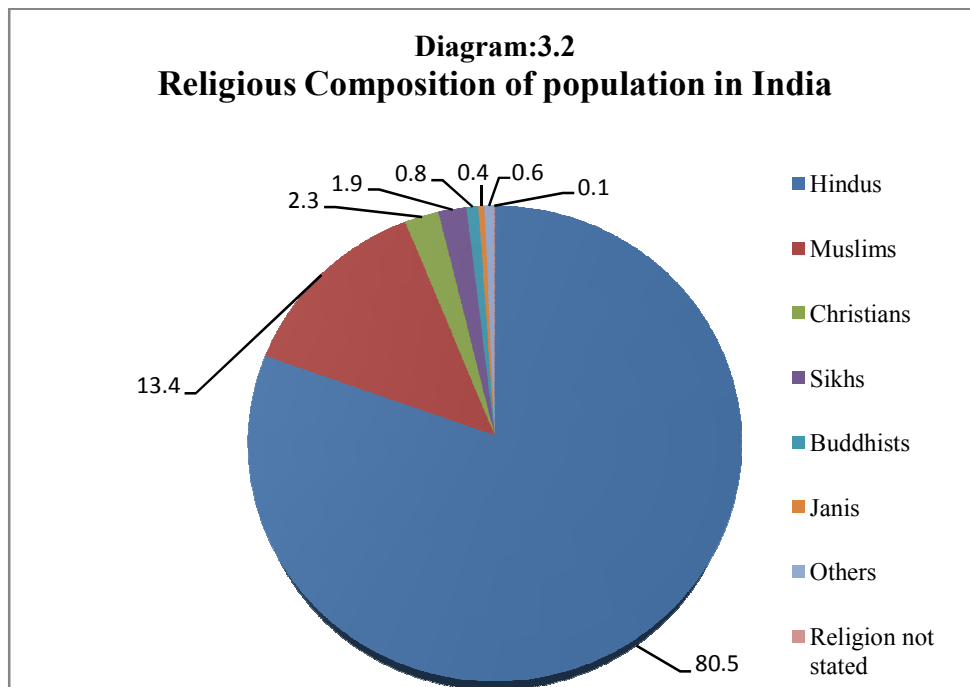
Buddhism and Jainism evolved during the sixth century B.C. Since the beginning of the Christian era, while Islam was brought by the Arab traders and popularized by the Turkish conquerors, Sikhism was the last to appear on the scene'.³⁴

Religious Composition in India:

Table No: 3.31

Major religious groups	Total population	Proportion in %
Hindus	827578868	80.5
Muslims	138188240	13.4
Christians	24080016	2.3
Sikhs	19215730	1.9
Buddhists	7955207	0.8
Janis	4225053	0.4
Others	6639626	0.6
Religion not stated	727588	0.1
Total	1028610328	100.00

Source: Census of India.



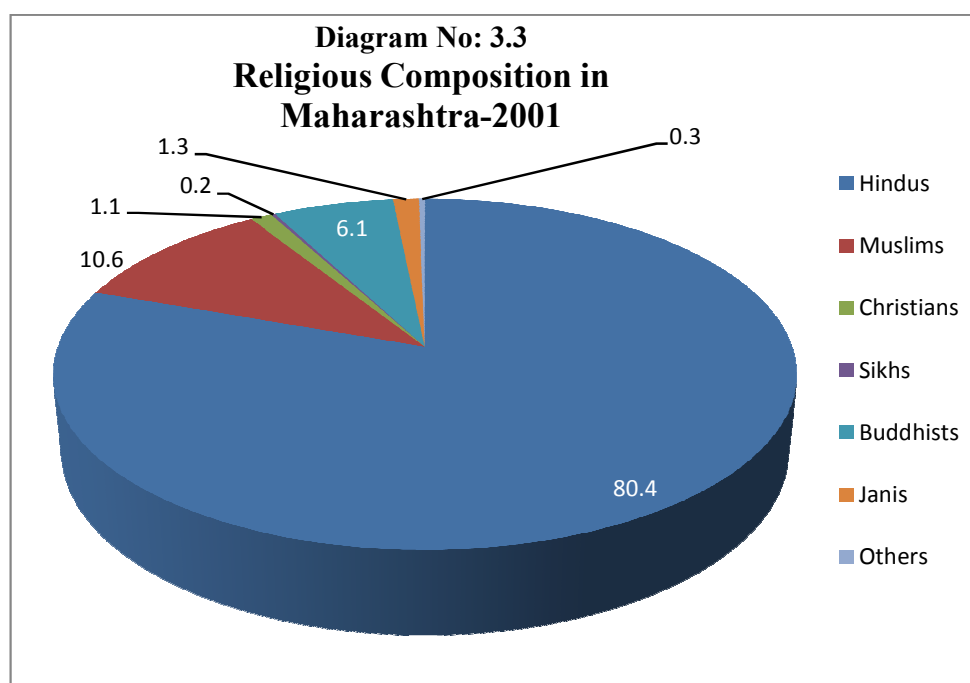
Hinduism is an old religion in South Asia. Hinduism has several religious holy books and number of religious preachers. Such is not the case with Christians and Muslims. They have only one holy religious book, as ‘Bible’ and ‘Koran’ and only one preacher each, namely Jesus Christ and Prophet Mohammed.

Religious Composition in Maharashtra:

Table No: 3.32

Major religious groups	Total population	Proportion in %
Hindus	77859385	80.4
Muslims	10270485	10.6
Christians	1058313	1.1
Sikhs	215337	0.2
Buddhists	5838710	6.1
Janis	1301843	1.3
Others	334554	0.3
Total	96878627	100

Source: Census of India.



3.4.3.3: Religious Composition in Ahmadnagar District:

1961-2001

Table No:3.33

Religion	Total	1961	1971	1981	1991	2001
	Rural Urban					
Hindu	T	87.69	88.01	88.57	90.74	90.69
	R	89.28	89.77	90.68	93.13	93.71
	U	74.18	73.88	74.44	78.05	78.52
Muslims	T	5.26	5.52	6.42	6.35	6.54
	R	4.27	4.44	5.12	4.84	4.60
	U	13.16	14.19	15.14	14.38	14.35
Christians	T	2.72	2.47	1.39	0.81	0.64
	R	2.55	2.27	1.13	0.51	0.30
	U	4.21	4.06	3.13	2.42	2.01
Sikhs	T	0.13	0.18	0.08	0.09	0.14
	R	0.02	0.05	0.02	0.02	0.05
	U	1.12	1.23	0.54	0.50	0.51
Buddhists	T	2.87	2.56	2.27	0.98	0.89
	R	2.94	2.61	2.19	0.90	0.78
	U	2.31	2.15	2.79	1.37	1.34
Janis	T	1.32	1.25	1.24	0.96	0.95
	R	0.94	0.85	0.84	0.55	0.42
	U	4.51	4.45	3.90	3.15	3.09
Others	T	0.01	0.01	0.03	0.07	0.15
	R	0.02	0.01	0.02	0.05	0.14
	U	0.07	0.04	0.05	0.13	0.18

Source: computed by Researcher.

Decadal growth of Religious Composition in the Ahmadnagar District: 1961-71 to 1991-2001

Table No: 3.34

Religion	Total		1961-71	1971-81	1981-91	1991-01
	Rural	Urban				
Hindu	T		+ 0.32	+ 0.56	+ 2.17	- 0.05
	R		+ 0.49	+ 0.91	+ 2.45	+ 0.58
	U		- 0.3	+ 0.56	+ 3.61	+ 0.47
Muslims	T		+ 0.26	+ 0.90	- 0.07	+ 0.19
	R		+ 0.17	+ 0.68	- 0.28	- 0.24
	U		+ 0.59	+ 0.95	- 0.76	- 0.03
Christians	T		- 0.25	- 1.08	- 0.58	- 0.17
	R		- 0.28	- 1.14	- 0.62	- 0.21
	U		- 0.15	- 0.93	- 0.71	- 0.41
Sikhs	T		+ 0.05	- 0.10	+ 0.01	+ 0.05
	R		+ 0.03	- 0.03	0.00	+ 0.03
	U		+ 0.11	- 0.69	- 0.04	+ 0.01
Buddhists	T		- 0.31	- 0.29	- 1.29	- 0.09
	R		- 0.33	- 0.42	- 1.29	- 0.12
	U		- 0.16	+ 0.64	- 1.42	- 0.03
Janis	T		- 0.07	- 0.01	- 0.28	- 0.01
	R		- 0.09	- 0.01	- 0.29	- 0.13
	U		- 0.06	- 0.55	- 0.75	- 0.06
Others	T		0.00	+ 0.02	+ 0.04	+ 0.08
	R		- 0.01	+ 0.01	+ 0.03	+ 0.09
	U		- 0.04	+ 0.03	+ 0.07	+ 0.05

As per 1961 census, the percentage of Hindu is 87.69 %, which is highest in religious groups of the district and Muslims are 5.26 %, which is second populated religion. This trend of the district is similar to the trend of state as well as trend of the country. Religion of Christian, Sikh, Buddhist and Jain are comparatively less in percentage. The rural proportion of Hindu and Buddhist is 89.28 % and 2.94 % respectively. Which is more than urban proportion i.e. 74.18% and 2.31 % respectively. While remaining religion of the district shows opposite trend of more urban population than that of the rural one.

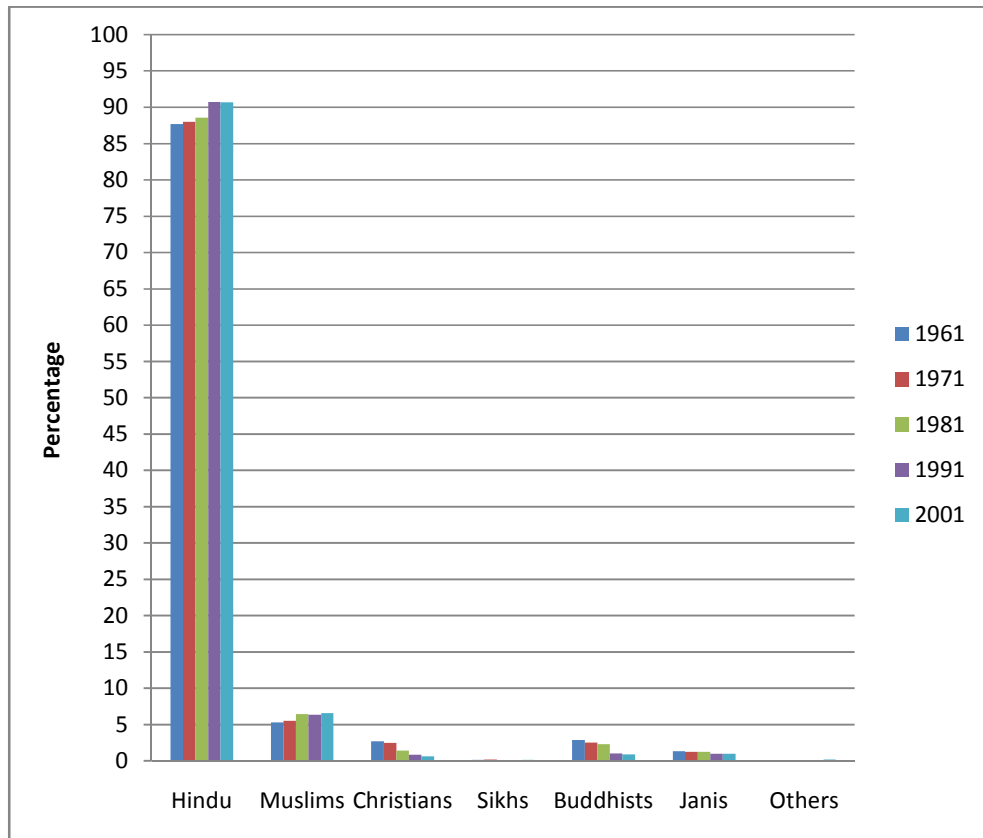
The census data of 1971 shows slight change in religious composition than the 1961 census data of the district. The proportion Hindu is 88.01 %, which is increased by 0.32 % during the decade. The Muslims are 5.52 %, increased by 0.26 % and Sikhs of 0.18 % shows 0.05 % increase in the decade. While Christians. Buddhist and Janis shows decrease in their population. Their population is 2.47 %, 2.56 % and 1.25 % respectively. Which shows 0.25 %, 0.31 % and 0.07 % decrease respectively. The rural religious population of Hindu, Muslims and Sikhs also shows increasing trend by 0.49, 0.17 and 0.03 % in the decade. And Christians. Buddhist and Janis shows decrease in their population of 0.28 %, 0.33 % and 0.09 % decrease respectively. The Urban religious population of Hindu do not shoes the increasing trend. But it is decreased by 0.3 % during the decade. Muslims and Sikhs shows increasing trend by 0.59, and 0.11 % in the decade. Christians. Buddhist and Janis shows decrease in their population of 0.15 %, 0.16 % and 0.06 % decrease respectively.

The census 1981 shows growth in religious population of Hindu and Muslims only. Hindus population of the district is 88.57 % and Muslims of 6.42 %, which shows decadal growth of 0.56 % and 0.90 % respectively. The Christians, Sikhs, Buddhists and Janis have 1.39 %, 0.08 %, 2.27 % and 1.24 % population, which is decreased by 1.08 %, 0.10 %, 0.29 % and 0.01 % respectively. The rural religious population of Hindu and Muslims also shows increasing trend by 0.91 % and 0.68 % in the decade. And Christians, Sikhs, Buddhist and Janis shows decrease in their population of 1.14 %, 0.03 %, 0.42 % and 0.01 % decrease respectively. The Urban religious population of Hindu, Muslims and Buddhist shoes the increasing trend. Which is increased by 0.56 %, 0.95 % and 0.64 % respectively during the decade. Christians, Sikhs and Janis shows decrease in their population of 0.93 %, 0.69 % and 0.55 % respectively during the 1971-1981 decade.

The 1991 census shows increase in Hindu and Sikhs population. Which is 90.74 % and 0.09 % and increased by 2.17 % and 0.01 % during the 1981-1991 decade. Other religion are decreased in their population during the decade. Muslims decreased by 0.07 %, Christians by 0.58 %, Buddhist 1.29 % and Janis decreased by 0.28 % during the decade. In rural religious population, there is only growth in religion of Hindus population. Which is 93.13 % and increased by 2.45 % during the decade. Other religions shows decreasing trend. Muslims, Christians, Buddhist and Janis are decreased by 0.28 %, 0.62 %, 1.29 %, 0.29 % respectively during the decade. The Urban religious population of Hindus is 78.05 %, Which is increased by 3.61%. During the decade. Other religions shows their decreasing trend. Muslims are decreased by

0.76 %, Christians by 0.71 %, Sikhs 0.04 %, Buddhists by 1.42 % and Janis decreased by 0.75 % during the 1981-1991 decade.

As per 2001 census population of Hindu is 90.69 % and in 1991 it was 90.74 %, which shows decrease by 0.05 % during the 1991-2001 decade. Same trend is found for the religion of Christian, Buddhist and Jains, Which is decreased by 0.17 %, 0.09 % and 0.01 % respectively. While Muslims and Sikhs are increased by 0.19 % and 0.05 % respectively during the decade. The rural and urban religious population of the district shows increase in Hindu and Sikhs population by 0.58 %, 0.47 % and 0.03 %, 0.01 % respectively during the decade. The rural and urban populations of other religion shows decreasing trend during the decade of 1991-2001.



The religious population of the Hindus in the district is continuously increasing from 1961 to 2001. It is increased by 3%, Which is comparatively more than that of the other religions. As per computed figures of the table, religious rural population of the district shows continuous increase in Hindu population. While declining trend is observed among Muslims, Christians, Buddhist and Janis. The urban Hindu population is increased from 74.18 % (1961) to 78.52% (2001). Muslims population is increased from 13.16% (1961) to 15.14% (1981) and then declined to became 14.35% (2001). Christian urban population is declined from 4.21% (1961) to 2.01% (2001). While Sikh and Janis population shoes decreasing trend.

3.4.4 ECONOMIC COMPOSITION

3.4.4.1 Introduction:

Economic composition of population is an important aspect of the study of population characteristics of the region. 'human beings not only considered as merely source of biological reproduction but source of knowledge, because knowledge can not be confined to the four walls of any nation. In other words, reduction which cost of one invention brings, can be calculated by applying standard to the workers spread all over the world'.³⁵ Economic status influence directly or indirectly several aspect of population, like Standard of living which includes wage levels, purchasing capacity together collectively influence the standard of living of the people. Various criteria's are used for the determination of economic activities of people. Such as Economically active and non-active population, Type of occupation, their importance and number of people engaged in them. 'Population of an area positively definitely effects its economic growth. It is because manpower provides human labor essentially needed for economic development and growth'.³⁶

3.4.4.2 Economically active and non-active population : The percentage or proportion of economically active population of an geographical area to the total population gives crude – efficiency rate for the region. In this situation it is also essential to calculate dependency ratio for the region. Dependency ratio is nothing but a dependency burden of the population.

3.4.4.3 Dependency Ratio/ burden: is a ratio between economically non-active population of people below 15 years of age and those above 60 years and economically active population of those in the age group of 15-59 years.

$$\frac{\text{Number of children Below 15 years.} + \text{Number of Old people above 60 years.}}{\text{Number of Economically Active people Between 15-59 Years of Age.}} \times 100$$

Dependency Ratio = ----- X 100

Number of Economically Active people Between 15-59 Years of Age.

-Dependency Ratio/ Burden of Ahmadnagar District for 1961:

$$\frac{\text{Number of children Below 15 years.} + \text{Number of Old people above 60 years.}}{\text{Number of Economically Active people Between 15-59 Years of Age.}} \times 100$$

Dependency Ratio = ----- X 100

Number of Economically Active people Between 15-59 Years of Age.

$$\begin{aligned} & \frac{750868 + 91669}{932485} \times 100 \\ & = 0.9035 \times 100 \\ & = 90.35 \% \end{aligned}$$

- Rural Dependency Ratio/ Burden of Ahmadnagar District for 1961:

$$\begin{aligned}
 & \text{Number of children} && \text{Number of Old} \\
 & \text{Below 15 years.} && + \text{ people above 60 years.} \\
 \text{Dependency Ratio} &= \frac{\text{Number of children Below 15 years.} + \text{Number of Old people above 60 years.}}{\text{Number of Economically Active people Between 15-59 Years of Age.}} \times 100 \\
 &= \frac{674697 + 83857}{758554} \times 100 \\
 &= \frac{829211}{758554} \times 100 \\
 &= 0.9147 \times 100 \\
 &= 91.47 \%
 \end{aligned}$$

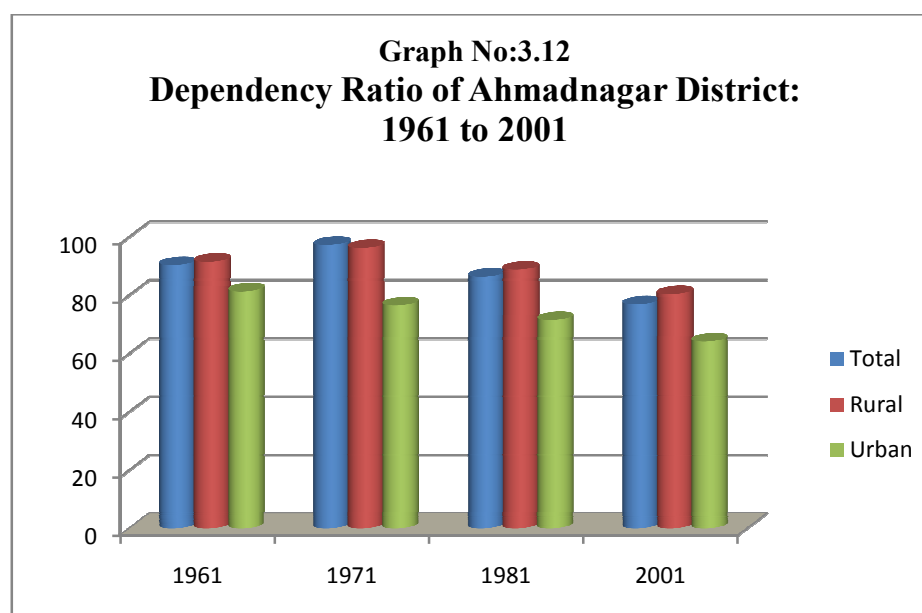
- Urban Dependency Ratio/ Burden of Ahmadnagar District for 1961:

$$\begin{aligned}
 &= \frac{76171 + 7812}{83983} \times 100 \\
 &= \frac{103274}{83983} \times 100 \\
 &= 0.8132 \times 100 \\
 &= 81.32 \%
 \end{aligned}$$

Dependency Ratio of Ahmadnagar District- 1961 to 2001:

Table No: 3.35

Census Year	Dependency Ratio of Total Population	Rural Dependency Ratio.	Urban Dependency Ratio.
1961	90.35	91.47	81.32
1971	97.25	96.21	76.53
1981	86.34	88.78	71.49
2001	76.88	80.37	64.11



The dependency ratio of the Ahmadnagar district shows decreasing trend. The ratio for the district was 90.35% in 1961, which became 76.88% in 2001. Similarly rural and urban dependency ratio also shows decreasing trend from 91.47% to 80.37% and 81.32% to 64.11% respectively. It means that working population that is population in between 15-59 age group is increasing due to addition of youth population of the district.

3.4.4.4 Workers and Non-workers Population :

The phenomena of Economically active Non-activeness of the population mainly deals with Number of people engaged in economic production. Proportion of economically active population to total population gives 'Crude efficiency rate' for the region.

The term 'work' is used in a special sense in the census. That is 'participation in any economically productive activity'. Such participation may be physical or mental in nature. All those who had worked for the major part of the preceding year were recorded as main workers (at least 06 months or 183 days) while those who worked for sometime during the preceding year but not for the major part, have been treated as marginal workers. All those who had not worked at all during the last year were as non-workers (persons engaged in household duties, students, dependents, retired persons, beggars etc.)

The census of India considers only workers as economically productive, while rest are considered economically unproductive. The term 'worker' is defined as 'A person who participate physically or intellectually in economically productive occupations or services is considered a worker'. Also those who are intellectually involved in organizational and managerial work ³⁷.

At the time of 1981 census, economically productive population divided in to two sub-groups as - 1] Those who were employed for more than six months or both the agricultural seasons in a year.

2] Those who were working before the commencement of census work but who were unemployed for larger part of the year.

Economically active population to the total population defined by – 1] Demographic factors and 2] Socio-economic factors.

1] Demographic factors includes i] Birth Rate.

ii] Age composition.

iii] Expectancy life at birth.

iv] Migration.

v] Size of the family.

2] Socio-economic factors includes- i] Literacy.

ii] Level of education.

iii] Status of the women in the society.

iv] Average age at marriage.

v] Health.

vi] Job opportunities.

vii] Wage levels.

When birth rate and death rate both are high, proportion of economically active population is small, children's are more, non productive section is large and productive is small.

When birth and death rate are low, economically active population is large.

Regions which receive migrants have large economically active population while regions from where migrants have gone out have small economically active population.

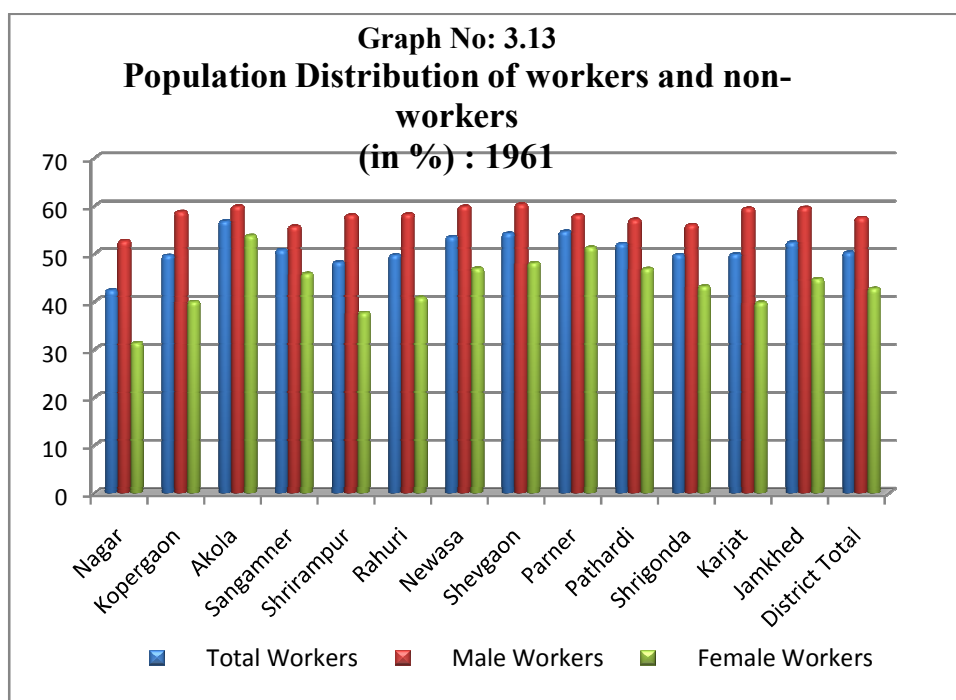
‘The manpower consist of only those persons who could participate in economically gainful activities in the event of need. In other words, manpower of the nation consist of those persons who are fit enough to produce goods and services and who have the propensity to participate in the economically gainful activities. Different countries classify manpower further into two sub-categories of economically active population and economically non-active population. The economically active population is that part of manpower, which is actually engaged in the production of goods and services. It consist of both males and females. Economically non-active population is that part of manpower, which is engaged in activities like household duties in their own house or at the place of their relatives, retired personnel, inmates of institutions, students and those living on royalties, rents. Dividends, pensions etc’.³⁸ ‘It is obvious that the very young, very old, as well as physically and mentally incapacitated persons are not useful for economic activity. It is therefore, accepted that only those who can produce goods and service constitute the manpower of any nation. The economically active population is that part of manpower which actually takes part or tries to take part in the production of goods and services’.³⁹

3.4.4.5 Population Distribution of workers and non-workers (in%): 1961

Table No : 3.36

Sr. No.	Tahsil	% of Workers Total	% of Workers Male	% of Workers Female
01	Nagar	42.38	52.67	31.36
02	Kopergaon	49.65	58.77	39.97
03	Akola	56.81	59.93	53.75
04	Sangamner	50.79	55.69	45.83
05	Shrirampur	48.24	58.07	37.65
06	Rahuri	49.73	58.23	40.82
07	Newasa	53.51	59.89	46.94
08	Shevgaon	54.28	60.31	48.09
09	Parner	54.67	58.03	51.34
10	Pathardi	52.06	57.10	46.89
11	Shrigonda	49.78	56.01	43.18
12	Karjat	49.92	59.51	39.82
13	Jamkhed	52.35	59.66	44.74
	District Total	50.27	57.50	42.75

Source: District census handbook – 1961.



Workers in Maharashtra and Ahmadnagar 1961: (in %)

Table No: 3.37

Sr. No.		% of Workers Total	% of Workers Male	% of Workers Female
	Ahmadnagar	50.27	57.50	42.75
	Maharashtra	47.91	57.09	38.10

Source: District census handbook – 1961.

The percentage of workers in the district is comparatively more than that of the Maharashtra. It is because of the development of agriculture in the district lower urban population. The male workers in the shevgaon is highest one i.e. 60.31 % and lowest in Nagar of 52.67 %. The female workers in the district in more in Akola of 53.75 % and lowest in Nagar Tahsil of 31.36 %. The female percentage in Akola is more due to rice farming activity is rich in the Tahsil. And less in Nagar due to more urban population.

Distribution of workers and non-workers : 1961

Table No: 3.38

			% of total workers to total population			% of Non- workers to total population		
			P	M	F	P	M	F
01	Nagar,	T	42.38	52.67	31.36	57.62	47.33	68.64
		R	53.05	57.96	48.05	46.95	42.04	51.95
		U	31.03	47.32	12.64	68.97	52.68	87.36
02	Rahuri	T	49.73	58.23	40.82	50.27	41.77	59.18
		R	49.73	58.23	40.82	50.27	41.77	59.18
		U	-	-	-	-	-	-
03	Shrirampur	T	48.24	58.07	37.65	51.76	41.93	62.35
		R	50.33	59.04	41.01	49.67	40.96	58.99
		U	33.99	51.64	14.06	66.01	48.36	85.94
04	Newasa	T	53.51	59.89	46.94	46.49	40.11	53.06
		R	53.51	59.89	46.94	46.49	40.11	53.06
		U	-	-	-	-	-	-
05	Shevgaon	T	54.28	60.31	48.09	45.72	39.69	51.91
		R	54.28	60.31	48.09	45.72	39.69	51.91
		U	-	-	-	-	-	-
06	Pathardi	T	52.06	57.10	46.89	47.94	42.90	53.11
		R	52.06	57.10	46.89	47.94	42.90	53.11
		U	-	-	-	-	-	-
07	Jamkhed	T	52.34	59.66	44.74	47.65	40.34	55.26
		R	52.34	59.66	44.74	47.65	40.34	55.26
		U	-	-	-	-	-	-
08	Karjat	T	49.92	59.51	39.82	50.08	40.49	60.18
		R	49.92	59.51	39.82	50.08	40.49	60.18
		U	-	-	-	-	-	-

09	Shrigonda	T	49.78	56.01	43.18	50.22	43.99	56.82
		R	49.78	56.01	43.18	50.22	43.99	56.82
		U	-	-	-	-	-	-
10	Parner	T	54.67	58.03	51.34	45.33	41.97	48.66
		R	54.67	58.03	51.34	45.33	41.97	48.66
		U	-	-	-	-	-	-
11	Akola	T	56.81	59.93	53.75	43.19	40.07	46.24
		R	56.81	59.93	53.75	43.19	40.07	46.24
		U	-	-	-	-	-	-
12	Sangamner	T	50.79	55.69	45.83	49.21	44.31	54.17
		R	53.74	57.13	50.49	46.26	42.87	49.79
		U	31.42	46.62	14.71	68.58	53.38	85.29
13	Kopergaon	T	49.65	58.77	39.97	50.35	41.23	60.03
		R	51.59	59.52	43.23	48.41	40.48	56.77
		U	35.43	53.38	15.52	64.57	46.62	84.48
	District Total	T	50.27	57.50	42.75	49.73	42.50	57.24
		R	52.43	58.60	46.06	47.76	41.77	53.94
		U	31.99	48.53	13.42	68.01	51.47	86.58

Source: Census handbook 1961.

The census 1961 recorded 50.27 % of the district population as total workers and 49.73 % as total non-workers.

Distribution of workers and non-workers (in %) : 1971.

Table No: 3.39

Sr. no	Tahsil	% of total workers to total population			% of Non- workers to total population		
		P	M	F	P	M	F
1.	Nagar T	33.81	49.12	16.81	66.19	50.88	83.19
	R	37.60	51.10	23.53	62.40	48.90	76.47
	U	29.84	47.17	09.30	70.16	52.82	90.70
2.	Rahuri T	34.78	51.40	17.34	65.22	48.60	82.66
	R	34.78	51.40	17.34	65.22	48.60	82.66
	U	-	-	-	-	-	-
3.	Shrirampur T	34.57	50.77	17.13	65.43	49.23	82.87
	R	35.59	51.17	18.88	64.41	48.83	81.12
	U	29.20	48.68	07.83	70.80	51.32	92.17
4.	Newasa T	37.20	51.87	22.15	62.80	48.13	77.85
	R	37.20	51.87	22.15	62.80	48.13	77.85
	U	-	-	-	-	-	-
5.	Shevgaon T	39.35	54.23	24.07	60.65	45.77	75.92
	R	39.35	54.23	24.07	60.65	45.77	75.92
	U	-	-	-	-	-	-
6.	Pathardi T	37.05	50.81	22.84	62.95	49.19	77.16
	R	37.05	50.81	22.84	62.95	49.19	77.16
	U	-	-	-	-	-	-
7.	Jamkhed T	32.72	51.49	13.49	67.28	48.51	86.51
	R	32.72	51.49	13.49	67.28	48.51	86.51
	U	-	-	-	-	-	-
8.	Karjat T	33.12	52.56	12.58	66.88	47.44	87.42

	R	33.12	52.56	12.58	66.88	47.44	87.42
	U	-	-	-	-	-	-
9.	Shrigonda T	33.41	49.83	16.12	66.59	50.17	83.88
	R	33.41	49.83	16.12	66.59	50.17	83.88
	U	-	-	-	-	-	-
10.	Parner T	38.22	49.10	27.60	61.78	50.90	72.39
	R	38.22	49.10	27.60	61.78	50.90	72.39
	U	-	-	-	-	-	-
11.	Akola T	37.15	52.16	22.14	62.85	47.83	77.86
	R	37.15	52.16	22.14	62.85	47.83	77.86
	U	-	-	-	-	-	-
12.	Sangamner T	33.33	48.46	17.81	66.66	51.54	82.19
	R	34.33	49.55	18.90	65.66	50.45	81.10
	U	26.65	41.55	10.14	73.35	58.45	89.86
13.	Kopergaon T	36.92	52.43	20.50	63.07	47.57	79.50
	R	37.92	52.91	22.19	62.08	47.09	77.80
	U	30.47	49.40	09.00	69.53	50.60	91.00
	District Total T	35.43	50.87	19.26	64.57	49.13	80.73
	R	36.17	51.37	20.46	63.83	48.63	79.54
	U	29.47	47.09	09.12	70.53	52.91	90.88

Source: Census handbook 1971.

The census 1971 recorded 35.43 % of the district population as total workers and 64.57 % as non-workers.

Distribution of workers and non-workers (in %): 1981

Table No. 3.40

Sr.no	Tahsil	% of total workers to total population			% of Non- workers to total population		
		P	M	F	P	M	F
1.	Nagar T	39.58	52.01	25.67	60.42	47.99	74.33
	R	47.30	54.31	39.86	52.70	45.69	60.14
	U	31.71	49.79	10.36	68.29	50.21	89.64
2.	Rahuri T	46.39	54.96	37.39	53.61	45.04	62.61
	R	48.20	55.58	40.43	51.80	44.42	59.57
	U	34.76	50.94	17.86	65.24	49.06	82.14
3.	Shrirampur T	39.35	51.24	26.73	60.65	48.76	73.27
	R	41.37	51.64	30.46	58.63	48.36	69.54
	U	30.76	49.57	10.89	69.24	50.43	89.11
4.	Newasa T	49.19	56.24	41.79	50.81	43.76	58.21
	R	49.19	56.24	41.79	50.81	43.76	58.21
	U	-	-	-	-	-	-
5.	Shevgaon T	48.77	54.97	42.46	51.23	45.03	57.54
	R	48.77	54.97	42.46	51.23	45.03	57.54
	U	-	-	-	-	-	-
6.	Pathardi T	48.40	53.06	43.71	51.60	46.94	56.29
	R	48.40	53.06	43.71	51.60	46.94	56.29
	U	-	-	-	-	-	-
7.	Jamkhed T	48.82	57.02	40.47	51.18	42.98	59.53
	R	48.82	57.02	40.47	51.18	42.98	59.53
	U	-	-	-	-	-	-
8.	Karjat T	48.96	56.82	40.71	51.04	43.18	59.29
	R	48.96	56.82	40.71	51.04	43.18	59.29
	U	-	-	-	-	-	-

9.	Shrigonda	T	48.67	54.98	42.09	51.33	45.02	57.91
		R	48.67	54.98	42.09	51.33	45.02	57.91
		U	-	-	-	-	-	-
10.	Parner	T	48.43	50.62	46.33	51.57	49.38	53.67
		R	48.43	50.62	46.33	51.57	49.38	53.67
		U	-	-	-	-	-	-
11.	Akola	T	51.82	54.41	49.25	48.18	45.59	50.75
		R	51.82	54.41	49.25	48.18	45.59	50.75
		U	-	-	-	-	-	-
12.	Sangamner	T	46.79	51.17	42.28	53.21	48.83	57.72
		R	49.34	52.15	46.47	50.66	47.85	53.53
		U	31.51	45.47	16.52	68.49	54.53	83.48
13.	Kopergaon	T	42.80	52.32	32.72	57.20	47.68	67.28
		R	44.79	52.73	36.43	55.21	47.27	63.57
		U	32.46	50.20	13.13	67.54	49.80	86.87
	District Total T		45.68	53.33	37.69	54.32	46.67	62.31
		R	47.74	53.94	41.34	52.26	46.06	58.66
		U	31.87	49.42	12.15	68.13	50.58	87.85

Source: Census handbook 1981.

The census 1981 recorded 45.68 % of the district population as total workers and 54.32 % as non-workers.

Distribution of workers and non-workers (in %) : 1991

Table No: 3.41

		% of total workers to total population			% of Non- workers to total population		
		P	M	F	P	M	F
01	Nagar, T	39.02	50.21	26.75	60.98	49.79	73.25
	R	44.58	50.66	38.11	55.42	49.34	61.89
	U	32.50	49.71	12.97	67.50	50.29	83.03
02	Rahuri T	44.70	52.00	36.97	55.30	48.00	63.03
	R	47.00	52.73	40.96	53.00	47.27	59.04
	U	36.18	49.30	22.02	63.82	50.70	77.98
03	Shrirampur T	39.22	49.20	28.63	60.78	50.80	71.37
	R	42.51	49.97	34.54	57.49	50.03	65.46
	U	28.37	46.62	9.28	71.63	53.38	90.72
04	Newasa T	48.90	52.62	44.97	51.10	47.38	55.03
	R	48.90	52.62	44.97	51.10	47.38	55.03
	U	-	-	-	-	-	-
05	Shevgaon T	50.18	52.54	47.71	49.82	47.46	52.29
	R	50.18	52.54	47.71	49.82	47.46	52.29
	U	-	-	-	-	-	-
06	Pathardi T	50.01	50.12	49.90	49.99	49.88	50.10
	R	52.04	50.84	53.29	47.96	49.16	46.71
	U	32.73	44.19	19.97	67.27	55.81	80.03
07	Jamkhed T	49.50	52.31	46.55	50.50	47.69	53.45
	R	49.50	52.31	46.55	50.50	47.69	53.45
	U	-	-	-	-	-	-

08	Karjat	T	51.55	54.57	48.34	48.45	45.43	51.66
		R	51.55	54.57	48.34	48.45	45.43	51.66
		U	-	-	-	-	-	-
09	Shrigonda	T	49.52	52.85	46.00	50.48	47.15	54.00
		R	50.77	53.17	48.24	49.23	46.83	51.76
		U	37.15	49.75	23.67	62.85	50.25	76.33
10	Parner	T	49.80	49.30	50.30	50.20	50.70	49.70
		R	49.80	49.30	50.30	50.20	50.70	49.70
		U	-	-	-	-	-	-
11	Akola	T	50.19	50.63	49.74	49.81	49.37	50.26
		R	50.19	50.63	49.74	49.81	49.37	50.26
		U	-	-	-	-	-	-
12	Sangamner	T	46.67	50.05	43.12	53.33	49.95	56.88
		R	49.25	50.64	47.79	50.75	49.36	52.21
		U	30.63	46.42	13.80	69.37	53.58	86.20
13	Kopergaon	T	43.99	51.38	36.12	56.01	48.62	63.88
		R	47.74	52.17	43.01	52.26	47.83	56.99
		U	33.43	49.15	16.78	66.57	50.85	83.22
	District Total	T	45.95	51.12	40.50	54.05	48.88	59.50
		R	48.49	51.60	45.23	51.51	48.40	54.77
		U	32.44	48.63	14.74	67.56	51.37	85.26

Source: District Census handbook 1991

The work participation rate for total workers is defined as the percent of total workers to total population. The census 1991 recorded 45.95 % of the district population as total workers and 54.05 % as non-workers. The corresponding figures for the state are 42.96 % and 57.02 % respectively.

Comparative percentage of Workers in the District to the State :1991

Table No: 3.42

Sr.No.	Workers	Ahmadnagar	Maharashtra
01	Main Workers	42.47 %	39.28 %
02	Marginal Workers	3.48 %	3.68 %
03	Non-Workers	54.05 %	57.02 %

Source : 1991 census record.

As compared to 1981 census, there is slightly increase in the work participation rate for the main workers of the district i.e. 41.55 % in 1981 and became 42.47 % in 1991.

As per 1991 census, among the main workers, male participation rate in the district was 50.59 % while that of females is 33.91 %. The corresponding figures for males and females in 1981 are 52.19 % and 30.45 % respectively. It shows that, in 1991 there is decrease in male and increase in female work participation rate of the district.

The sex-wise break up shows that, among males and females 0.53% and 6.59% of the population are marginal workers as against the 1981 male and female marginal workers of 1.14% and 7.24% respectively. As compared to 1981, there has been slightly decrease in marginal male and female workers respectively in the district.

The proportion of workers is highest in Karjat Tahsil (51.55%) and the lowest in Nagar Tahsil (39.02%). The district average is 45.95%. The Tahsils of Newasa (48.90%), Shevgaon (50.18%), Pathardi (50.01%), Jamkhed (49.50%), Shrigonda (49.52%), Parner (49.80%), Akola (50.19%), Sangamner (46.67%) shows higher percentage of workers participation than the district average of 45.95%.

As per 1991, the rural population of the district shows 44.48% of main workers, 4.01% of marginal workers and 51.51% non-workers. The corresponding proportion for the state is 44.18%, 5.48% and 50.31% respectively.

Among the main workers, male participation rate in rural area of the district is 51.03%, while female is 37.62%. Marginal male and female workers account for 0.57% and 7.61% respectively of the total rural population of the district. The proportion of female marginal workers is higher than that of male because the females besides attending their household duties also perform one or more economic activities to supplement the family income.

There are considerable variations in work participation rates among the tahsil of the district between rural and urban sectors and also between males and females. Generally rural work participation rate is more (44.48%) than in the urban areas (31.77%). In male and female work participation the differential is larger among the females (32.67% rural and (13.70%) urban as compared to males (51.03% rural and (48.29%) urban.

In rural areas of the district, Pathardi occupies the first rank (48.46%) and Shrirampur occupies last rank (39.01%). In Akola, Newasa, Karjat, Shevgaon, Parner and Jamkhed Tahsil, which are entirely rural, the main workers of these tahsil account for 46.44%, 46.29%, 46.06%, 45.62%, 44.57% and 42.69% respectively.

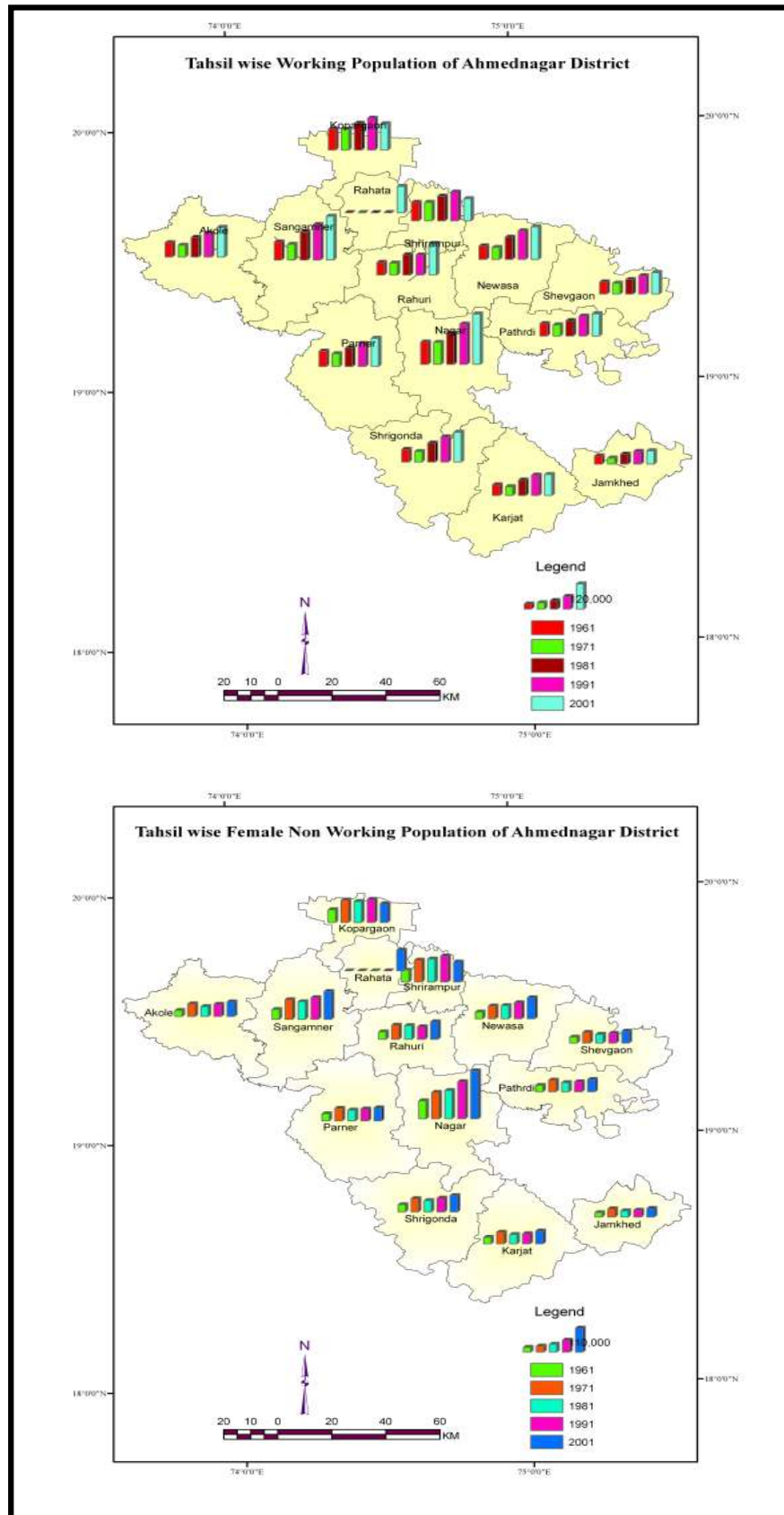
Workers percentage of the district:1991

Table No: 3.43

	Main Workers (%)		Marginal Workers (%)		Non-Workers (%)	
	State	District	State	District	State	District
Total	39.28	42.47	3.68	3.48	57.02	54.05
Male	51.24	50.59	0.92	0.53	47.82	48.88
Female	26.47	33.91	6.64	6.59	66.87	59.50

Source: District census handbook-1991.

Map No. 3.8



Distribution of workers and non-workers (in %) 2001.

Table No:3.44

Name of the Tahsil		% of total workers to total population			% of Non- workers to total population		
		P	M	F	P	M	F
1.Nagar,	T	38.68	51.55	24.39	61.32	48.45	75.61
	R	47.70	52.52	42.55	52.30	47.48	57.45
	U	33.14	50.97	12.90	66.86	49.03	87.10
2.Rahuri	T	49.96	55.60	43.91	50.04	44.40	56.09
	R	52.58	56.15	48.76	47.42	43.85	51.24
	U	40.65	53.68	26.59	59.35	46.32	73.41
3.Shrirampur	T	40.01	51.66	27.73	59.99	48.34	72.27
	R	44.38	52.70	35.54	55.62	47.30	64.46
	U	31.75	49.66	13.16	68.25	50.34	86.84
4.Newasa	T	46.58	53.14	39.57	53.42	46.86	60.43
	R	46.58	53.14	39.57	53.42	46.86	60.43
	U	0	0	0	0	0	0
5.Shevgaon	T	49.13	52.59	45.50	50.87	47.41	54.50
	R	49.13	52.59	45.50	50.87	47.41	54.50
	U	0	0	0	0	0	0
6.Pathardi	T	48.27	49.96	46.50	51.73	50.04	53.50
	R	49.97	50.42	49.51	50.02	49.58	50.49
	U	33.97	46.21	20.46	66.03	53.79	79.54
7.Jamkhed	T	46.01	51.19	40.56	53.99	48.81	59.44
	R	49.39	52.48	46.15	50.61	47.52	53.85
	U	32.98	46.25	18.86	67.02	53.75	81.14

8.Karjat	T	47.65	53.48	41.40	52.35	46.52	58.60
	R	47.65	53.48	41.40	52.35	46.52	58.60
	U	0	0	0	0	0	0
9.Shrigonda	T	50.05	54.99	44.77	49.95	45.01	55.24
	R	51.23	55.39	46.80	48.77	44.61	53.20
	U	38.76	51.23	25.38	61.24	48.77	74.62
10.Parner	T	53.05	54.29	51.80	46.95	45.71	48.20
	R	53.05	54.29	51.80	46.95	45.71	48.20
	U	0	0	0	0	0	0
11.Akola	T	51.84	54.05	49.56	48.16	45.95	50.44
	R	51.84	54.05	49.56	48.16	45.95	50.44
	U	0	0	0	0	0	0
12.Sangamner	T	46.31	51.16	41.17	53.69	48.84	58.83
	R	49.49	51.98	46.88	50.51	48.02	53.12
	U	32.20	47.63	15.45	67.80	52.37	84.55
13.Kopergaon	T	44.14	51.66	36.04	55.86	48.34	63.95
	R	48.27	52.79	43.42	51.73	47.21	56.58
	U	32.11	48.40	14.51	67.89	51.60	85.49
14.Rahata	T	42.37	51.89	32.22	57.63	48.11	67.78
	R	43.44	51.79	34.58	56.56	48.21	65.42
	U	36.59	52.41	19.35	63.41	47.58	80.65
District	T	45.96	52.59	38.90	54.04	47.41	61.10
Total	R	48.98	53.17	44.55	51.02	46.83	55.45
	U	33.80	50.28	15.65	66.20	49.72	84.35

Source: Census of India 2001.

**3.4.4.7 Comparison of workers and non-workers Distribution :
(in%) 1961-2001.**

Table No:3.45

Census Year		% of total workers to total population			% of Non- workers to total population		
		P	M	F	P	M	F
1961	T	50.27	57.50	42.75	49.73	42.50	57.24
	R	52.43	58.60	46.06	47.76	41.77	53.94
	U	31.99	48.53	13.42	68.01	51.47	86.58
1971	T	35.43	50.87	19.26	64.57	49.13	80.73
	R	36.17	51.37	20.46	63.83	48.63	79.54
	U	29.47	47.09	09.12	70.53	52.91	90.88
1981	T	45.68	53.33	37.69	54.32	46.67	62.31
	R	47.74	53.94	41.34	52.26	46.06	58.66
	U	31.87	49.42	12.15	68.13	50.58	87.85
1991	T	45.95	51.12	40.50	54.05	48.88	59.50
	R	48.49	51.60	45.23	51.51	48.40	54.77
	U	32.44	48.63	14.74	67.56	51.37	85.26
2001	T	45.96	52.59	38.90	54.04	47.41	61.10
	R	48.98	53.17	44.55	51.02	46.83	55.45
	U	33.80	50.28	15.65	66.20	49.72	84.35

The work participation rate for total workers is defined as the percent of total workers to total population. The census 2001 recorded 45.96 % of total workers 54.04 % of non-workers. The corresponding figures for the state of Maharashtra are 42.49% and 57.50% respectively. Here district shows more percent of workers

than state while state has more percent of non-workers than the District. ‘The work participation Rate (WPR) is a distributive mechanism through which macroeconomic gains may percolate down to a large number of lower income household in India. WPR levels are high and stable for males but low and increasing for females. An increase in WPRs of women does not necessarily support the hypothesis of an increasing role of women in the national economy. But women’s working population has a positive impact on the health and survival of children’.⁴⁰

3.4.8 Comparison of Workers and Non-workers to the state 1991 & 2001:

Table No: 3.46

Census Year	Workers %		Non-workers %	
	District	State	District	State
1991	45.95	42.96	54.05	57.02
2001	45.96	42.49	54.04	57.50

Source : Computed by Researcher.

The census 1991 recorded 45.95% of the district population as total workers and 54.05% as non-workers. Both are increased by 0.01 % only during the 1991-2001 decade. State shoes decrease in workers percentage by 0.47 % and increase in non-workers percent by 0.48 %.

The 2001 census records highest proportion of workers in Parner Tahsil (53.05%) and lowest in Nagar Tahsil (38.68%). The District average is 45.96 %. The Tahsilof Newasa (46.58%), Shevgson (49.13%), Pathardi (48.27%), Jamkhed (46.01%),

Shrigonda (50.05%), Rahuri (49.96%), Akola (51.845), Sangamner (46.31%) shows higher percentage of workers participation than the district average of 45.96 %. Among the workers, male participation rate is 52.59 % and female 38.90 %. While workers male participation rate in rural area of the district is 53.17 % and female is 44.55 %. The proportion of female workers is lower than that of male in rural (44.55%) and urban (15.65%) because females are attending their household duties. There are considerable variations in work participation rates among the Tahsil of the district between rural and urban sectors and also between males and females. Generally rural work participation rate is more (48.98%) than in the urban (33.80%). In male and female work participation the differential is larger among the females (44.55%) rural and (15.65%) urban as compared to males (53.17%) rural and (50.28%) urban.

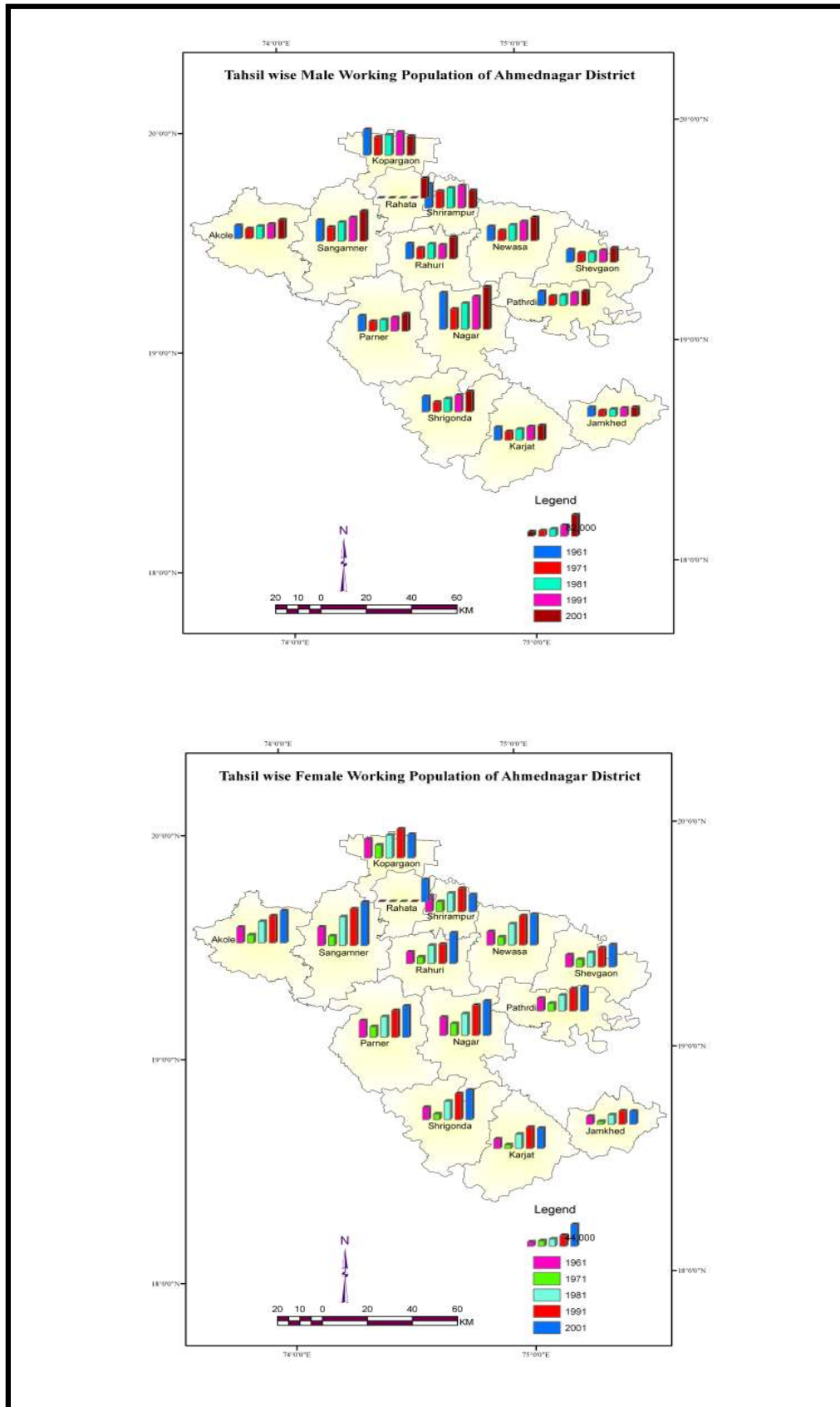
The work participation rate of the district was 50.27 % in 1961, which decreased to form 35.43 % in 1971. It shows increasing trend from 1971 to 2001. In 1981 it became 45.68 %, which is increased by 10.25% during the decade. Then it is slightly increased by 0.27% to form 45.95% in 1991 and very slightly increased by 0.01% to form 45.96% in 2001. Some what similar trend is found among the male and female work participation in the district.

India's work participation Rate-2001.

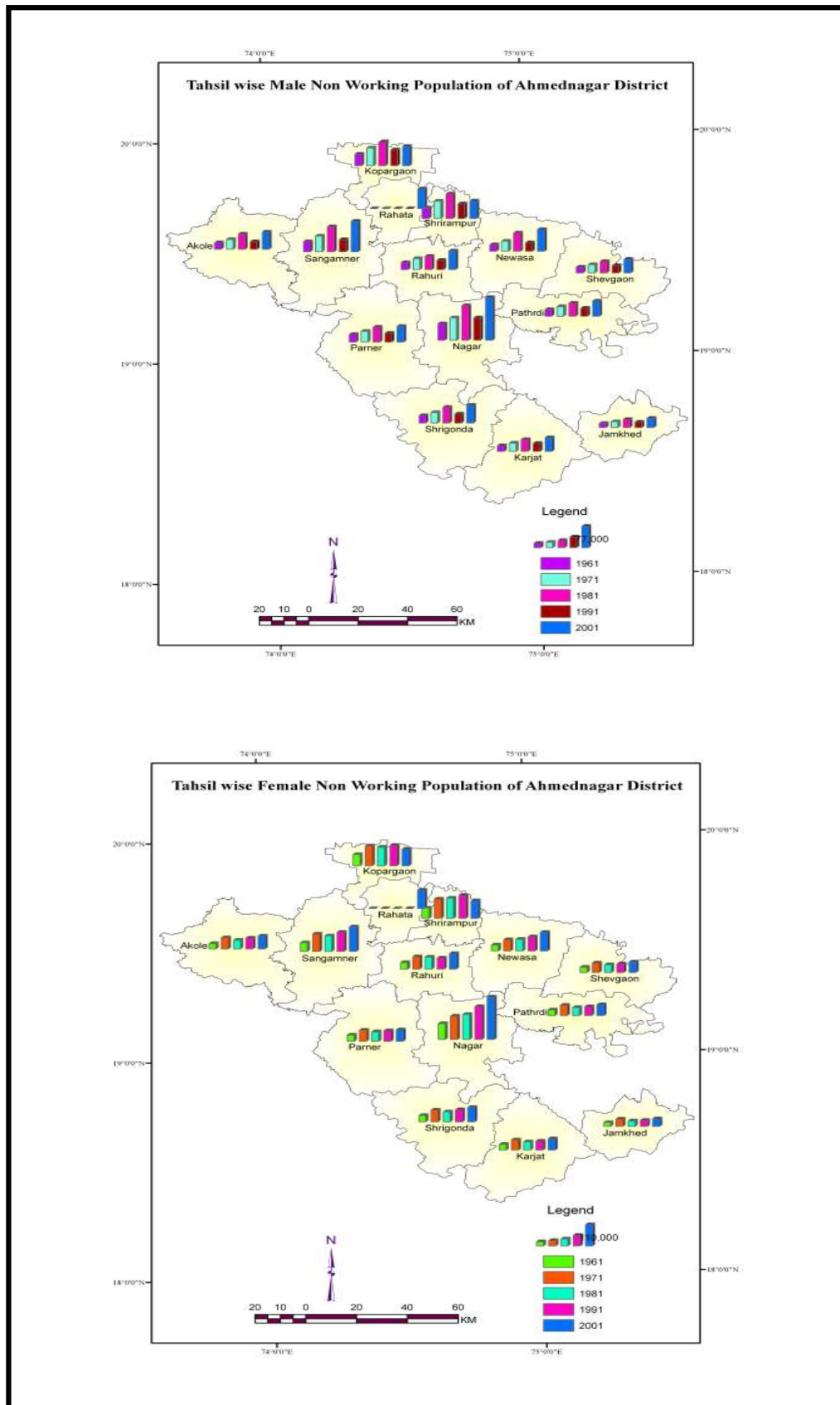
'India on an average, has comparatively low participation rate (39.1%) in consonance with the stage of its demographic transition. Its fertility level still soars at 25.8 per thousand (2000) adding large increments to its child population every year. Its mortality rate is already declined to 8.5 per thousand. However, there still persist wise male-female differentials in the participation rate. In 2000,

while 51.7% of the country's male population was engaged in economically gainful activities, the corresponding figure for female was only 25.6%. it means that while one among every two males in the country was a worker, in case of females the corresponding ratio was one among every four females. The work participation rate among females in India continued to be low because of 1) Continuing prejudices against female participation in outdoor activities among certain sections of Indian society e.g. Muslims; 2) comparatively low literacy rate among females; 3) Limited availability of jobs suitable for females and 4) Competition among males and females for jobs which still remain extremely limited under the prevailing conditions of unemployment. Such a situation favors males as females have their own family limitations'.⁴¹

Map No. 3.9



Map No. 3.10



3.4.5 LITERACY RATE

3.4.5.1 Introduction :

In simple terms literacy word defines the ability to read and write his name. therefore literacy is a parameter of population characteristics and its level of development. One who is unable to read and write, known as illiterate. Hence in every field of knowledge, one has acquired certain minimum skill is a literate and vice versa. Accordingly literacy deals with many fields s.a. Technical literacy, Computer literacy, Mathematical literacy etc.

According to United Nations Organization, literate is one who has ability to read and write. One who can read but can not write is considered 'semi-literate'. According to census of India, 'person who can both read and write with understanding in any language is to be taken as literate'.

Higher literacy rate is a symptom of peoples activation in secondary and tertiary activities, developed status of the country and higher socio-economic status of the society.

Therefore literacy level of any country shows the overall personality. There are socio-economically developed countries in the world, enjoying fruits of development. While there are still underdeveloped countries remain backward, where literacy level is low. Such a large number of countries especially in the Asia and Africa, where large number of females are illiterate.

“Normally, proportion of literates is higher among males than that among females. This is so particularly in the developing countries. This is because of lower social status of women in the developing countries. In rural areas parents are not very keen to

educate their daughters. In addition to this, lower age at marriage for girls and household work they are required to do, also contributes towards lower proportion of literates among females.”⁴⁶

3.4.5.1.1 Crude literacy Rate: Literacy can be calculated with the help of number of literate persons and the total population of the region, is known as crude literacy rate. Which is calculated by this formula-

$$\text{Crude Literacy Rate (CLR)} = \frac{L}{P} \times K$$

Where, L= Number of literate persons.
P= Total population.
K= 100.

Using this formula the crude literacy rates for 1961, 1971, 1981, 1991, and 2001 census population of the district is as follows.

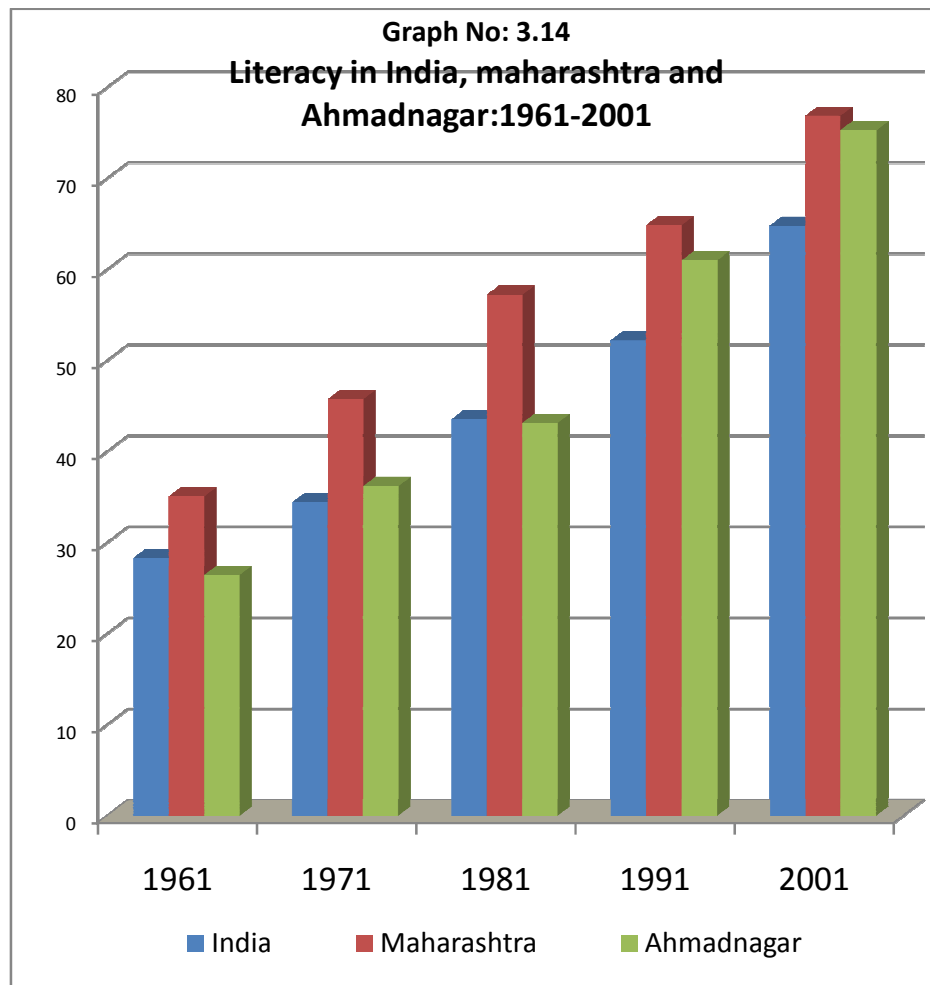
3.4.5.2 Literacy in India, Maharashtra and Ahmadnagar:

1961-2001

Table No: 3.47

Census	India			Maharashtra			Ahmadnagar		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1961	28.3	40.4	15.35	35.08	49.26	19.80	26.45	39.36	13.03
1971	34.45	45.96	21.97	45.77	59.40	31.00	36.23	48.97	22.90
1981	43.57	56.38	29.76	57.24	70.06	43.50	43.16	56.51	29.24
1991	52.21	64.13	39.29	64.87	76.56	52.32	61.03	75.30	45.99
2001	64.83	75.26	53.67	76.88	85.97	67.03	75.30	85.70	64.30

Source: District census handbook-1961-2001.



The comparative literacy table shows that literacy of the district, state and the nation is increased from 1961 to 2001. The trend of increase is some what similar. The percentage of male literacy is more than that of the females. In comparison, Maharashtra has more literacy than the national and the districts literacy.

3.4.5.3 Tahsil wise literacy in Ahmadnagar district 1961:

Table N0: 3.48

Sr.No.	Tahsil	Total/ Rural/ Urban	Percentage of literates		
			persons	Male	Female
1.	Kopergaon	T	27.43	40.28	13.80
		R	25.12	37.93	11.62
		U	44.28	57.04	30.13
2.	Akola	T	18.47	30.10	7.07
		R	18.47	30.10	7.07
		U	-	-	-
3.	Sangamner	T	24.19	37.61	10.58
		R	20.13	33.20	7.04
		U	50.87	65.27	35.03
4.	Shrirampur	T	28.74	41.46	15.04
		R	26.62	39.45	12.90
		U	43.22	54.86	30.08
5.	Rahuri	T	25.49	38.00	12.37
		R	25.49	38.00	12.37
		U	-	-	-
6.	Newasa	T	25.71	39.18	11.85
		R	25.71	39.18	11.85
		U	-	-	-
7.	Shevgaon	T	23.16	36.56	9.43
		R	23.16	36.56	9.43
		U	-	-	-

8.	Parner	T	24.05	38.03	10.19
		R	24.05	38.03	10.19
		U	-	-	-
9.	Nagar	T	38.97	52.72	24.25
		R	24.78	38.76	10.57
		U	54.05	66.84	39.61
10.	Pathardi	T	21.80	34.34	8.91
		R	21.80	34.34	8.91
		U	-	-	-
11.	Shrigonda	T	24.12	37.45	12.09
		R	24.12	37.45	12.09
		U	-	-	-
12.	Karjat	T	21.23	31.96	9.93
		R	21.23	31.96	9.93
		U	-	-	-
13.	Jamkhed	T	22.12	34.01	9.78
		R	22.12	34.01	9.78
		U	-	-	-
14.	Rahata	T	-	-	-
		R	-	-	-
		U	-	-	-
	District	T	26.45	39.36	13.03
	Total	R	23.54	36.33	10.36
		U	51.12	63.96	36.70

Source: Computed by researcher.

As per 1961 census literacy is more in Nagar, Rahuri and Shrirampur tahsil, as 38.97, 25.49 and 28.74 respectively. Akola, Shevgaon and Pathardi shows least literacy, as 18.47, 23.16, 21.80 respectively. Nagar tahsil has highest literacy rate in the district. But rural rate and rural male literacy of the Shrirampur tahsil (26.62 & 39.45) is highest in the district. Female literacy rate of rural Rahuri is highest in the district. In case urban literacy obviously Nagar tahsil shows highest literacy rate in the district.

Tahsil wise literacy in Ahmadnagar district 1971:
Table N0: 3.49

Sr.No.	Tahsil	Total/ Rural/ Urban	Percentage of literates		
			persons	Male	Female
1.	Kopergaon	T	34.46	46.74	21.44
		R	32.00	44.19	19.22
		U	50.42	62.70	36.50
2.	Akola	T	27.61	39.79	15.42
		R	27.61	39.79	15.42
		U	-	-	-
3.	Sangamner	T	35.99	49.74	21.87
		R	32.34	46.18	18.31
		U	60.23	72.43	46.70
4.	Shrirampur	T	39.22	50.82	26.74
		R	37.00	48.88	24.26
		U	50.97	60.98	40.00
5.	Rahuri	T	36.96	48.77	24.56
		R	36.96	48.77	24.56
		U	-	-	-
6.	Newasa	T	35.67	48.77	22.24
		R	35.67	48.77	22.24
		U	-	-	-

7.	Shevgaon	T	35.28	48.43	21.79
		R	35.28	48.43	21.79
		U	-	-	-
8.	Parner	T	32.00	45.99	18.36
		R	32.00	45.99	18.36
		U	-	-	-
9.	Nagar	T	49.70	62.97	35.00
		R	36.15	50.93	20.75
		U	63.89	74.80	50.93
10.	Pathardi	T	30.00	43.00	16.58
		R	30.00	43.00	16.58
		U	-	-	-
11.	Shrigonda	T	33.17	45.55	20.13
		R	33.17	45.55	20.13
		U	-	-	-
12.	Karjat	T	34.12	45.31	22.29
		R	34.12	45.31	22.29
		U	-	-	-
13.	Jamkhed	T	27.94	40.47	15.11
		R	27.94	40.47	15.11
		U	-	-	-
14.	Rahata	T	-	-	-
		R	-	-	-
		U	-	-	-
	District	T	36.23	48.97	22.90
	Total	R	33.32	46.11	20.11
		U	59.56	70.75	46.65

Source: Computed by researcher.

As per 1971 census literacy is more in Nagar, Shrirampur and Rahuri tahsil, as 49.70, 39.22 and 36.96 respectively. Akola, and Jamkhed shows least literacy, as 27.61 and 27.94 respectively. Nagar tahsil has highest literacy rate in the district. Female literacy rate of rural Rahuri is highest in the district (24.56). In case urban literacy obviously Nagar tahsil shows highest literacy rate in the district.

Tahsil wise literacy in Ahmadnagar district 1981:

Table N0: 3.50

Sr.No.	Tahsil	Total/ Rural/ Urban	Percentage of literates		
			persons	Male	Female
1.	Kopergaon	T	46.99	60.45	32.75
		R	45.14	58.93	30.63
		U	56.59	68.21	43.94
2.	Akola	T	28.63	41.14	16.20
		R	28.63	41.14	16.20
		U	-	-	-
3.	Sangamner	T	41.37	54.90	27.47
		R	37.68	51.94	23.13
		U	63.51	72.23	54.15
4.	Shrirampur	T	48.58	60.91	35.50
		R	46.52	59.60	32.64
		U	57.35	66.52	47.66
5.	Rahuri	T	45.21	57.69	32.11
		R	43.72	56.42	30.37
		U	54.83	65.92	43.25
6.	Newasa	T	40.09	52.80	26.76
		R	40.09	52.80	26.76
		U	-	-	-

7.	Shevgaon	T	37.64	52.43	22.61
		R	37.64	52.43	22.61
		U	-	-	-
8.	Parner	T	38.27	53.32	23.83
		R	38.27	53.32	23.83
		U	-	-	-
9.	Nagar	T	57.18	69.63	43.25
		R	46.00	61.23	29.83
		U	68.58	77.79	57.72
10.	Pathardi	T	37.35	52.39	22.22
		R	37.35	52.39	22.22
		U	-	-	-
11.	Shrigonda	T	40.34	53.28	26.93
		R	40.34	53.28	26.93
		U	-	-	-
12.	Karjat	T	37.42	50.24	23.96
		R	37.42	50.24	23.96
		U	-	-	-
13.	Jamkhed	T	35.91	50.39	21.15
		R	35.91	50.39	21.15
		U	-	-	-
14.	Rahata	T	-	-	-
		R	-	-	-
		U	-	-	-
	District	T	43.16	56.51	29.24
	Total	R	40.12	53.90	25.91
		U	63.55	73.28	52.61

Source: Computed by researcher.

As per 1981 census 43.16 % of the total population in the district is literate. Within the district, the literacy rate is maximum in Nagar tahsil (57.18%) and minimum in Akola tahsil (28.63%). Other tahsils which recorded literacy above the district average include Rahuri (45.21), Shrirampur (48.58%) and Kopergaon (46.99%).

Male and female show quite a difference in their literacy rates. In Nagar tahsil male literacy rate is highest (69.63%). Female literacy is also higher in the Nagar tahsil (43.25%). While Akola bears lowest male and female literacy rates in the district (56.51 & 29.24%). Similar to male-female differentials in literacy, there exist a differential in rural and urban literacy in the district. There are 63.55% literates in the urban areas, between the two sexes also a difference is large.

Tahsil wise literacy in Ahmadnagar district 1991:

A person who can both read and write with understanding in any language is to be taken as literate by the Indian census. A person who can merely read but cannot write, is not literate. It is not necessary that a person who is literate could have received any formal education or should have passed any minimum educational standard. In addition to this for 1991 census, all children of age 06 (six) years or less are treated as illiterate even though they may be going to school and can read and write a few odd words. In earlier census, this limitation was up to the age of 04 (four). It has also been decided to use only effective literacy rates for the 1991 census i.e. the ratio of literates and population excluding the age group of 0-6.

Tahsil wise literacy in Ahmadnagar district 1991:

Table N0: 3.51

Sr.No.	Tahsil	Total/ Rural/ Urban	Percentage of literates		
			persons	Male	Female
1.	Kopergaon	T	64.88	79.06	49.80
		R	62.45	77.52	46.41
		U	71.69	83.39	59.28
2.	Akola	T	49.66	65.35	33.94
		R	49.66	65.35	33.94
		U	-	-	-
3.	Sangamner	T	61.39	75.61	46.49
		R	58.22	73.28	42.47
		U	80.52	89.55	70.92
4.	Shrirampur	T	66.77	79.01	53.78
		R	64.86	77.64	51.21
		U	73.02	83.51	62.08
5.	Rahuri	T	62.82	76.22	48.52
		R	60.61	74.71	45.66
		U	70.78	81.61	58.99
6.	Newasa	T	57.09	72.06	41.22
		R	57.09	72.06	41.22
		U	-	-	-
7.	Shevgaon	T	54.75	72.30	36.37
		R	54.75	72.30	36.37
		U	-	-	-

8.	Parner	T	56.46	72.70	40.71
		R	56.46	72.70	40.71
		U	-	-	-
9.	Nagar	T	73.74	85.16	61.13
		R	64.97	79.34	49.63
		U	83.63	91.50	74.60
10.	Pathardi	T	54.02	71.02	36.29
		R	51.77	69.12	33.82
		U	72.89	86.45	57.76
11.	Shrigonda	T	58.25	72.27	43.47
		R	56.90	71.20	41.89
		U	71.39	82.55	59.25
12.	Karjat	T	53.35	67.67	38.10
		R	53.35	67.67	38.10
		U	-	-	-
13.	Jamkhed	T	51.52	67.67	34.69
		R	51.52	67.67	34.69
		U	-	-	-
14.	Rahata	T	-	-	-
		R	-	-	-
		U	-	-	-
	District	T	61.03	75.30	45.99
	Total	R	57.81	72.91	42.03
		U	77.66	87.35	67.01

Source: Computed by researcher.

As per above data of 1991 census for the district, the literacy rate for males is much higher than that females. 75.30 % for males and 45.99 % for females. Tahasil wise distribution shows that Nagar tahsil having highest literacy 73.74 % and Akola with only 49.66 % which is at the bottom in the district. Out of 13 tahsils, only 05 tahsils are above the district average (61.03%)., which are Nagar, Rahuri, Shrirampur, Sangamner and Kopergaon. For urban literacy, 02 tahsila are having higher rate than the district average (77.66%). The urban literacy rate of the district is 77.66% with male 85.35% and female 67.01%.

In case of rural literacy of the district the total literacy rate is 57.81% with male 72.91% and female 42.03%. Nagar tahsil has the highest literacy rate of 64.97% with 79.34% of male and 49.63% females are literate. The lowest literacy rate in Akola tahsil (49.66%). Akola stands at the bottom of the list. There is significant difference in literacy rate between males and females of the total literacy of the district. The difference varies from 25- 36 points in various tahsils of the district. The difference is maximum in shevgaon tahsil (by 36 Points) and minimum in Nagar tahsil (by 30 points). In other words females are lagging behind than the males but day by day gap is narrowing.

Tahsil wise literacy in Ahmadnagar district 2001:

Table N0: 3.52

Sr.No.	Tahsil	Total/ Rural/ Urban	Percentage of literates		
			persons	Male	Female
1.	Kopergaon	T	74.6	85.2	63.3
		R	72.9	84.2	60.9
		U	79.5	88.0	70.4
2.	Akola	T	70.0	82.1	57.6
		R	70.0	82.1	57.6
		U	-	-	-
3.	Sangamner	T	75.5	85.8	64.7
		R	72.9	84.2	61.2
		U	86.4	92.4	79.9
4.	Shrirampur	T	78.0	87.7	67.8
		R	75.3	86.2	63.9
		U	82.9	90.5	75.0
5.	Rahuri	T	75.6	85.5	65.1
		R	75.1	85.4	64.2
		U	77.4	86.1	68.1
6.	Newasa	T	73.8	84.7	62.3
		R	73.8	84.7	62.3
		U	-	-	-
7.	Shevgaon	T	70.0	83.1	56.5
		R	70.0	83.1	56.5
		U	-	-	-

8.	Parner	T	71.5	83.9	59.2
		R	71.5	83.9	59.2
		U	-	-	-
9.	Nagar	T	84.6	91.8	76.8
		R	78.8	88.7	68.5
		U	88.1	93.6	82.0
10.	Pathardi	T	70.4	83.3	57.0
		R	69.0	82.4	55.2
		U	82.1	90.6	72.7
11.	Shrigonda	T	73.4	83.6	62.7
		R	72.8	83.1	61.8
		U	79.9	87.8	71.5
12.	Karjat	T	71.2	82.2	59.5
		R	71.2	82.2	59.5
		U	-	-	-
13.	Jamkhed	T	67.8	80.7	54.3
		R	64.5	78.5	50.0
		U	80.4	89.1	71.2
14.	Rahata	T	78.2	87.5	68.5
		R	77.7	87.2	67.8
		U	81.3	89.5	72.5
	District	T	75.3	85.7	64.3
	Total	R	72.9	84.2	61.1
		U	84.7	91.4	77.3

Source: Computed by researcher.

As per 2001, district poses 75.3% of literacy which is grater than 1991 census by 12%. Tahsil wise distribution shows that Nagar tahsil bears highest literacy i.e. 84.6%. It has also top ranking in male and female literacy in the district, 91.8% for male and 76.8% for female. While Jamkhed has only 67.8% literacy, which is at the lowest rank in the district. Where as male contribute 80.7% and female 54.3%.

Out of 14 tahsils in the district, only 05 tahsils are having literacy more than the average of the district. These tahsils are Nagar (84.6%), Rahata (78.2), Shrirampur (78.0%), Rahuri (75.6%) and Sangamner (75.6%). The remaining 09 tahsils are below the district.

The urban literacy rate of the district is 84.7% with 91.45 males and 77.3 % females. Here the difference between male and female literacy is comparatively less i.e. 14.1%. out of 14 tahsils only 09 has urban population. Out of these 09, only 02 bears more literacy than the district average (84.7%), these tahsils are Sangamner (86.4%) and Nagar (88.1%). Remaining 07 are below the district average.

In case of rural literacy, 72.9% with 84.2% males and 61.1% females. Nagar tahsil has highest rate (78.8%) and Jamkhed with least one (64.5%). About lower literacy, Auther 'Sawant' predicts that, 'proportion of literates is low for rural areas. There is dearth of educational facilities in rural areas, similarly there is absence of proper environment needed for spread of education'.⁴⁷

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CHAPTER –IV
PHYSIOGRAPHY, RESOURCES, CO-OPERATIVE
MOVEMENT AND POPULATION CHARACTERISTICS
OF AHMADNAGAR DISTRICT

- 4.1 IMPACT OF PHYSIOGRAPHY ON POPULATION CHARACTERISTICS OF THE DISTRICT.
- 4.2 IMPACT OF RESOURCES ON POPULATION CHARACTERISTICS OF THE DISTRICT
- 4.3 IMPACT OF CO-OPERATIVE MOVEMENT ON POPULATION CHARACTERISTICS OF THE DISTRICT.

4.1 Impact of physiography on population characteristic of the district.

Physiography or physical set of the district is unique in nature. The district is a elevated tableland. Its location to the west or close to the sahyadri bounds the physiography of the district. Because the offshoots of the Sahyadri are penetrated in the district. The district is bounded by 'Kalasubai – Adala' range in the north, 'Baleshwar range' in the middle and 'Harishchandragad' in the south. The district has a vast plateau as a Ahmednagar plateau in the middle running with north west-south-eastern trend.

The drainage pattern of the rivers 'Godavari' and 'Bhima' are flowings on either sides of plateau. It means Godavari is at north edge and Bhima to the south edge of the district.

The Akola taluka to the west link to the sahyadri that is kalasubai range and also the highest part of the district averaging about 800 mtr. from mean sea level. It goes on decreasing towards east of the district. The kalasubai range run to the north to form boundary between ahmednagar and nashik district¹.

The Baleshwar is the second another range of the sahyadri, which traverses the Akola and Sangamner taluka. The Baleshwar separates the Pravara and Mula river vallies. Pravara to the north and Mula to the south.

The third range which leaves the Sahyadri at Harishchandragad is the longest in the district and forms water – shed between the Govadari and Bhima rivers. It travels towards east about 15 miles and turns to the south to form boundary between Ahmednagar and Poona district. Then it tuens to the south-east, crosses the corner of Junner Taluka of Poona, an enters in Parner taluka. The summits of

the hills here widen into the plateau of Kanhur of a mean height of 2800 ft. above the sea and 7000 ft. above the plain of the Ghod river. To the east of parner is a Nagar taluka, here a flat ridge shoots to the north-east. The ridge run towards north and gradually acquires a slope towards Mula river, it becomes the crest of tableland having a gentle slope towards south – east. North of the city of Ahmednagar, the crest rises again to the dignity of a mountain range. The hill of Gorakhnath popularly called Gorakshnathgad is in the range. This range run towards east, covering part of Nagar and pathardi taluka.

Another branch of the range leaving the kanhur plateau of parner taluka crosses the north-east corner of the Shrigonda taluka and enters in Karjat taluka. Still pursuing to south-east direction, the hill gradually decrease in height and disappear near the Bhima river in south in Poona district².

These ranges of Sahyadri covered most of the part of the Akola, Sangamner, Parner, Rahuri, Nagar, Shrigonda and Karjat taluka. It made its impact over the distribution of population as well as density of the population of the Ahmednagar district.

Tahsil wise Distribution of population (%) in Ahmadnagar district : 2001

Table No: 4.1

Sr.No.	Name of the Tahsil	Popu.%
1	Akola	6.60
2	Sangamner	10.90
3	Kopergaon	6.85
4	Rahata	7.10
5	Shrirampur	6.35
6	Newasa	8.10
7	Shevgaon	5.05
8	Patherdi	5.30
9	Nagar	15.00
10	Rahuri	7.30
11	Parner	6.10
12	Shrigonda	6.85
13	Karjat	5.10
14	Jamkhed	3.30
	District Total	100

Source: Ahmadnagar District census Report-2001

Akola taluka bears 6.60 %, Patherdi 5.30 % , Rahuri 7.30 %, Parner 6.10 %, Shrigonda 6.85 %, Karjat 5.10 %. These distributions are due to somewhat impact of the physiography of the region.

The region of the district which is not much affected by the physiography shows contribution more than these region like Newasa 8.10 %, Shirampur 10.10 % (in 1991), Rahata 7.10 %.

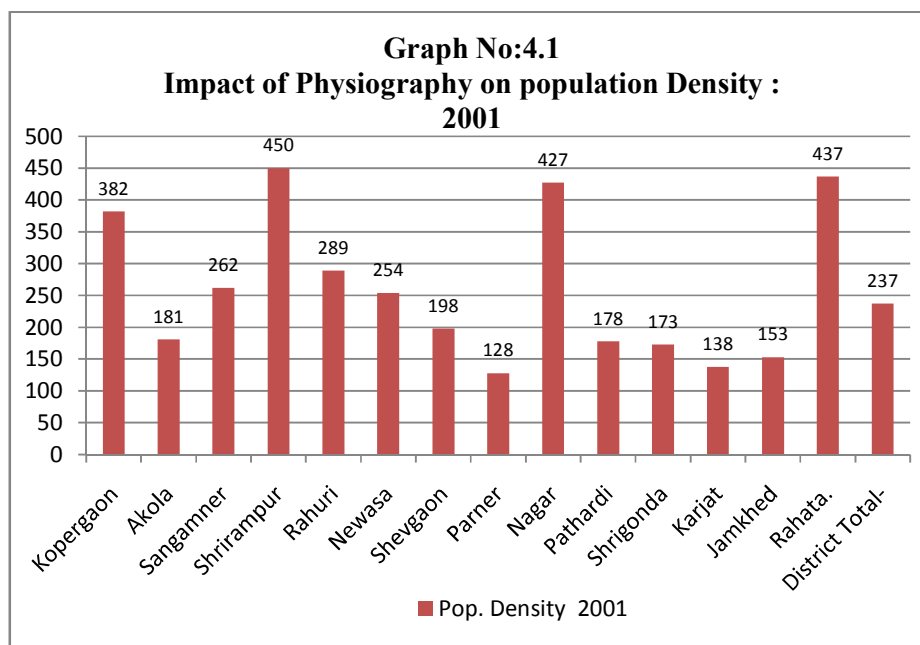
The region with river basins like Newasa, Kopergaon, Shirampur shows 8.10 %, 10% (in 1991) & 10.10 %(in 1991) population growth.

Tahsil wise population density of the Ahmsdnagar district- 2001.

Table No: 4.2

Tahsil	Pop. Density 2001
Kopergaon	382
Akola	181
Sangamner	262
Shrirampur	450
Rahuri	289
Newasa	254
Shevgaon	198
Parner	128
Nagar	427
Pathardi	178
Shrigonda	173
Karjat	138
Jamkhed	153
Rahata.	437
District Total-	237

Source: Ahmadnagar District Census handbooks.



The 2001 census record shows following distribution of density in the district.

Below 100 – Nil

100-200 – Akola, Shevgaon, Parner, Pathardi, Shrigonda, Karjat & Jamkhed.

200-300 – Sangamner, Rahuri, Newasa.

Above 300 – Kopargaon, Shrirampur, Nagar, Rahata.

The region with low density consist Akola, Parner, Pathardi, , Karjat & Jamkhed are dominanc in physiography, which shows its impact over population density of the region.

The region with high density are Kopargaon, Shrirampur, Nagar & Rahata. Out of Kopargaon, Shrirampur & Rahata are in the Pravara & Godavari basins while Nagar is on plateau. Also headquarters population affect density of the tahsil Nagar.

The drainage of the districts belongs to two major river systems. The Godavari is in the north & the Bhima in the south. The Godavari drains or blows from talukas of Kopargaon, Sangamner, Akola, Rahuri, Newasa & Shevgaon. The river Pravara, Mula & Dhora are tributaries which drains Talukas of Rahuri, Shrirampur & Shevgaon. These talukas are partly becomes alluvial plains due to the Godavari. Bhima flows at the south boundary of the district to poona district. Bhima drain Shrigonda & Karjat taluka. The Ghod & the river Sina are the main tributaries of Bhima which drains this region of the district. The drainage of Godavari & Bhima supplied water for irrigation and contributed alluvial plains which supported population growth of the district. Mainly the talukas of Kopargaon, Rahuri, Shrirampur, Newasa, Shevgaon & Shrigonda

4.2 Impact of Resources on population characteristic of the district:

4.2.1 Minerals:

The minerals are of metallic and nonmetallic in nature with economic importance are not available in the district. The basalt with its hard and compact characteristic are available on large proportion, which is mainly used for construction of houses, Roads, Concretes as a building materials. Many 'khadi kendras' are based on stone mines in the district, which are distributed all over the district

A specific blackish basalt found at Newasa, which is very popular because especially it is used for construction of Temples, Idols of god and goddess. These characterized stone is exported to other district also for the same purpose. The particular community peoples of the district, 'vadars' also known as 'Earth-diggers' are concerned with extraction of stones from the mines. These vadars are not in considerable proportion but distributed all over the district.

Mining & Quarrying – distribution of workers – 1991

Table No: 4.3

Ahmadnagar			Maharashtra		
P	M	F	P	M	F
1952 (0.14%)	1578 (0.18%)	374 (0.07%)	115075 (0.37%)	98335 (0.47%)	16740 (0.17%)

Source: Ahmadnagar District Hand Book 1991.

**Taluka wise distribution of workers in mining and quarrying:
1991.**

Nagar	– 227 (0.5)	Shrigonda – 59 (0.06)
Rahruri	– 207 (0.20)	Parner – 126 (0.13)
Shrirampur	– 92 (0.07)	Karjat – 118 (0.14)
Newasa	– 259 (0.20)	Sangamner – 324 (0.21)
Shevgoan	– 120 (0.15)	Kopergaon – 184 (0.13)
Pathardi	– 47 (0.05)	Akola – 70 (0.07)
District total	– 1952 (0.14)	

4.2.2 Land Resource:

The district has 17048 sq. km. area as a land resource. The people engaged as a cultivators 47.35 % & as a agricultural laborers 26.59%, together constitute 73.94% of the total main workers of the district as against the state average of 59.62%. The ratio between cultivators and agricultural laborers is 10.6 in the district differs from the state average of 10.8.

The proportion are both cultivators and agricultural laborers differ considerably from Tahsil to Tahsil. The proportion of cultivators 67.63% in Akola which is highest and lowest in Shrirampur 27.73%. The district average is 47.35%.

The proportion of agricultural laborers is in between 14.83% in Nagar Tahsil to 42.76% in Newasa. About 74% of workers in the district are directly engaged in agriculture as a cultivators or agricultural laborers.

Cultivators and agricultural laborers per 100 hectors of cultivable areas: 1991

Table No: 4.4

Tahsil	Cultivators And Agricultural Labourers	Total Cultivable Area (In Hectors)	Cultivators and Agricultural Labourers Per 100 Hectors of Cultivable Area
Nagar	76719	112206.52	68
Rahuri	76758	60994.00	126
Shrirampur	76339	75727.78	101
Newasa	106590	103853.43	103
Shevgaon	66164	85856.82	77
Pathardi	74874	96397.10	78
Jamkhed	41746	76285.89	55
Karjat	72315	120573.58	60
Shrigonda	88104	108454.61	81
Parner	81872	136236.39	60
Akola	86347	88611.45	97
Sangamner	114288	100952.47	113
Kopergaon	97090	93894.00	103
District Total	1059206	1260044.04	84

Source: Census Hand Book of Ahmadnagar District 1991.

The irrigated area in the district is 86.94%. the total cultivated area is 74.57% which is $\frac{3}{4}$ of the total area. The Tahsils exceeding the district average % of cultivated area are Nagar (77.41%), Shrirampur (83.25%), Pathardi(84.05%), Jamkhed(86.83%), Kopergaon (90.18%). The remaining tahsils are below the district average. There is 24.33% cultivated area of the district is irrigated.

Shrirampur & Kopergaon tahsils have a better proportion 59.27% & 57.42% respectively of the cultivated area under irrigation. Other tahsils, more than average are Rahuri(47.62%), Newasa(40.79%), Shrigonda(27.72%).

Taluka wise % of cultivable area, irrigated area to total area and population growth – A comparative chart.

Table No: 4.5

Tahsil	% of Cultivable area to total area (2001)	% of irrigated area to total cultivable area (2001)	% of population 2001	Population growth 1991-2001	Density 2001
Nagar	77.41	13.26	15.00	+ 25.63	427
Rahuri	65.68	47.62	7.30	+ 16.74	289
Shrirampur	89.51	59.27	6.35	- 24.64	450
Newasa	88.15	40.79	8.10	+ 19.63	254
Shevgaon	83.25	17.94	5.05	+ 19.45	198
Pathardi	84.05	12.01	5.30	+ 16.15	178
Jamkhed	86.83	10.21	3.30	+ 12.52	153
Karjat	69.66	12.49	5.10	+ 11.57	138
Shrigonda	71.36	27.72	6.85	+ 17.67	173
Parner	68.92	15.03	6.10	+ 14.17	128
Akola	58.59	6.62	6.60	+ 20.02	181
Sangamner	60.92	15.13	10.90	+ 24.41	262
Kopergaon	90.18	57.42	6.85	- 17.84	382
Rahata	-	-	7.10	-	437
District Total-	74.57	24.33	100	+ 19.79	237

Source: Computed by Researcher.

The land resource with irrigation facilities shows direct relation to the density of population such as Shrirampur bears 59.27% of irrigation and density is 450 per square km. similarly Newasa 40.79% and 254 density, Kopargaon 57.42% and 382, Rahuri 47.62 % and 289 density. It is cleared that land resource with irrigation facility in Rahuri, Shrirampur, Kopargaon & Newasa makes its impacts over density of population.

4.2.3 Fisheries:

Fishes available in the water bodies as reservoirs, tanks, ponds & rivers is important Natural resource of the district.

The district has average 12240 ha. Water spread with 347 water bodies.

Water- bodies in Ahmednagar district – Table No: 4.6

Sr.No.	Water bodies	Number	Area in ha.
1	Reservoirs	04	7352.11
2	Tanks	68	3228.66
3	Ponds	272	1659.23
4	Riverine Stretch	587 kms.	12827

Source: Ahmednagar district PLP 2007 – 08 issue (PLP = Potential linked credit plan.)

The production of fish was remain 872 metric ton involves an amount of ₹130.80 lakh as at the end of July 2006.

The district has fishermen federation with 53 affiliated fishermen societies with total membership of 3488. There are 18250 fishermen of which 1430 are actively involved in the fishing activity³. (District PLP 2007 – 08 issue P-43).

4.3 Impact of co-operative movements on population characteristics of the region:

The co-operative movement accelerates economic status of the region. Social change, population status depends upon the economic status of the region and co-operation is an important means by which these changes are made with constant speed. Co-operation is a work in a association for the comprehensive benefits. It is said that 'Co-operation act as a balancing factor. It is a double edged axe, which strikes at the same time at the dead abstractions of the socialistic state and at the sterility of individualism.'⁴ there fore different personalities tried to define Co-operation on their own way, like wise a H. Calvert defined as 'Co-operation is a form of organization in which persons voluntarily associate together as human beings on the basis of equality for the promotion of the economic interest of themselves.'⁵ It is true that peoples come together for the purpose of economical beneficialness. A establishment of Co-operative society in an experiment in the field of Co-operative movements. A comprehensive definition has been given by R.B.Tyagi, according to him, 'A Co-operative society is an association of human beings wherein persons, invariably of limited or moderate means, voluntarily associate as human beings on a basis of equality for the promotion of their common economic, social and moral interest by honest means and distribute their profits or surplus among themselves in proportion to their contribution made for earning that surplus or service.'⁶ There fore it is observed that Co-operative movement not only strengthen the economy of the human beings but also strengthen the social life and moral values of the society. Ahmadnagar district is the best example for this movement.

Ahmednagar is popular in Maharashtra as well as in India and in the world due to co-operative movement. Ahmednagar has its unique identity in the world as a, 'Sahakaracha Jilha'. The co-operative movement in the district is begins before independence. Padmashri Dr. Vitthalrao Vikhe Patil established first sugar factory on co-operative basis at pravaranagar in 1948. This remains first industrial co-operative venture in Asia. This co-operative movement made socio-economic progress of the district. The growth of sugar factories benefited to farmers, who get a substantial income from sugarcane cultivation, which changed their living standard and improved social status. This economic and social change is made only due to establishment of co-operative sugar factories and many other processing units. The notable socio-economical change is observed in Sangamner, Shrirampur, Kopargaon, Rahuri, Rahata, and Newsa Tahsil. This change is accelerated due to other means of co-operative units as co-operative societies, co-operative banks and other co-operative units.

Ahmednagar is remarked as bowl of sugar or sugar bowl due to number of sugar mills and its huge production. As co-operative movement is concerned district has been known as pioneer co-operative movement. This movement is actively proceed in the north part of the district that is north Ahmednagar, which includes Kopargaon, Sangamner, Shrirampur, Rahata tahsils. This north Ahmednagar is also facilitated irrigation which remains useful for practicing sugarcane on large proportion to the farmers. No doubt black soil available in this region is also suitable for the sugarcane production. This irrigation was made available through 'Nandur Madhmeshear' Dam and 'Bhandardara' Dam. This credit of Bhandardara goes to British man Mr. Wilson, by his foresight

constructed Bhandardara the water through canal facilitate irrigation to entire north part of the district.

4.3.1 Co-operative sugar factories -

There are at present 20 sugar factory in the district, out of 17 are running on co-operative basis and remaining on private basis. The sugar factory at pravaranagar is the first co-operative basis factory established in Asia each of these has an installed capacity of crushing about 1000 tons of sugarcane per day.

Sugar factories in the Ahmadnagar district 2011 :

Table No: 4.7

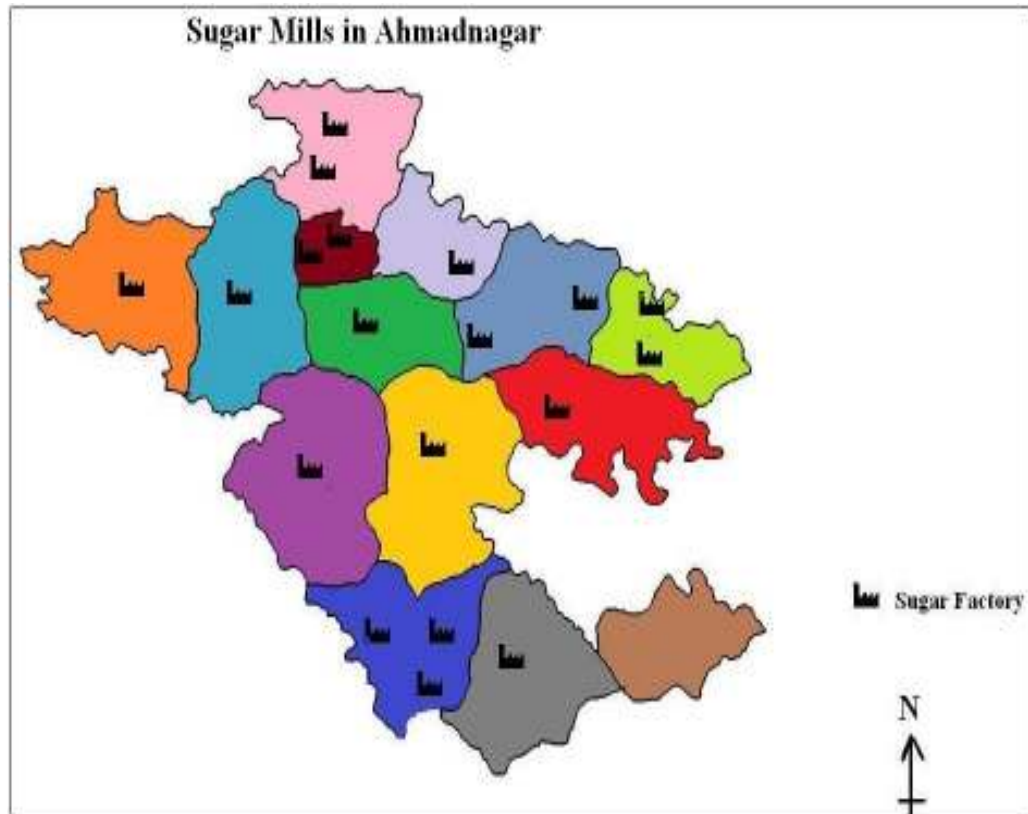
Sr. No	Name of the Sugar Factory	Workers		Crushing Capacity in Met. ton	Net Crushing in Met. ton	Production of Sugar in Met. ton.
		Permanent	Seasonal			
01	Agasti Co-operative Sugar Factory, Akole.	248	462	2500	347040	392
02	Sangamner Co-operative Sugar Factory, Sanamner.	719	497	3500	975195	1133
03	Kopergaon Co-operative Sugar Factory, Kolpewadi. Tal-Kopergaon.	461	504	2500	683836	726
04	Sangeevani Co-operative Sugar Factory, Kopergaon.	912	440	3200	632284	674
05	Padmashri Vikhe Patil Co-operative Sugar Factory, Pravaranagar. Tal-Rahata.	600	825	4000	1004658	1163
06	Ganesh Co-operative Sugar Factory, Ganeshnagar, Tal-Rahata.	280	620	1750	299463	311
07	Ashok Co-operative Sugar Factory, Ashoknagar, Tal-Shrirampur.	466	352	2600	612160	687
08	Mula Co-operative Sugar Factory, Sonai, Tal-Newasa.	405	687	3500	904844	987
09	Dnyaneshwar Co-operative Sugar Factory, Bhenda, Tal-Newasa.	577	733	5000	1117672	1214

10	Kedareswar Co-operative Sugar Factory, Bodhegaon, Tal-Shevgaon.	232	283	2500	200488	221
11	Vrudheshwar Co-operative Sugar Factory, Tisgaon, Tal-Pathardi.	222	284	2500	481983	543
12	Nagar Taluka Co-operative Sugar Factory, Walki, Tal-Nagar.	241	88	2500	121798	1162
13	Tanpure Co-operative Sugar Factory, Shivaginagar, Tal-Rahuri.	822	103	4250	693663	685
14	Parner Co-operative Sugar Factory, Devibhoire, Tal-Parner.	210	254	1250	301310	311
15	Shrigonda Co-operative Sugar Factory, Limpangaon, Tal-Shrigonda.	260	385	3500	695836	751
16	Kukadi Co-operative Sugar Factory, Pimpalgaon Pisa, Tal-Shrigonda.	119	165	1250	321569	358
17	Jagdamba Co-operative Sugar Factory, Rashin, Tal-Karjat.	115	351	2500	676101	793
18	Saikrupa private Sugar Factory, Devdaithan, Tal-Shrigonda.	215	210	800	--	--
19	Gangamai private Sugar Factory, Shevgaon, Tal-Shevgaon.	157	0	2500	272880	289
20	Saikrupa private Sugar Factory, Shrigonda.	174	71	7500	261474	263

Source: Ahmadnagar district Socio-economic Analysis, 2011-12.

Co-Operative Sugar Mills in Ahmadnagar District

Map No. 4.1



4.3.2 Co-Operative Societies in Ahmednagar District:

‘Co-operative societies are economic organizations and differ from other types of business concern in so far as they keep their doors open and allow every person to obtain the benefits of association. In case the movement allows persons having only certain specified views to have access to its benefits, it would cause to be a welfare or a national movement.⁷ Co-operative societies come in to existence according to the activity and need of the peoples, for example, Agricultural credit societies, Marketing societies, Production societies etc. are remain fruitful for the Co-operative movement in the district. No doubt, care and progress of

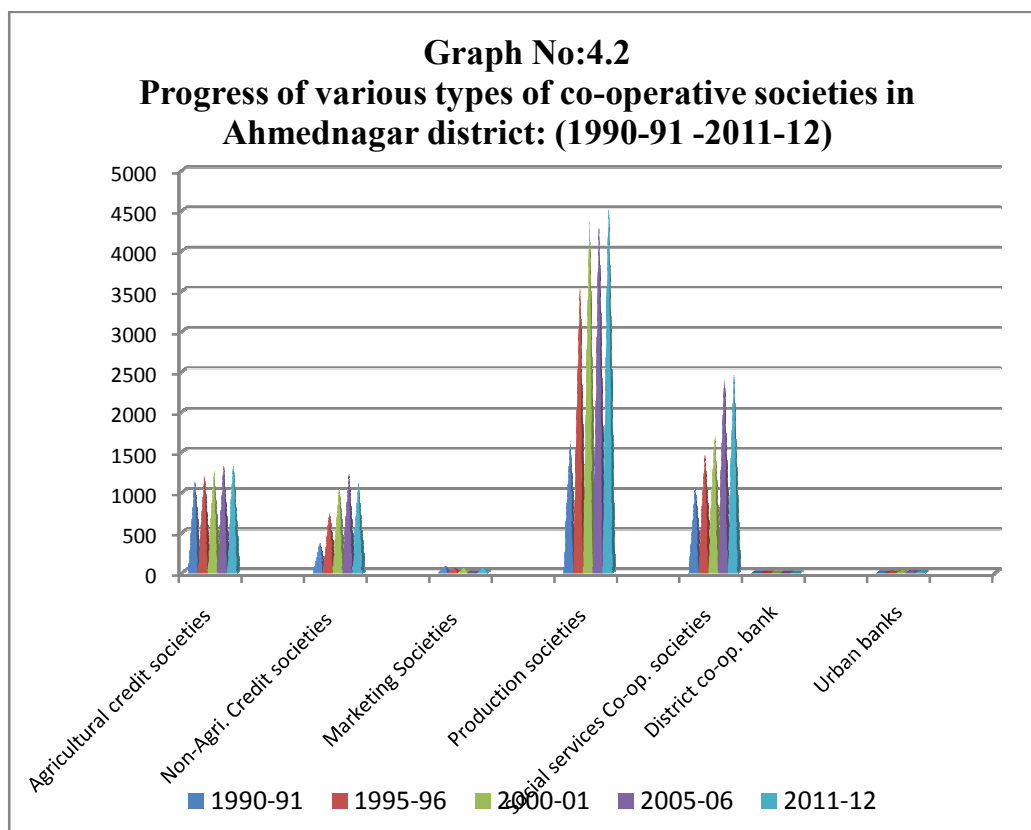
these societies depends upon the members of the concerned Co-operative society. For the long period benefits a confirmed strategy is essential. Like, 'when a Co-operative society is come in to existence, its prime concern is to stay in the field for long period of time, in due course, to expand its activities to meet the- ever increasing requirements of a large number of members.'⁸ When this progress is seen, one can conclude that, 'In principle, Co-operative society is a free and voluntary association functioning on democratic basis, with self-help and mutual aid to satisfy a number of economic and social needs and to provide a wide variety of services. Better farming, Agricultural processing, supply of agricultural inputs and essential consumers goods through retail and wholesale trade as well as through manufacture, dairy and poultry industry, rural electrification, irrigation, fishing and forestry are some of the fields which are considered important and appropriate for Co-operative activity.'⁹ The actual progress of the various Co-operative societies can be attributed with the help of following table.

Progress of various types of co-operative societies in Ahmednagar district: (1990-91 -2011-12)

Table No: 4.8

Sr no.	Type	1990-91	1995-96	2000-01	2005-06	2011-12
1	Agricultural credit societies	1129	1203	1265	1323	1327
2	Non-Agri. Credit societies	360	732	1032	1221	1122
3	Marketing Societies	72	55	51	15	56
4	Production societies	1621	3519	4380	4291	4542
5	Social services Co-op. societies	1055	1449	1686	2410	2460
6	District co-op. bank	01	01	01	01	01
7	Urban banks	14	16	22	24	20
	Total	1252	6975	8437	9285	9528

Source: Ahmadnagar district Socio-economic Analysis, 1990-2012.



**Progress of various types of co-operative societies in
Ahmednagar district: (1990-91 to 2011-12)**

Table No: 4.9

Sr.No.	Item	1990-91	1995-96	2000-01	2005-06	2011-12
1	Agricultural credit societies	1130	1204	1266	1324	1328
1.1	ADCC Bank	01	01	01	01	01
1.2	PACS	1091	1164	1227	1283	1287
1.3	Agricultural Service Societies	02	02	01	00	00
1.4	LAMPS Co-Op Societies	36	37	37	38	38
1.5	Grain Banks	00	00	00	00	00
1.6	Other	00	00	00	02	02
2	Non-Agri. Credit societies	374	748	1054	1245	1142
2.1	Urban Banks	14	16	22	24	20
2.2	Urban credit societies	162	523	820	313	904
2.3	Employees societies	197	208	212	212	218
2.4	Other	01	01	--	696	00
3	Marketing societies	72	55	51	15	56
3.1	District Marketing Societies	01	01	01	01	01
3.2	Primary Marketing Societies	12	12	14	14	14
3.3	other	59	42	36	00	41
4	Production co-op societies	1621	3519	4380	4291	4542
5	Social services co-op societies	1055	1449	1686	2410	2460
	Total-	4252	6975	8437	9285	9528

Source: Ahmadnagar district Social and Economic Analysis, 1990 to 2012.

The above table gives progress of co-operative societies in the district during the period of 1990-91 to 2011-12. Total member of

societies in 1990-91 was 4250, which became 9528 in 2011-12. This numbers twice the number that of 1990-91. This shows flourishing growth of co-operative in the district. Agricultural credit co-operative societies increased from 1129 in 1990-91 to 1327 in 2011-12.

4.3.3 Co-Operative Bank:

The Ahmadnagar District Central Co-Operative Bank (ADCC Bank) has its main head office at the district place and connected 280 branches which are spread all over the district. ADCC is well known in Maharashtra due to its transparent administration. It is also a largest co-operative bank in the Asia. ADCC was established in 1958. It has been working as a central federal financing unit full fills the requirements of all primary credit society of the district. ADCC gives financial assistance to the primary agricultural societies which are popularly known as, ‘vividh karykari society’ located somewhat in every village of the district. This societies provides agricultural loans as a, ‘crop loan’ to the farmers. There number was 1091 in 1990-91 which became 1287 in 2011-12.

Ahmadnagar District Central Co-operative Bank : 2011 (ADCC progress)

Table No: 4.10

Branches	282
Members	6830 (in ‘000’)
Capital	435.63 (in ‘000’)
Deposits	345.26 (in ‘000’)
Loan Dispersed	2319.77 (in ‘000’)

Source: Ahmadnagar district Social and Economic Analysis, 2011.

**Financial position of Ahmednagar district central co-operative
bank ltd: (1990-91 to 2011-12)**

Table No: 4.11

Sr. No	Item	1990-91	1995-96	2000-01	2005-06	2011-12
1	No. of branches	234	289	289	286	282
2	No. of members	2984	4465	5103	5665	5920
	a) societies					
	b) personal	1608	1588	1575	940	910
3	Share capital	86694	156441	425426	593647	10491.04
4	Reserve and other funds	127562	346560	916013	2113211	28497.29
5	Deposits	2231107	5208482	13218626	19760278	345261.23
6	Working capital	3776049	3667980	17361747	24410839	435628.60
7	Issued loans- Short term	351927	3757668	1701501	2235454	165288.33
	Medium term	308514	244552	629343	1151393	11306.04
	Long term	48283	13283	17049	41037	3112.94
8	Outstanding loans- Short term	578569	1154427	8987290	8485707	172920.20
	Medium term	435122	795223	2063336	2679209	20769.37
	Long term	296269	333842	164163	12816625	17929.81
9	Loan over dues- Short term	187932	385220	981927	871593	15008.68
	Medium term	16102	90561	139448	197380	2693.82
	Long term	8232	54397	66992	149156	1115.94

Source: Ahmadnagar District Socio-Economic Analysis:1990-2012.

This Table No.4.11 shows financial position of ADCC from 1990-91 to 2011-12. No of branches during 1990-91 were 234, now branches are 282 in 2011-12. This number improved drastically into 289 and remains constant till 2000-01. This number started to decline after 2000-01, became 286; decline by 3 branches and by 7 branches in 2011-12.

Number of members of societies in 1990-91 was 2984 which improved to 5920 it shows constant increasing rate

The personal membership shows inverse trend. Personal members are declining are 1608 in 1990-91, 1588 in 1995-96, 1575 in 2000-01, 940 in 2005-06, and 910 in 2011-12.

Share capital is increased from ₹ 86694 thousands to ₹ 10491 thousands. Till 2005-06 it is increasing one while in 2011-12 it declined by ₹ 583156. Reserve and other fund shows increasing rate. It was ₹ 127562 during 1990-91 and became ₹ 28497 during 2011-12. A deposit also shows positive growth till 2005-06 but it declined in 2011-12.

Working capital of the bank increased from ₹ 37760.490 in 1990-91 to ₹ 435628.60. Short term loaned increased from ₹ 35192.7 to ₹ 165288.33, medium term loan and long term loan also showing increasing trend

The outstanding loan ADCC bank of short term loan ₹ 578569 in 1990-91 became ₹ 172920.20 in 2011-12, medium loan ₹ 4351.22 to ₹ 20769.37 and long term ₹ 2962.69 to ₹ 17929.81 thousands. Outstanding loan increased during the period due to inadequate production in the field and framers wait for government packages or financial assistance against loan

The over dues loan amount of the ADCC in short, medium and long term shows increasing in there amount. The amount was ₹ 1879.32, ₹ 1610.20 and ₹ 823.20 in 1990-91, which became ₹ 15008.68, ₹ 2693.82, ₹ and 1115.94 respectively in 2011-12.

LAMPS number improved from 36 to 38 during this period of 1990 to 2012. Non-Agricultural credit co-operative societies increased from 374 to 1142 during the same period. This progress is also remarkable in the co-operative movement of the district. This is made possible because, it is said that, ‘a Co-operative bank try to bring about the most effective use of the loans they advance. For this purpose, the loans are advanced only for productive purposes’.¹⁰

The urban banks increased from 14 to 20 units, also a remarkable progress in this co-operative movement of the district. Similar to the ADCC there is one district central co-operative bank, who’s head office is also at Ahmednagar city. This bank was established in 1910 and extended their sub branches all over the district. The number 15 branches. The bank provides loans to credit societies, salary earner’s societies, weaver’s society’s industrial societies and individuals. Urban credit societies increased from 162 to 904 during the period of 1990 to 2012. Employees’ societies increased from 197 to 218 during the same period. Primary marketing societies increased from 12 to 14 units. The production societies improved from 1621 to 4542 during the credit of 1990-2012. Which mainly includes co-op sugar factories, weavers, handloom weavers societies, Milk processing, Fishery, Cotton ginning and irrigation societies. The progress of all these co-operative units shows the right co-operative movement in the district.

Financial Institution of Ahmednagar district central co-op bank Ltd. The work of primary agricultural credit co-operative societies (PACS) 1990-91 :

Table No: 4.12

Tahsil	Total Societies	Total Members	Share capital in '000'	Working Capital	Loan Issued	Loan Outstanding	Loan Overdue
Akola	45	20912	12034	57632	26737	44288	9622
Sangamner	126	49510	36286	175619	64259	143009	30299
Kopergaon	125	40627	43573	196880	79569	139833	40188
Shrirampur	83	39289	41557	158674	63019	113837	34305
Newasa	89	56670	49409	311357	149323	280157	84514
Shevgaon	68	35848	18964	110241	46093	99772	27672
Pathardi	80	39813	13198	64910	32032	56479	16036
Nagar	105	45513	17920	103019	41139	91124	45255
Rahuri	89	42490	49488	194663	84421	151665	32732
Parner	99	44515	14920	104007	64192	92283	14925
Shrigonda	75	50968	31432	175844	75344	143160	38704
Kerjat	64	30681	11410	55519	28458	48654	9364
Jamkhed	43	23262	3807	15521	7555	13617	4923
Total--	1091	519098	343998	1723886	762141	141787	388539

Source: Ahmednagar District Socio-Economic Analysis: 1990-2012.

The Table No.4.12 gives work of PACS in different Tahsils of Ahmednagar district. In all total societies in the district during 1990-91 was 1091, which increased in 1287 in 2011-12. The total members were 519098, which increased to 686640 during the same period. The share capital was ₹ 343998 which became ₹ 2121342, work in capital ₹ 1723886 becomes ₹ 13637171 during the same period these increased in amount determines the development of co-operative movement in the district.

The Tahsil Akola bears 48 societies with 17449 members which were 45 societies and 20912 members during the 1990-91. It has shared capital ₹ 70317, working capital ₹ 273799 & loan issued ₹ 27189, which becomes ₹ 12034, ₹ 57632 & ₹ 26737 respectively shows increasing trend in shared and working capital. Similarly in every Tahsil same trend is established which is symptom of growth of co-operative movements in the district.

Financial Institution of Ahmednagar district central co-op bank Ltd. The work of primary agricultural credit co-operative societies (PACS) 1995-96 :

Table No: 4.13

Tahsil	Total Societies	Total Members	Share capital in '000'	Working Capital	Loan Issued	Loan Outstanding	Loan Overdue
Akola	46	19671	20496	111334	29106	65324	18144
Sangamner	131	61047	54577	278951	55668	172414	53243
Kopergaon	130	44305	74202	372911	100245	241849	68299
Shrirampur	90	45478	63120	285251	114877	175994	50867
Newasa	111	63480	110240	786464	187491	573675	170285
Shevgaon	72	46313	41246	301234	112359	186794	103570
Pathardi	80	66376	21805	150778	43099	92479	36849
Nagar	107	52576	25469	186521	43384	125258	91082
Rahuri	93	58259	80894	353033	94742	216215	55762
Parner	100	56988	25585	175070	72669	141022	64997
Shrigonda	95	53264	59920	442833	116483	346629	126536
Kerjat	66	34414	21125	117223	37913	89139	29879
Jamkhed	43	32983	7596	34610	21148	29051	9187
Total--	1164	635154	606275	3596213	1029184	2455843	868680

Source: Ahmadnagar District Socio-Economic Analysis: 1990-2012.

The Table No. 4.13 gives work of PACS during the period of 1995-96 in different Tahsils of Ahmednagar district. In all total societies in the district during 1990-91 was 1091, which is increased in 1164 during 1995-96. The total members were 519098, which increased to 635154 during the same period. The share capital was ₹ 343998 which became ₹ 606275, working capital ₹ 1723886 becomes ₹ 1596213 during the same period. These increased in amount determines the development of co-operative movement in the district.

The Tahsil Akola bears 46 societies with 19671 members which were 45 societies and 20912 members during the 1990-91. It has shared capital ₹ 20496, working capital ₹ 111334 & loan issued ₹ 29106, which becomes ₹ 42555, ₹ 226085 & ₹ 19650 respectively. Which shows increasing trend in shared and working capital. Similarly in every Tahsil same trend is established which is symptom of growth of co-operative movements in the district.

Financial Institution of Ahmednagar district central co-op bank Ltd. The work of primary agricultural credit co-operative societies (PACS) 2000-01 :

Table No: 4.14

Tahsil	Total Societies	Total Members	Share capital in '000'	Working Capital	Loan Issued	Loan Outstanding	Loan Overdue
Akola	47	21014	33030	175554	62185	114273	36765
Sanganner	134	69794	90996	436043	167050	325039	54916
Kopergaon	137	53260	103536	579538	187060	387308	119696
Shrirampur	94	57760	95951	696128	156340	415500	93077
Newasa	127	73365	187656	1643435	330646	909465	296027
Shevgaon	73	57392	75411	603780	265165	436629	144052
Pathardi	83	42050	45663	322872	158555	265150	67030
Nagar	113	62160	41420	328460	140377	243876	107206
Rahuri	104	67790	116585	572031	170395	330032	60166
Parner	104	83848	44972	494556	242914	387169	173066
Shrigonda	99	59741	117472	846900	412254	733377	184182
Kerjat	66	41478	42550	283394	85817	202856	73190
Jamkhed	46	39219	14430	154000	102405	139988	45500
Total--	1227	728871	1009672	7136691	2481463	4890662	1454873

Source: Ahmadnagar District Socio-Economic Analysis: 1990-2012.

Financial Institution of Ahmednagar district central co-op bank Ltd. The work of primary agricultural credit co-operative societies (PACS) 2005-06

Table No: 4.15

Tahsil	Total Societies	Total Members	Share capital in '000'	Working Capital	Loan Issued	Loan Outstanding	Loan Overdue
Akola	48	23353	42555	226085	91650	195519	49529
Sangamner	134	74126	122129	561327	187387	424454	67566
Kopergaon	119	53023	97178	409948	163030	270158	41087
Shrirampur	67	28617	66246	456568	133357	3653084	46470
Newasa	133	80474	262237	1932337	538091	1302358	109265
Shevgaon	74	60745	94705	735577	377610	232078	102686
Pathardi	83	46119	54238	368884	113212	198560	46606
Nagar	113	66013	48733	309217	130373	264498	55319
Rahuri	110	70398	135770	661527	231640	508608	56942
Parner	104	87622	47448	291735	128673	278784	78125
Shrigonda	104	64521	160144	1154051	1115766	882955	38083
Kerjat	73	43772	44435	382426	120102	324564	37968
Jamkhed	47	40171	18783	170191	73782	161874	29718
Total--	1283	769030	1275717	8078132	3545920	8982403	798642

Source: Ahmadnagar District Socio-Economic Analysis: 1990-2012.

Financial Institution of Ahmednagar district central co-op bank ltd.

The work of primary agricultural credit co-operative societies (PACS) 2011-12 :

Table No: 4.16

Tahsil	Total Societies	Total Members	Share capital in '000'	Working Capital	Loan Issued	Loan Outstanding	Loan Overdue
Akola	48	17449	70317	273799	27189	163378	14144
Sangamner	134	52821	173318	616764	429805	395957	140222
Kopergaon	117	32170	127582	598863	420062	415850	109259
Rahata	75	37500	110237	526385	237511	347515	66808
Shrirampur	69	16612	77264	613164	282841	433202	89252
Newasa	134	79294	392503	2317897	954136	1699362	440848
Shevgaon	74	65105	183159	1474110	542836	969467	285726
Pathardi	84	47585	94251	912009	364258	470494	77533
Nagar	110	58349	135604	1032360	504894	394931	177930
Rahuri	110	58424	257682	1155642	402047	863655	161122
Parner	105	74845	113488	707585	1074630	536689	263060
Shrigonda	106	82850	241755	2380525	946973	2174099	202414
Kerjat	73	41995	104245	729137	376299	591520	166987
Jamkhed	48	21641	39937	298931	202918	238049	50674
Total--	1287	686640	2121342	13637171	6766399	9694168	2245979

Source: Ahmadnagar District Socio-Economic Analysis: 1990-2012.

Impact of Co-Operative Movement on Population Characteristics:

All these tables shows right position and development of co-operative movement in the district. Co-operatives accelerate many more human activities which directly affect the economic growth and social change. Co-operatives in the district mainly deals with Sugar co-operatives, co-operative banking and other co-operative financial veins. Co-operative Banking has made constructive economic growth, availability of capital for agriculture, improved the standard of living of the people. Which distinct the population characteristics of the district, as--- distribution, growth, density, literacy etc. co-operative movement is flourished in Shrirampur, Kopergaon, Sangamner, Rahuri, Rahata and Newasa tahsils than the other tahsils. Which shows its impact on population characteristics and socio-economic development of these tahsils. The percent of population, growth and density of these tahsils found comparatively more than the others. The percent of population (1991) of Sangamner is 10.6, Kopergaon (10 %), Shrirampur (10.10%), Newasa (8.10%), Rahuri (7.50%), Rahata (7.10). similarly density (2001) is also more in these tasils, as—Sangamner (262 /km²), Kopergaon (382 /km²), Shrirampur (450 /km²), Newasa (254 /km²), Rahata (437 /km²) and Rahuri (289 /km²). Literacy of these tahsils are also more than the average density of the district. As per 200, sangamner (75.5%), Shrirampur (78%), Rahata (78.2%), Rahuri (75.6%), Newasa (73.8%).

Co-operative Banking provided an alternative channel to every farmer as well as an ordinary families to improve their living standard and to meet there basic needs. So co-operatives not only

serves economic benefits but culture the good citizenship in the society. Co-operatives brings together peoples of different religious and ethnic as well as political groups. Which has been creating stability in the society. This is a social empowerment obtained through co-operative movement. That is why Ahmadnagar district is some what matured in socio-economic sense.

The special women self-help groups are established on large proportion in the district. This movement is accelerated only because of co-operative background of the district.

The different co-operatives playing their roles as per their objectives in the district. As—Consumer co-operatives provides food and other products, Housing co-operatives provide shelter, Credit co-operatives provide saving and credit, Agricultural co-operatives helps farmer to grow crops and process their agro products. Therefore co-operatives spread all over the district and becomes districts identity as a “co-operative” district.

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CHAPTER –V
**POPULATION CHARACTERISTICS AND SOCIO-
ECONOMIC DEVELOPMENT OF THE REGION**

5.1 SOCIO-ECONOMIC DEVELOPMENT OF THE REGION.

5.1.1 OCCUPATIONAL CHARACTERISTICS

5.1.2 CAST WISE POPULATION.

5.2. SERVICES AND FACILITIES AVAILABLE.

5.2.1 HEALTH SERVICE.

5.2.2 EDUCATIONAL FACILITIES.

5.2.3 TRANSPORT AND COMMUNICATION FACILITIES

5.2.4 MARKET FACILITIES.

5.2.5 BANK FACILITIES.

5.2.6 DRINKING WATER FACILITY.

5.2.7 POWER SUPPLY.

5.1 Socio-Economic development of the region:

The Socio –Economic development determined by the economic indicators of the region and different social amenities served to the people in a geographical region. Therefore the level of development of socio –economic facilities reflect the economic set up of the region. The present analysis of the social amenities is an attempt to examine the importance of socio–economic infrastructural facilities for overall development of the Ahmadnagar district. This analysis will enlighten the optimum levels of these facilities and hence it is necessary in order to achieve the overall socio-economic development of the study region. Therefore the occupational structure, S.C. and S.T. population contribution, health or medical facilities, Educational Facilities, Transportation and Communication, Marketing and Banking Services etc. available in all the tahsils are discussed here. Hence these services are analyzed as below.

5.1.1. Occupational characteristics:

Occupation wise population:

Peopole are engaged in different works as a economic activities .These activities are closed in nine categories as -1) Cuctivators 2) Agricultural Labourers 3) Livestock ,Forestry ,Fishing,Hunting and Plantations 4) Mining and quarrying 5)a)Manufacturing Processing, Servicing and repairing in Household and 5)b) other than Household industry 6) Constructions 7)Trade and Commerce 8) Transport ,Storage and Communication 9) Other services. The ahmednagar district has population of these nine categories accelerate their socio-economic life .

Tahsil wise distribution of workers in nine categories of economic activities 1991:

Table No: 5.1

Tahsil	1	2	3	4	5(a)	5(b)	6	7	8	9
Nagar	50005	26714	2551	277	3828	28715	7592	19981	8050	32580
%	(27.78)	(14.84)	1.42	0.15	2.01	15.94	4.22	11.09	4.47	1809
Rahuri	39903	36855	1104	207	824	10742	1266	4309	1272	7953
%	38.21	35.29	1.06	0.20	0.79	10.29	1.21	4.13	1.22	7.62
Shrirampur	34435	41904	3986	92	1399	3502	2656	11094	3754	11354
%	27.73	33.76	3.21	0.07	1.13	10.87	2.14	8.93	3.02	9.14
Newasa	52533	54057	1528	259	1362	5587	1019	3996	1213	4851
%	41.56	42.76	1.21	0.20	1.08	4.42	0.81	3.16	0.96	3.84
Shevgaon	40834	25330	722	120	919	2566	553	2291	842	3610
%	52.49	32.57	0.93	0.15	1.18	3.30	0.71	2.95	1.08	4.64
Pathardi	56471	18403	546	47	944	2693	606	2322	851	3890
%	65.08	21.21	0.63	0.05	1.09	3.10	0.70	2.68	0.98	4.48
Jamkhad	28444	13302	533	69	929	1493	652	2230	769	2496
%	55.86	26.13	1.05	0.14	1.82	2.93	1.28	4.38	1.51	4.90

Karjat	51723	205.92	1345	118	687	3338	714	2237	611	3534
%	60.93	24.26	1.58	0.14	0.81	3.93	0.84	2.63	0.72	4.16
Shrigonda	58356	29748	1207	59	1381	3565	1318	2619	1178	4865
%	55.99	28.54	1.16	0.06	1.26	3.42	1.26	2.51	1.13	4.97
Parner	63752	18120	1186	126	1499	2634	883	2160	1302	3742
%	66.83	19.00	1.24	0.13	1.57	2.76	0.93	2.26	1.36	3.92
Akola	69771	16576	1623	70	677	5988	998	2283	623	4564
%	67.63	16.07	1.57	0.07	0.66	5.80	0.97	2.21	0.60	4.42
Sangamner	85526	28762	2150	324	4000	15982	2274	7097	2845	7843
%	54.54	18.35	1.37	0.21	2.55	10.19	1.45	4.53	1.81	5.00
Kopergaon	46535	50555	2706	184	1584	11440	1933	9751	2670	9955
%	33.89	36.83	1.97	0.13	1.15	8.33	1.41	7.10	1.94	7.25
District	678288	380918	2118 7	1952	1977 0	10824 5	2246 4	72370	2598 0	10123 7
Total	47.35	26.59	1.48	0.14	1.38	7.56	1.57	5.05	1.81	7.07

Source : Ahmednagar district census-1991

The table 5.1 gives distribution of workers by nine categories of economic activities in the district of 1991 .The proportion of all these categories differ from tehsil to tahsil .The Proportion of cultivators is found in between 67.63% to 27.73% .The highest % is in Akola (67.63%) and lowest 27.73% is in Shrirampur tehsil .out of all the tahsils Eight are above & Five are below the district Average (47.35%) the Proportion of agricultural Labourers varies between 14.83% to 42.76% in this category Six are above and seven are below the district average (26.59%).these 73.94% of the workers are directly engaged in agriculture as cultivators or agricultural labourers because of agricultural base economy of the district .The 1.48% workers are engaged in category III and 0.14% In the mining and Quarrying activity .Remaining about 25% workers are related to the V to IX category of the district.

Distribution of Workers in nine categories of economic Activities:1991(in %)

Table No: 5.2

Categories	Maharashtra (%)			Ahmednagar (%)		
	P	M	F	P	M	F
1) Cultivators	32.81	29.79	39.07	47.35	44.70	51.52
2) Agricultural Labourers	26.81	18.67	43.69	26.59	19.66	37.49
3) Livestock,Forestry,Fishing, Hunting and Plantation	1.52	1.93	0.67	1.48	1.93	0.78
4) Mining &Quarrying	0.37	0.47	0.17	0.14	0.18	0.07
5) A) Manufacturing ,processing, Servicing & repairs in Household industry	1.61	1.61	1.60	1.38	1.50	1.19
B) other than Household industry	11.60	15.54	3.44	7.56	9.27	4.08
6) Construction	2.59	3.39	0.92	1.57	2.34	0.36
7) Trade & Commerce	8.57	11.47	2.54	5.05	7.52	1.17
8) Transport ,Storage and Communications	3.74	5.33	0.45	1.81	2.91	0.09
9) Other Services	10.38	11.80	7.45	7.07	9.49	3.25
Total	100%	100%	100%	100%	100%	100%

Source: Census Hand Book 1991.

The Table5.2 gives distribution of total, Male and Female Workers by nine categories of economic activities for the district and the state of Maharashtra. The cultivators (47.35%) and agricultural laboures (26.59%) together contributes 73.94% against the state for these two categories 59.62%. This is because of agricultural economy of the state and similar reflection in the district, about $\frac{3}{4}$ Percentage is found in these categories. The category II to IX shows their percentage less than the average percentage of the state. The category II to IX in the state is 1.52,0.37,1.61,11.60,2.59,8.57,3.74,& 10.38 percent while for the same categories , Proportion is 1.48, 0.14, 1.38, 7.56, 1.57, 5.05, 1.81 and 7.07 percent in the district.

Tahsilwise distribution of workers in nine categories of economic activities -2001:

Table No: 5.3

Tahsil	Cultivators			Agrilabourers			Workers in Household industries 5 a)			Other workers 3 ,4 ,5 b),6		
	P	M	F	P	M	F	P	M	F	P	M	F
Akola	82912	42870	40042	28138	11364	16774	4753	1776	2977	22411	16988	5423
%	60.0	58.7	61.4	20.4	15.6	25.7	3.4	2.4	4.6	16.2	23.3	8.3
Sangamner	101437	53695	47742	41626	17941	23685	5922	2691	3231	55440	41793	13647
%	49.6	46.2	54.1	20.4	15.5	26.8	2.9	2.3	3.7	27.1	36.0	15.5
Kopergaon	41112	22891	18221	42428	19829	22549	2955	1428	1527	35849	30019	5830
%	33.6	30.8	37.9	34.7	26.8	46.9	2.4	1.9	3.2	29.3	40.4	12.1
Rahata	36325	21491	14834	38891	18623	20268	4247	1917	2330	42683	35171	7512
%	29.7	27.8	33.0	31.8	24.1	45.1	3.5	2.5	5.2	34.9	45.6	16.7
Shrirampur	24579	15491	9088	33433	16689	16744	3140	1686	1454	41456	34117	7339
%	24.0	22.8	26.2	32.6	24.5	48.4	3.1	2.5	4.2	40.4	50.2	21.2
Newasa	67218	39294	27924	54808	26443	28365	3515	2172	1343	26624	21700	4924
%	44.2	43.9	44.6	36.0	29.5	45.3	2.3	2.4	2.1	17.5	24.2	7.9
Shegaon	51023	27435	23588	30952	13232	17720	3150	1657	1493	14950	12531	2419
%	51.0	50.0	2.2	30.9	24.1	39.2	3.1	3.0	3.3	14.9	22.8	5.3
Pathardi	59.647	30728	28919	25155	9627	15528	3080	13.13	14.67	15848	13050	2798

%	57.5	55.9	59.4	24.3	17.5	31.9	3.0	2.9	3.0	15.3	23.7	5.7
Nagar	54678	28742	25936	27975	11253	16722	11160	4593	6567	140833	119916	20917
%	23.3	71.5	37.0	11.9	5.8	23.8	4.8	2.8	9.4	60.0	72.6	29.8
Rahuri	53777	29449	24328	46482	20754	25728	2790	1411	1379	44285	33162	11123
%	36.5	34.7	38.9	31.5	24.5	41.1	1.9	1.7	2.2	30.1	39.1	17.8
Parner	85293	42070	43223	23525	8376	15149	2952	1625	1327	19034	15266	3768
%	65.2	62.5	68.1	18.0	12.4	23.9	2.3	2.4	2.1	14.6	22.7	5.9
Shrigonda	77809	42964	34845	36848	16580	20268	2861	1390	1471	21287	17744	3543
%	56.1	54.6	58.0	26.5	21.1	33.7	2.1	1.8	2.4	15.3	22.6	5.9
Karjat	55112	31813	23299	25476	10958	14518	1851	994	857	15557	13144	2413
%	56.2	55.9	56.7	26.0	19.3	35.3	1.9	1.7	2.1	15.9	23.1	5.9
Jamkhed	33221	18126	15095	14445	5905	8540	1755	1113	642	12333	10100	2233
%	53.8	51.4	56.9	23.4	1608	32.2	2.8	3.2	2.4	20.0	28.7	8.4
District Total	824143	447159	377084	470182	207624	262558	54131	26066	28065	459413	414701	44712
%	44.38	4081	4951	25.32	18.92	34.47	2.91	2.38	3.68	24.74	37.86	5.87

Source :Ahmednagardistrict census C.D.-2001

The Table 5.3 gives distribution of workers by nine categories of economic activities in the district. According to 2001- census record the proportion of cultivators and Agricultural labours is more than the other categories. The cultivators 44.38% and agricultural labour 25.32% , together contribute 69.7 % which indicates that the district pusers agricultural based economy. The Proportion of females in these activities is more than the males, which is 49.51% and 34.47% respectively.

The Proportion of cultivators is highest in Akola tehsil (60%) and least in Nagar tehsil (23.3%) .The Agricultural labourers are highest in Newasatahsil (36%) and lowest in nagar tehsil (11.9%).

5.1.2. Cast wise Population:

SC and ST population: (Scheduled Castes and scheduled Tribes)

District census handbook contains data about Scheduled Castes and scheduled Tribes. This data is useful for the planout their socio-economic upliftment and both the planners and administrators.

The president of India by Gazette notification, under article 341 (1) of the Indian constitution, has declared, some castes, races or tribes or parts of or groups within castes, races or tribes a schedule Castes as there is no standard definition of scheduled castes . Similarly schedule tribes mean all such tribes or tribal communities or parts of or groups with in such tribes or tribal communities as are declared by the president of India, to be treated as schedule tribes under article 342 (i) of the Indian constitution. There is a slight change in the definition of schedule castes in 1991. Up to 1981 scheduled castes could belong to the Hindu and Sikh religion, scheduled castes may belong to Buddhist and Nav-buddhist religions also. For Maharashtra there are some minor changes in the list which

was published in 1981 census and accordingly in the 1991 census, 59 castes and 47 tribes have been declared to be recognized as scheduled castes and scheduled tribes respectively and the list of scheduled castes and scheduled tribes in the state of Maharashtra is given below.

List of scheduled castes : 1)Ager 2)Anamuk 3) Aray mala 4) Arwa mala 5) Bahan, Bahana 6) Bakad, Bant 7) Balahi Balai 8) Basor, Burud, Bansor, Bansodi 9) Beda Jangam, Budga janjam 10) Bedar 11) Bhambi, Bhambhi, Asadaru, Asodi, Chamadia, Chamar, Chamari, Chambhar, Chamgar, Harlayya, Harali, Khalpa, Machigar, Mochigar, Madar, Madig, Mochi, Telgu mochi, Kamati mochi, Ranigar, Rohidas, Nona Ramnami, Rohit, Samgar, Samagara, Satnami, Surjya banshi, Surjyaramnami. 12) Bhangi, Mehtar, Olgana, Rukhi, Malkana, Halakhor, Lalbegi, Balmiki, Korar, Zadmalli. 13) Bindla 14) Byagara 15) Chalvadi, Channayya, 16) Chenna Dasar, Holaya, Dasari, Holey Dasari 17) Dakkal, Dakkalwar. 18) Dhor, Kakkayya, Kankayya, Dohor 19) Dom, Dumar 20)Ellamalver, Yellammalawandlu, 21) Ganda, Gandi 22) Garoda. Garo 23) Ghasi, Ghasia 24) Halleer 25) Halsar, Haslar, Hulasvar, Halasvar. 26) Holar, Valhar 27) Holaya, Holer, Holey. 28) Kaikadi (in Akola, Amravati, Bhandara, Buldhana, Nagpur, Vardha, Yavatmal, and Gadchiroli Districts and Chandapur District other than Rajura Tahsil) 29) Katia, Patharia 30) Khangar, Kanera, Mirdha 31) Khatik, Chikwa, Chikvi. 32) Kolupulvandlu 33) Kori.34) Lingader. 35) Madgi. 36) Madiga. 37)Mahar, Mehra, Taral, Dhegu megu. 38) Mahyavanshi, Dhed, vankar, Maru Vankar (39) Mala 40) Mala Dasari. 41) Mala Hannai 42) Mala jangam 43) Mala Masti. 44) Mala sale, Netkani. 45) Mala Sanyasi. 46) Mang, Matang, Minimadig, Dankhni Mang, Mang Mahashi, Madari, Gaudi, Radhe

Mang. 47) Mang Garodi, Mang Garudi. 48) Mane 49) Mashti 50) Meghval, Menghvar. 51) Mitha Ayyalvar. 52) Mukri. 53) Nadia, Hadi 54) pasi. 55) Sansi. 56) Shenva, Chenva, Sedma, Ravat 57) Sindhollu, chindollu. 58) Tirgar, Tirbanda. 59) Turi.

List of schedule tribes- 1) Andh. 2) Baiga. 3) Barda. 4) Bavacha, Bamcha. 5) Bhaina 6) Bharja Bhumia, Bhuinhar Bhumia, pando 7) Bhattra 8) Bhil, Bhil Garasia, Dholi, Bhil, Dungri Bhil, Dungri Garasia, Mewasi, Bhil, Rawal Bhil, Tadvi Bhil, Bhagalia, Bhilala, pawra, Vasana, Vasare, 9) Bhungia. 10) Binjhwar. 11) Birhul, Birhor. 12) Chodhara (excluding Akola, Amravati, Bhandara, Buldhana, Chandrapur, Gadchiroli, Nagpur, Wardha, Yavatmal, Aurangabad, Jalna, Beed, Nanded, Usmanabad, Latur and Parbhani Districts and Goverdhanpur, Sarala, Mahankal Vasgaon and Bhamthan Villages of Shrirampur Tahsil of Ahmednagar District which have been transferred from Vijapur Tahsil of Aurangabad District. But will be treated as Scheduled Tribe in Yedashi, Dudhagaon, Gopalwadi, Kombadwadi, Kasabe - Tadavale, Jawale (Dumala), Ambe javalge and Koudgoon villages of Osmanabad Tahsil of Osmanabad District which are transferred from Barshi Tahsil of Solapur District) 13) Dhanka, Tadvi, Tetaria, Valvi, 14) Dhanwar 15) Dhodia 16) Dubla, Talavia, Halpati 17) Gamit, Gamta, Gavit, Mavchi, Padvi 18) Gond, Rajgond, Arakh, Arrakh, Agaria, Asur, Badi Marja, Bada Maria, Bhatola, Bhimma, Bhuta, Koilabhuta, Koilabhuti, Bhar, Bisonhorn Maia, Chota Maria, Dandami Maria, Dhuru, Dhurwa, Dhoba, Dhulia, Dorla, Gaiki, Gatta, Gatti, Gaita, Gond Gowari, Hill Maria, Kandra, Kalanga, khatola, Koitar, Koya, Khirwar, Khirwara, Kucha Maria, Kuchaki Maria, Madia, Maria, Mana, Mannewar, Moghya, Mogia, Monghya, Mudia, Murja, Nagarchi, Naikpod, Nagwanshi, Ojha, Raj, Sonjhari,

Jhareka, Thatia, Thotya, Wade Maria, Vade Maria 19) Halba, Halbi 20) Kamar 21) Kathodi, Katkari, Dhor, Kathodi, Dhor Katkari, Son Kothodi, Son Katkari 22) Kavar, Kanwar, Kaur, Cherwa, Rathia, Tanwar, Chattri 23) Khairwar 24) Kharia 25) Kokna, Kokni, Kukna 26) Kol 27) Kolam, Mannervaru 28) Koli Dhor, Tokre Koli, Kolcha, Kolgha 29) Koli Mahadev, Dongar Koli 30) Koli Malhar 31) Kondh, Khond, Kandh 32) Korku, Bopchi, Mouasi, Nihal, Nahul, Bondhi, Bhondeya 33) Koya, Bhine Koya, Rajkoya 34) Nagesia, Nagasia 35) Naikda, Nayka, Cholivala Nayaka, Kopadia Nayaka, Mota Nayaka, Nana Nayaka 36) Oraon, Dhangad 37) Pardhan, Pathari, Saroti (38) Pardhi, Advichincher, Phans Pardhi, Phanse Pardhi, Langoli Pardhi, Bahelia, Bahllia, Chita Pardhi, Shikari, Takankar, Takia 39) Parja 40) Patelia 41) Pomla 42) Rathawa 43) Sawar, Sawara 44) Thakur Thakar, Ka Thakar, Ma Thakur, Ma Thakar 45) Thoti (In Aurangabad, Jalna, Bid, Nanded, Osmanabad, Latur, Parbhani, Districts and Rajura Tahsil of Chandrapur District and Goverdhanpur, Sarala, Mahankal, Vadgaon and Bhamthan villages of Shrirampur Tahsil of Ahmednagar District which have been transferred from Vijapur Tahsil of Aurangabad District. But will not be treated as scheduled tribe in Yedashi, Dudhagaon, Gopalwadi, Kombadwadi, Kasabe – Tadavale, Jawale (Dumala), Ambejavalge, and koudgaon villages of osmanabad Tahsil of osmanabad District transferred from Barshi tahsil of solapur District) 46) Varli 47) Vitolia, Kotwalia, Baroida.

Percentage of S.C. and S.T. Population in Ahmadnagar

District:1961-2001

Table No:5.4

Year	S.C. %			S.T. %		
	Total	Rural	Urban	Total	Rural	Urban
1961	8.87	9.07	7.16	6.18	6.84	0.63
1971	9.32	9.54	7.51	6.42	7.14	0.65
1981	10.62	10.77	9.64	6.93	7.72	1.60
1991	12.41	12.22	13.39	7.12	8.12	1.81
2001	12.00	11.72	13.12	7.50	8.92	1.82

Source: Comuted by Researcher.

The population of SC and ST in the district shows increasing trend during the study period of 1961-2001. The percentage of SC population is comparatively more than that of the ST population. SC population is increased from 8.87 % to 12.41 % till 1991. While ST population is increased from 6.18 % to 8.92 % till 2001.

In 1971 the district bears 211443 SC population, in which 107397 males & 104046 females. These accounts for 9.31% of the total population, 9.26% & 9.38% to the respective males & females of the district. Out of SC population 192546 persons lives in rural areas and 18897 lives in urban areas. Among these SC population 91.06 % in rural & 8.94 % in urban areas. Among the tahsils, Nagar has largest SC population of 31860 and Akola with least 2900 population.

Decadal Variation in S.C. and S.T. Population In Ahmadnagar District: 1961-2001
Table No. 5.5

Tahsil	Year	SC Population			Decadal Variation in SC Population			ST Population			Decadal Variation in ST Populati		
		Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Kopergaon	1961	16233	14541	1692				12588	12137	451			
	1971	21191	18737	2454	30.54	28.86	45.04	17243	16697	546	36.98	37.57	21.06
	1981	31100	26798	4302	46.76	43.02	75.31	21348	20227	1121	23.81	21.14	105.31
	1991	48121	34462	13659	54.73	28.60	217.50	25713	22971	2742	20.45	13.57	44.60
	2001	35316	26147	9169	-26.61	-24.13	-32.87	27457	25357	2100	6.78	10.39	-23.41
Akola	1961	1765	1765	-				54716	54716	-			
	1971	2900	2900	-	64.31	64.31	-	66133	66133	-	20.87	20.87	-
	1981	4143	4143	-	42.86	42.86	-	79292	79292	-	19.90	19.90	-
	1991	9446	9446	-	128.00	128.00	-	101966	101966	-	28.60	28.60	-
	2001	11234	11234	-	18.93	18.93	-	121566	121566	-	19.22	19.22	-
Sangamner	1961	8179	7412	767				12750	12462	288			
	1971	12891	12007	885	57.61	61.99	15.38	17127	16815	312	34.33	34.93	8.33
	1981	19874	17440	2134	54.17	45.25	141.12	23204	22609	595	35.48	34.46	90.70
	1991	29120	26048	3072	46.52	46.83	43.96	30524	29879	645	31.55	32.16	8.40
	2001	35652	29884	5768	22.43	14.73	87.76	41297	40067	1230	35.29	34.10	90.70

Shrirampur	1961	21643	18893	2750							8869	8680	189						
	1971	28639	24595	4044	32.32	30.18	47.05				12732	12399	333	43.56				42.85	76.19
	1981	39243	33264	5979	37.03	35.25	47.85				14966	14469	497	17.55				16.69	49.25
	1991	63814	48162	15652	61.93	44.07	161.78				17286	16049	1237	12.54				7.99	148.89
	2001	46700	30077	18623	-23.68	-37.55	18.98				14016	12593	1423	-18.92				-21.53	15.04
Rahuri	1961	10788	10788	-							9647	9647	-						
	1971	15720	15720	-	45.72	45.72	-				11990	11990	-	24.29				24.29	-
	1981	25636	21730	3906	63.08	38.23	-				17139	15714	1425	42.94				31.06	-
	1991	34642	27627	7015	35.13	27.14	79.60				20981	18469	2512	22.42				17.53	76.28
	2001	39492	31130	8362	14.00	12.68	19.20				27913	24649	3264	33.04				33.46	29.94
Newasa	1961	10107	10107	-							4346	4346	-						
	1971	14023	14023	-	38.75	38.75	-				6299	6299	-	44.94				44.94	-
	1981	26982	26982	-	92.41	92.41	-				9267	9267	-	47.12				47.12	-
	1991	38642	38642	-	43.21	43.21	-				12999	12999	-	40.88				40.88	-
	2001	45757	45757	-	18.41	18.41	-				15720	15720	-	20.93				20.93	-
Shevgaon	1961	13111	13111	-							893	893	-						
	1971	16793	16793	-	28.08	28.08	-				1122	1122	-	25.64				25.64	-
	1981	19640	19640	-	16.95	16.95	-				1786	1786	-	59.18				59.18	-
	1991	24438	24438	-	24.43	24.43	-				2526	2526	-	41.43				41.43	-
	2001	28002	28002	-	14.58	14.58	-				3277	3277	-	29.73				29.73	-

Parner	1961	7207	7207	-						1467	1467	-							
	1971	9379	9379	-	30.14	30.14	-			5480	5480	-	273.55	273.55					
	1981	10041	10041	-	7.06	7.06	-			6930	6930	-	26.46	26.46					
	1991	14834	14834	-	47.73	47.73	-			8432	8432	-	21.67	21.67					
	2001	16577	16577	-	11.75	11.75	-			12074	12074	-	43.19	43.19					
Nagar	1961	24244	16035	8209						2410	2161	249							
	1971	31860	20355	11505	31.41	26.94	40.15			3093	2638	455	28.34	22.07					82.73
	1981	42565	25000	17665	33.60	22.82	52.67			6146	4174	1972	98.71	58.23					333.40
	1991	63063	35942	27151	48.23	43.77	54.57			8371	6274	2097	36.20	50.31					6.34
	2001	79151	32459	46492	25.45	-9.69	71.23			10208	6645	3563	21.94	5.91					69.91
Pathardi	1961	9722	9722	-						952	952	-							
	1971	13093	13093	-	34.67	34.67	-			1329	1329	-	39.60	39.60					-
	1981	15519	15519	-	18.53	18.53	-			1767	1767	-	32.96	32.96					-
	1991	22250	20022	2228	43.37	29.02	-			2601	2440	161	47.20	38.09					-
	2001	20512	18124	2388	-7.81	-9.48	7.18			2712	2514	198	4.27	3.03					22.98
Shrigonda	1961	12639	12639	-						805	805	-							
	1971	15626	15626	-	23.63	23.63	-			1996	1996	-	147.95	147.95					-
	1981	20256	20256	-	29.63	29.63	-			3476	3476	-	74.15	74.15					-
	1991	28309	25668	2641	39.76	26.72	-			5127	4845	282	47.50	39.38					-
	2001	34232	30706	3526	20.92	19.63	33.51			7401	7077	324	44.35	46.07					14.89

Karjat	1961	14507	14507	-					214	214	-				
	1971	18466	18466	-	27.29	27.29	27.29	-	708	708	-	230.84	230.84	-	-
	1981	20744	20744	-	12.34	12.34	12.34	-	1360	1360	-	92.09	92.09	-	-
	1991	26043	26043	-	25.54	25.54	25.54	-	2229	2229	-	63.90	63.90	-	-
	2001	27820	27820	-	6.82	6.82	6.82	-	2310	2310	-	3.63	3.63	-	-
Jamkhed	1961	7355	7355	-					170	170	-				
	1971	10862	10862	-	47.68	47.68	47.68	-	531	531	-	212.35	212.35	-	-
	1981	11964	11964	-	10.14	10.14	10.14	-	975	975	-	83.61	83.61	-	-
	1991	15727	15727	-	31.45	31.45	31.45	-	1386	1386	-	42.15	42.15	-	-
	2001	16071	12786	3285	2.19	2.19	-18.70	-	1879	1167	712	35.57	-15.80	-	-
Rahata	1961														
	1971														
	1981														
	1991														
	2001	46169	38559	7610	-	-	-	-	15425	13616	1809			-	-

The decadal growth rate of SC population during 1961-71 was 34.25 percent as against 27.77 % for the general population of the district. which indicates that growth rate of SC population is more by 6.47 % than the general growth rate of the district. It is also found in all tahsils of the district. The highest growth rate of 64.31 % is seen in Akola tahsil & lowest of 23.63 % in Shrigonda tahsil. Six tahsil are above the district average while remaining seven are below the district average. The rural growth rate of the district is 33.64 %. Six tahsils are above the district average and seven are below the average. The urban growth rate of the district is 40.83 % Out of total tahsila, two tahsils are above and two are below the district average. The highest growth rate in urban areas is seen in Shrirampur tahsil, 47.05 % and the lowest 15.38 % is in sangamner tahsil.

The decadal growth rate of ST population during 1961-71 was 32.74 % as against 27.77 % for the general population of the district. It is seen that ST population has increased in all tahsils during 1961-1971 decade. The highest growth rate is observed in Parner tahsil (273.55%) and lowest in Akola tahsil (20.87%). Nine tahsil indicated growth rate above the district average (32.74%) and remaining 04 tahsils are below the district average. In rural area the same pattern is seen, nine tahsils have growth rate above and four tahsils below the district average.

The decadal growth of SC Population during 1971-1981 was 36.07%, which is increased by 1.82% than the previous decade 1961-71. In 1961-71 It was 34.25%. The decadal growth of rural SC Population during 1971-81 was 31.82% & urban 79.32% . There is positive growth in all tahsils of the district . The highest growth rate 92.41% is seen in Newasa tehsil and lowest 7.06% in Parner tehsil. Out 13 tahsils, 06 are above the district average and remaining are below the district average.

The decadal growth of ST Population during 1971-1981 shows positive growth of 28.72% . The Rural growth remaining 26.30% And Urban 240.82%.

All the tahsil shows positive growth rate of ST Population during the period of 1971-81. Nagar tahsil with highest growth of 98.71% and Shrirampur with least 17.55%. In case of rural population growth, karjat has highest growth of 92.09% and Akola with least 19.90% .with all the tahsils Nine are above the total average of 28.72% and remaining four tahsils are below the average growth rate of the district.

In 1981, the decadal grow rate of the district in SC Population was 45.37% as against 24.35% for the general population of the district. Which indicates that the growth rate of SC population is nearly two times more than the general growth rate of the district . During last decade SC population has increased in all tahsils of the district in total as well as in rural areas. The highest growth rate of 128.00% was seen in Akola tahsil .The lowest growth rate of 24.43% was seen in Shevgaon tahsil . Six tahsils are above the district average and remaining seven are below the district average. the rural growth rates in six tahsils are above and in seven , below the district average . The urban growth rate in two tahsils are above and in three, it is below the district average . The highest growth rate in urban areas is seen in Kopergaon tahsil of 217.50% and the lowest in Sangamner tahsil of 43.96%.

In 1981-1991 , the ST Population in the district is has shown 27.70% growth rate with 26.32% rural and 72.48% Urban growth rate .Out of the total ST Population of the district, 230465 (95.97%) Lives in rural areas and the remaning 9676(4.03%) lived in Urban

areas . All the tahsils have indicated positive growth rate. In nine tahsils it is above and in four, it is below the district average. The highest growth rate is seen in karjat (63.90%) and the lowest in Shrirampur tahsil 12.54% . In case of rural decadal growth also, Nine tahsils are above the average and four are below the district average .the highest rural growth remain in karjat tehsil(63.90%) and Lowest in Shrirampur (7.99%). In Urban Areas highest rate was in Shrirampur (148.89%) while lowest in Nagar (6.34%). Two tahsils are above and three remain below the district average .

The SC population in 1991 census in Ahmadnagar district was 418479 comprising of 217989 Males And 200490 Females . They Constitute 12.41% of the total district population as against 10.62% in 1981.

The ST Population of the district stands at 240141 comprising 121144 Males And 118997 Females .They Constitute 7.12% of the total district Population as against 6.93% in1981.

Out of total SC Population in the district 82.93% Lives in rural areas And 17.07% in the Urban areas .Similarly, out of the total ST Population in the district 95.97% People Lives in rural areas and 4.03% in the urban areas.

The decadal growth rate of SC population during 1991-2001 was 15.82% .Out of SC Population of the district 379262(78.25%) lived in rural areas and the remaining 105423(21.75%) in urban areas . During the decade (1991-2001) SC Population has increased in all tahsils of the district. In total areas of the district, the highest growth rate of 25.45% is seen in Nagar tahsil, and lowest in Kopergaon tahsil of -26.61%. The negative growth rate is seen in kopergaon & Shrirampur tehsil due to formation of new tehsil in

between these tahsils as a 'Rahata 'tehsil. Rahata has 46169 SC Population in 2001.

The decadal growth rate of ST Population during 1991-2001 was 26.28%. Out of the total ST Population of the district 288632 (95.18%) live in rural areas and 14623 (4.82%) in urban areas. Except Shrirampur, remaining all the tahsil shows positive growth rate in ST Population of the district . The highest growth rate is seen in Shrigonda tehsil (44.35%) and least in shrirampur (-18.92%) tahsil.

Percentage of SC & ST Population in India, Maharashtra and Ahmednagar 1991-2001:

Table No: 5.6

	Area	SC Percentage		ST Percentage	
		1991	2001	1991	2001
India	Total	16.73	16.30	7.95	8.22
	Rural	18.40	17.92	9.92	10.42
	Urban	12.03	11.92	2.30	2.42
Maharashtra	Total	11.09	10.20	9.27	8.9
	Rural	11.47	10.92	13.23	13.42
	Urban	10.49	9.21	2.98	2.65
Ahmednagar	Total	12.41	12.00	7.12	7.50
	Rural	12.22	11.72	8.12	8.92
	Urban	13.39	13.12	1.81	1.82

In India total SC Population Was 16.30% in 2002 and it was 16.73% in 1991 It was decreased by 0.43% during this period . The Rural SC Population in India was 17.92% in 2001 & 18.40% in 1991.while Urban, 11.92% & 12.03 % respectively. As compared to Maharashtra total percentage of SC was 11.09% in 1991 and decreased in 2001 (10.20%). Similarly rural and Urban SC Population decreased during 1991-2001 as 11.47% to 10.92% and 10.49% to 9.21% respectively.

The ST population of India was 7.92% in 1991, which became 8.22% in 2001. The rural ST population increased from 9.95% (1991) to 10.42 (2001). The Urban ST population of India also increased from 2.30% to 2.42% 1991 – 2001 respectively.

In SC population of Maharashtra in 1991 to 2001 shows decline from 11.09 to 10.20%. Also there is decline in rural and Urban SC population during 1991 to 2001. It is decrease in rural percentage from 11.47 to 10.92 and Urban percentage from 10.49 to 9.21.

The ST population of Maharashtra in Total and Urban percentage, shows similar declining trend as SC population. It is changed from 9.27 to 8.9, 2.98 to 2.65 during 1991 to 2001. While Urban percentage is slightly increased from 13.23 to 13.42 % during 1991 to 2001 period.

5.2 Services and Facilities Available.

5.2.1 Health Service:

The Medical Facilities available in the study area also discussed as a health services. The available medical institutions either private or Govt. Provides health service to the rural as well as urban peoples. Most of the health facilities are provided through medical institation like municipal hospitals and primary health sub-centers. Many specialized experienced Doctors have established private hospitals in the city, taluka places as well in the villages. The services regarding the health is depends upon the specility of the doctors like Eye Hospital, Heart Care Hospital, Orthopedic, Child Hospital, Gynocologic, Maternity Homes etc. These Private Hospital not only Providing their services to the patients of the district but also to the adjoining periphara patients and dispencerics of other districts.

Medical facilities Available in ahmednagar District -1971

Table No: 5.7

Tahsil	No of Hospital And Dispencerics	No of Primary Health Centers	No of Maternity homes	No of Doctors	No of Nurses
Akola	22	07	10	09	38
Sangamner	24	07	05	14	37
Kopergaon	55	08	05	10	32
Shrirampur	67	10	03	13	31
Newasa	22	06	03	07	17
Shevgaon	22	09	02	08	20
Pathardi	32	07	04	08	22
Nagar	135	07	04	55	117
Rahuri	36	06	04	09	31
Parner	26	10	03	10	21
Shrigonda	38	04	05	07	28
Karjat	14	07	04	09	19
Jamkhed	20	05	03	05	20
District Total	513	93	55	164	433

Source : Ahmednagar district census:1971

The above table gives data about medical and public health facilities available in the district during 1971. The data is as per census reports. As per census record 513 Dispensaries and Hospitals were available for the public health care in the district. The number of Doctors was 164, providing medical checkup facility to the patient with 433 Nurses in the district.

**Tahsil wise Number of Villages & Rural Population Served
Medical Facilities-1981**

Table No: 5.8

Tahsil	No of Villages with Medical Facilities	Percentage	No of Rural population Served by medical facilities	%
Akola	27	15.88	59542	33.76
Sangamner	27	17.42	62781	26.12
Kopergaon	33	31.43	139364	57.01
Shrirampur	26	34.21	135833	57.51
Newasa	26	20.31	91863	43.49
Shevgan	25	22.52	37048	48.49
Pathardi	21	17.21	58195	38.69
Nagar	93	83.04	164732	89.17
Rahauri	22	23.40	101688	57.56
Parner	24	18.32	65826	37.08
Shrigonda	14	13.46	66601	36.71
Karjat	35	32.41	72259	49.28
Jamkhed	09	10.34	35938	37.71
District Total	382	25.42	1120670	47.55

Source :Ahmednagar District Census -1981

The above table gives existence of medical facilities in the villages of the district. Medical institutions of any type exist in one out of every four villages in the district (25.42%). These villages among themselves having 47.55% of the rural population of the

district. Thus only about half of the districts rural population enjoys this facility within their respective villages.

Out of the all tahsils, the position is best in Nagar tehsil, where 83.04% villages are getting medical facility and these villages provides 89.17% of the rural population. On the other hand, in Jamkhed, one out of the ten villages (10.34%) enjoy medical facility with in the respective villages.these villages Accommodate 37.71% of the rural population.

Tahsil wise No of Villages with Medical Facilities -1981

Table No: 5.9

Tahsil	No of Villages having Medical Facilites	%
Akola	40	22.35
Sangamner	27	16.67
Kopergaon	45	43.69
Shrirampur	28	34.57
Newasa	44	34.11
Shevgan	24	21.62
Pathardi	45	34.62
Nagar	105	91.30
Rahauri	26	27.37
Parner	20	15.27
Shrigonda	14	12.28
Karjat	36	30.77
Jamkhed	11	12.64
District Total	465	29.92

Source : Ahmednagar District Census -1981

Proportion of rural population Served by Medical Facilities -1991

Table No: 5.10

Tahsil	No of Rural Pop. Served by Medical Facility	%
Akola	84480	38.03
Sangamner	73098	23.91
Kopergaon	154194	61.92
Shrirampur	154193	59.02
Newasa	155057	56.78
Shevgan	86511	50.74
Pathardi	85375	51.33
Nagar	247190	94.78
Rahauri	105866	53.24
Parner	75467	35.25
Shrigonda	62465	29.18
Karjat	90282	48.98
Jamkhed	53572	44.91
District Total	1427750	50.28

Source : Ahmednagar District Census -1991

The above table states that, Medical institutions of single or other type are functioning in 465(29.92%) villages out of 1554 inhabited villages in the district. It is observed from tahsilwise figures of villages having medical facility that highest number is in Nagar tehsil of 105(91.30%) villages and lowest in shrigonda tehsil of 14(12.28%). The proportion of villages with medical facilities in

Nagar (91.30%), Shrirampur (34.57%), Newasa (34.11%), Pathardi (34.62%), Karjat (30.77%) and in Kopergaon (43.69%) tahsils, it is above the district average (29.92). The primary health centers, Sub-center's and Dispensaries serve not only the resident population of the concerned villages but also those residing in surrounding location, and are somewhat away from town and tend to be large in population size.

The medical institutions like Dispensary, Hospital, Primary health center, Sub-health centre, Maternity homes etc. exist in near about three out of every ten villages in 1991 as against two villages out of every ten villages in 1981 in the district. These villages account for 50.28% of the rural population of the district. This is nothing but the improvement in the provision of medical facility in the district.

5.2.2.Educational facilities:

Education is a continuous process by which, change in behavior is carried in the society. Education brings confidence and empowerment in the society. Hence, educational level determines the qualitative and socio-economic level of the society.

Here in this sub-unit educational statistics tried to throw light on primary, secondary and higher educational situation of Ahmadnagar district.

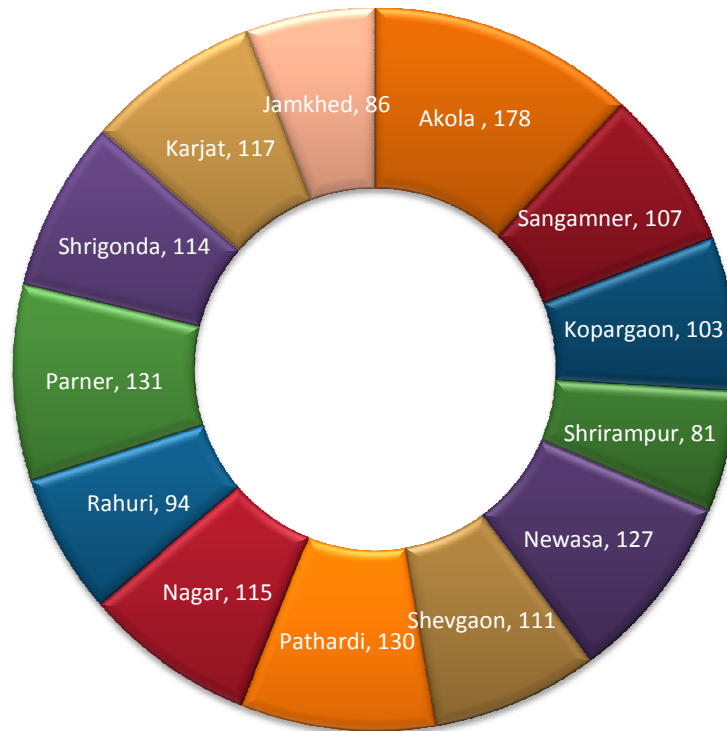
Tahsil wise No. of villages according to availability of education facility and Proportion of rural population served by education facility: 1991

Table No: 5.11

Sr.no	Tahsil	No. of Villages with education facility	% of Villages with education facility	No. of Rural Population served by education facility	% of rural population served by education facility
1.	Akola	178	99.44	222111	99.98
2.	Sangamner	107	98.77	303847	99.38
3.	Kopargaon	103	100	249013	100
4.	Shrirampur	81	100	261275	100
5.	Newasa	127	98.45	272788	99.89
6.	Shevgaon	111	100	170507	100
7.	Pathardi	130	100	166313	100
8.	Nagar	115	100	260796	100
9.	Rahuri	94	98.95	198669	99.91
10.	Parner	131	100	214064	100
11.	Shrigonda	114	100	214060	100
12.	Karjat	117	100	184331	100
13.	Jamkhed	86	98.95	119032	99.79
14.	Dist Total	1547	99.55	2836806	99.91

Source : Ahmednagar District Census -1991

Diagram No:5.1
Villages With Educational Facility:1991



The 1991 records show that, educational facility is available in 1547 villages in the district. From 1981 to 1991 decade it is improved from 1485 to 1547 villages. That is 98.80 to 99.55 %. This village of 99.51% population getting educational facility, which is improved from 0.40% it means from 99.59 to 99.91% during the 1981-91 periods. The educational facility is available to 100% villages in Nagar, Shrirampur, Shevgaon, Patherdi, Karjat, Shrigonda, Parner and Kopargaon Tahsils. As compared to 1981, the proportion of facility has increased from 97.32 to 100% in Nagar, 95.31 to 98.45%, in Newasa, 99.07 to 100% in Karjat, 97.12 to 100% Shrigonda, 98.47 to 100% in Parner, and 99.05% to 100% in Kopargaon Tahsils. From this all statistics, it is true that Ahmednagar is one of the best districts in Maharashtra state in respect of educational facilities.

Educational facilities – Primary to Higher education:

Education is said to be a kind of wealth of human being, but it is a wealth of knowledge, once it is acquired, it is never lost. It is acquired by a system of education from primary to higher education. It is also continuous process on the level of formal and informal. Therefore learning something by experiences is also an education. By experience we learn of understand something. Therefore education in its general sense is a form of learning in which knowledge skills and habits of a group peoples are transferred from one generation to the next through teaching, Training, research. Generally it occurs through any experience that has a formative effect on the way one thinks, feels or acts. Educating the people is essential thing for the socio-economic development by the society. By system, it can be worked at different levels as primary or elementary education, secondary education and higher education.

Primary education:

The first v to vii classes of formal education are considered as primary education. All the Childs of age five or six are enrolled in primary education. To achieve the scent percent enrollment, Gov. of India had launched ‘Sarva Shiksha Abhiyan’ which runs every village of India. It is considered that it is right of the children to get free primary education, hence a right to education has been created and made compulsory to the Childs between 4-6 years enrollment in primary schools. The position of primary education in the district is show in the following table.

**Tahsil wise Number of primary Schools in Ahmednagar
district:1981-2011**

Table No: 5.12

Sr.No	Tahsil	Number of Primary schools			
		1981	1991	2001	2011
1.	Akola	170	181	333	428
2.	Sangamner	178	189	330	386
3.	Kopargaon	104	107	116	195
4.	Rahata	0.00	0.00	169	177
5.	Shrirampur	76	83	126	156
6.	Newasa	122	132	227	264
7.	Shevgaon	118	119	182	253
8.	Pathardi	123	130	240	317
9.	Nagar	115	115	298	353
10.	Rahuri	100	100	210	287
11.	Parner	129	133	298	351
12.	Shrigonda	101	115	295	377
13.	Karjat	108	120	198	291
14.	Jamkhed	87	93	142	186
	Dist Total	1531	1617	3200	4021

Source: Socio-economic Review of the District 1981 to 2011.

The table shows the development in primary education in the Tahsils of Ahmednagar district. In 1981 total primary schools in the district was 1540, in 1991 the number improved to 1617, in 2001 to 3200 and 2011 it becomes 4021.

As per Tahsilwise data there is continuous growth in number of primary schools except Kopargaon in 2001-2011, becomes formation of new Tahsil. Within the various Tahsils, there is made variation in number of primary schools. The highest number of primary schools was in Sangamner Tahsil during 1981 to 1991, and then Akola achieved that position being highest number of 333 and 428. The lowest number found in Shrirampur Tahsil of 76, 83, 126 and 156 in respective years.

Secondary schools:

In most contemporary educational systems of the world, secondary education comprises the formal education that occurs during adolescence. It is transition from primary to this stage, depending on the system, schools for this period, or part of it, may be called secondary or high schools or middle schools. The exact meaning of any of these terms varies from one system to another. The exact period is generally around the seventh to the tenth year of schooling.

The district position about secondary schools with number is show in the following table.

Number of Secondary schools in Ahmednagar district: 1981-2011

Table No: 5.13

Sr.no	Tahsil	Number of Secondary schools			
		1981	1991	2001	2011
1.	Akola	22	24	64	86
2.	Sangamner	18	19	77	105
3.	Kopargaon	24	29	43	46
4.	Rahata	00.00	00.0	46	56
5.	Shrirampur	24	32	50	58
6.	Newasa	15	24	57	67
7.	Shevgaon	22	29	31	41
8.	Pathardi	15	17	46	60
9.	Nagar	28	29	123	126
10.	Rahuri	16	23	41	48
11.	Parner	21	30	51	67
12.	Shrigonda	12	18	61	70
13.	Karjat	13	17	44	52
14.	Jamkhed	08	12	23	26
	Dist. Total	238	303	756	908

Source:- Ahmednagar district socio-economic Analysis report

The above table states the numerical position of secondary schools in the district. In 1981 total secondary schools were 238 which improved to 908 in 2011.

The Tahsilwise trend also states the increase in their numbers. The highest number of high schools is in Nagar Tahsil of 28, 29, 123

& 126 in respective years & least number is found in Jamkhed of 08, 12, 23 and 26 in respective years. Sangamner Tahsil shows aoristic increase their number as 18, 19, 77 and 105 is 2011, which stood second in ranking position. Over all distribution is uneven but number of secondary schools shown increasing trend in every Tahsil.

5.2.3. Transport and communication:

Transport and communication is the most important item among socio-economic development. It accelerate infrastructural development of the region. It consist roads, railways, post and phone facilities.

The total road length in the district as on 31/03/1980 was 11,523kms. Which works out 67kmsPer 100 road length per 100 sq. km-area. Since1961, 49kms.Of new roads per 100 sq. km. area have been constructed in the district.

The Dound-Manmad railway line passes through Ahmadnagar district which is a broad gauge single line railway with a length of only 197kms and connects 18 places in the district by rail.

As per 1981 census, 67.53% of the inhabited villages in the district have the availability of communication facilities with in villages. They comprise 80.44% of the rural population in the district.

About one-half, 49.10% villages in the district are approachable by pucca road. These villages accommodate about two-third 65.12% of the rural population in the district. The situation some what poor in Rahuri and Parner tehsil's where not even one-fifth of their respective villages are linked with pucca roads.

About post and telegraph 45.44% of the inhabited villages in the district serve this facility, and these villages have 69.92% of the rural population of the district. Out of all these tehsil's Shrirampur have this amenity three-fourth 72.37% of its villages, which ranks at the top in the district. These villages of Shrirampur comprise 86.39% of the rural population. While Akola Passes only about one-fourth, 23.53% of its villages having this facility, which is at the bottom. These villages constitute 46.66% of the rural population of the Akola tehsil. 820 villages do not have any kind of post and telegraph facility in the district.

As per 1991 census, the district enjoys comparatively good system of communication facilities mainly through bus and railway. It is available to 1069 (68.79%) villages out of 1554 villages serving 81.75% of rural population of the district. The Kopergaon tehsil with 97.09% of villages appears to be the best served tehsil while Newasatehsil with only 44.19%, holds last rank in the district. As compared to 1981, the proportion of communication facilities has increased from 67.53% to 68.79%, which shows slight change. Out of 1554 villages, 485 (31.21%) villages do not have bus stop, railway station & there is no communication facility available.

The road whether 'Pucca' or 'Kachcha' brings development in the region. Roads with cement concrete and water bound macadam comes under pucca road and remaining are treated as kachcha road. The 900 villages (57.92%) served by pucca road, which provide this facility of pucca road to 2077572 (73.17%) population of the district.

The length of roads in the district was 12279kms in 1988-89. Out of this 2810kms. And 9105kms roads are under the control of public works department and zillha classified as cement concrete (46kms), tar road (4550kms)

Regarding postal facility in the district. It is available in 706(45.43%) villages out of 1554 villages serving 68.40% of rural population. Within in the all tehsil's of the district percentage of villages having post and telegraph facility varies considerably. Shrirampur tehsil's with 70.37% is on the top rank while Akola tehsil with 26.82% holds last rank. Only five tehsil's as Nagar, Shrirampur, Parner, Sangamner and Kopargaon have the proportion of more than 50% while Rahuri, Newasa, Patherdi, Jamkhed, karjat and Akola tehsil's are below the district average (45.43%). The postal facility is not available to 848 villages in the district.

Tahsil Wise Post and Telephone Facility in the Ahmadnagar District: 2011

Table No: 5.14

Tahsil	No. of villages with post facility	No. of post office	Personal Telephone BSNL	Public phone Booths(PCO)
Akola	191	57	2912	482
Sangamner	170	77	9424	628
Kopargaon	80	59	5520	453
Rahata	58	17	3816	336
Shrirampur	54	45	11987	1374
Newasa	99	43	5236	583
Shevgaon	115	43	3527	333
Patherdi	145	42	4052	282
Nagar	121	67	30940	1716
Rahuri	91	34	6321	550
Parner	122	65	4900	419
Shrigonda	125	52	6280	497
Karjat	122	39	2658	210
Jamkhed	87	24	3230	522
District Total	1580	664	100803	8385

Source: Socio-economic Review of the District-2011-12

The above table gives availability of post and telephone facility in the district. Total 1580 villages having post facility and 664 villages served by post offices. Out of the tahsil's, Sangamner bears 77 post offices with first rank, while Rahataonly 17, to lowest rank. The facility of personal phones provided by Bhartiya Sanchar Nigam Ltd. (BSNL) in the district is to 100803 households. Out of 14 tehsil's Nagar is on top rank with 30940 individuals while Akola on the least with 2912 utilizing personal phone facility. There are public telephone booths, providing telephone facility to the public. Which is open to all, also provided by BSNL through proper channel. These PCO'S are 8385 in number in the district.

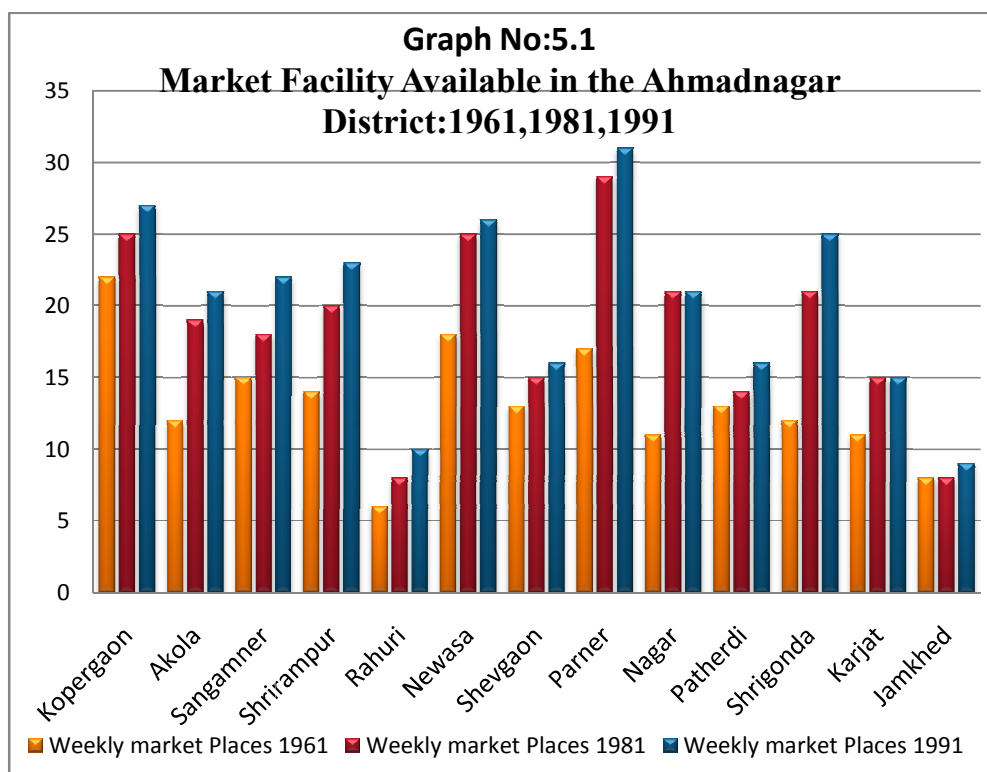
5.2.4. Market Facility:

Market facility available in the Ahmadnagar district: 1961, 1981, 1991.

Table No: 5.15

Sr. No.	Tahsil	Weekly market Places		
		1961	1981	1991
01.	Kopergaon	22	25	27
02.	Akola	12	19	21
03.	Sangamner	15	18	22
04.	Shrirampur	14	20	23
05.	Rahuri	06	08	10
06.	Newasa	18	25	26
07.	Shevgaon	13	15	16
08.	Parner	17	29	31
09.	Nagar	11	21	21
10.	Patherdi	13	14	16
11.	Shrigonda	12	21	25
12.	Karjat	11	15	15
13.	Jamkhed	08	08	09

Source: Socio-economic Review of the District.

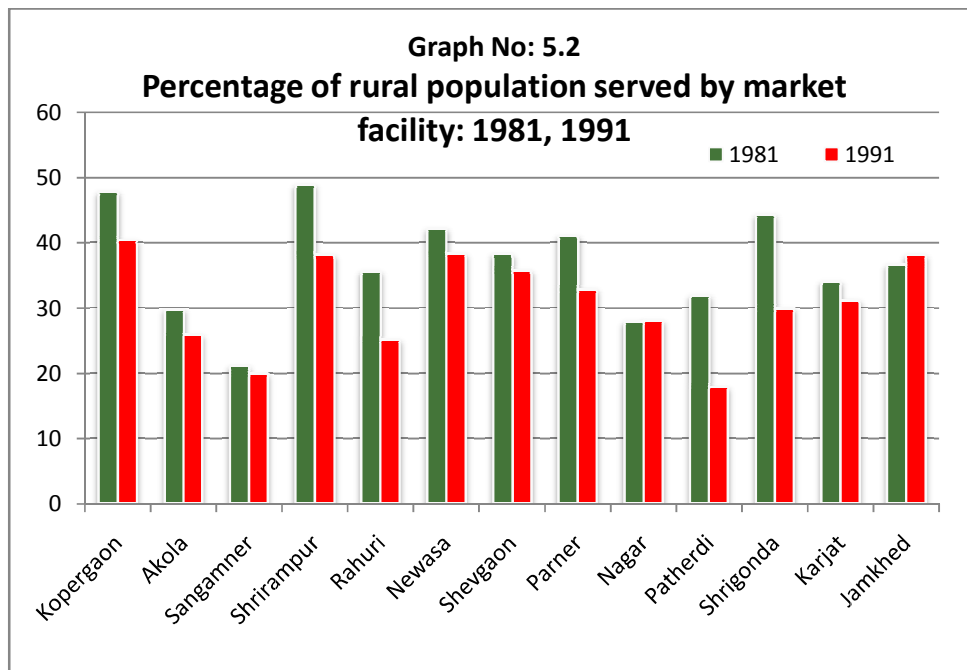


**Percentage of rural population served by weakly market facility:
1981, 1991.**

Table No: 5.16

Sr.No	Tahsil	1981	1991
01.	Kopergaon	47.79	40.38
02.	Akola	29.80	25.85
03.	Sangamner	21.08	19.90
04.	Shrirampur	48.86	38.13
05.	Rahuri	35.58	25.17
06.	Newasa	42.16	38.34
07.	Shevgaon	38.26	35.71
08.	Parner	41.05	32.84
09.	Nagar	27.92	28.06
10.	Patherdi	31.93	17.86
11.	Shrigonda	44.26	29.94
12.	Karjat	34.02	31.17
13.	Jamkhed	36.65	38.11
	District Total-	37.21	30.79

Source: Socio-economic Review of the District.



In 1961 market is being held in 172(13.05 %) villages. In 1981, this number improved to 238(15.83 %) villages. In 1991, market is being held in 195(12.55 %) villages in this district. In 1981 these villages account for 37.21 % of the districts rural population. Among the 13 tahsils in the district, the position is best in Shirirampur tahsil, whwre 26.32% (20 villages) of the villages comprising 48.86 % of its rural population have the facility of market with in the village itself.

According to 1991 census markets are held in 195(12.55%) villages out of the 1554 inhabited villages. The proportion of villages with weekly markets to total number of inhabited villages in the tahsil found in between 7.37% in Rahuri and 22.33% in Kopergaon tahsil. Generally large villages have at least a few permanent shops which deals with the daily necessities of the residents. Weekly markets are generally held in some of the important villages or clustering villages.

5.2.5. Banking Facility:

Availability of Bank facility in Ahmadnagar district: 1961

Table No: 5.17

Sr.No	Tahsil	Number of Co-operative Banks.	Number of Scheduled Banks.
01.	Nagar	02	04
02.	Rahuri	02	-
03.	Shrirampur	03	02
04.	Newasa	01	-
05.	Shevgaon	01	-
06.	Patherdi	01	-
07.	Jamkhed	01	-
08.	Karjat	03	-
09.	Shrigonda	01	-
10.	Parner	01	-
11.	Akola	01	-
12.	Sangamner	03	02
13.	Kopergaon	05	03
	District Total-	25	11

Source: Ahmadnagar district socio-economic abstract.

Commercial Banking in Ahmadnagar district: 1981

Table No: 5.18

Sr.No	Tahsil	Number of Co-operative Banks.(A)	Number of Scheduled Banks. (B)	Total = A+B	No. of villages/ Towns Having Banking offices.
01.	Nagar	25	21	46	12
02.	Rahuri	11	07	18	07
03.	Shrirampur	16	10	26	12
04.	Newasa	12	05	17	10
05.	Shevgaon	06	02	08	04
06.	Patherdi	06	02	08	05
07.	Jamkhed	06	02	08	04
08.	Karjat	06	05	11	06
09.	Shrigonda	08	03	11	06
10.	Parner	09	02	11	08
11.	Akola	07	04	11	06
12.	Sangamner	15	06	21	11
13.	Kopergaon	18	10	28	13
	District Total-	145	79	224	104

Source: Ahmadnagar district socio-economic abstract.

As per 1961 data, there was only 12 commercial banking offices in the district, which was located in four tahsils only as Nagar, Shrirampur, Sangamner and Kopergaon. In 1981, this number increased to 79. During the period of this 17 years, this Banking facility increased by about 07 times covering all the tahsil. In 1961, one Bank completes the Banking need of 29539 households. In 1978, one Bank covers 4911 households.

Commercial Banking in Ahmadnagar district: 1991

Table No: 5.19

Sr.No	Tahsil	Number of Co-operative Banks.(A)	Number of Scheduled Banks. (B)	Total = A+B	No. of villages/ Towns Having Banking offices.
01.	Nagar	33	44	77	19
02.	Rahuri	24	12	36	22
03.	Shrirampur	30	17	47	20
04.	Newasa	21	13	43	17
05.	Shevgaon	15	08	23	12
06.	Patherdi	14	11	25	13
07.	Jamkhed	08	08	16	10
08.	Karjat	13	12	25	12
09.	Shrigonda	17	11	28	14
10.	Parner	14	10	24	15
11.	Akola	16	11	27	14
12.	Sangamner	34	16	50	29
13.	Kopergaon	32	20	52	27
	District Total-	271	193	464	224

Source: Ahmadnagar district census handbook- 1991.

As per 1991 census Nagar, Rahuri, Shrirampur, Newasa, Sangamner and Kopergaon being the important trade centers have more than half of the total number of Banking institutions in the district.

5.2.6. Drinking water facility:

As per 1961 census, 03 cities and one village was getting drinking water facility through tap or tap water. 241 villages were using river water for drinking purpose. 02 villages using tank water, 04 villages through canals, 17 from Nalas, 697 Villages and one city utilizing well water for drinking purpose.

Availability of Drinking water facility in the Ahmadnagar district: 1961.

Table No: 5.20

Sr. No.	Drinking water facility	No. Of villages
1.	Tap water	01
2.	River water	241
3.	Tank	02
4.	Canals	04
5.	Nalas	17
6.	Wells	697
7.	More than two ways	356
		1318

Source: Ahmadnagar district census 1961.

Tahsil wise Availability of Drinking water facility in the Ahmadnagar district:1971.

Table No:5.21

Tahsil	Tap water	Wells	Tanks	River	Canal	More than one
Nagar	-	75	-	01	-	30
Rahuri	-	27	-	12	-	43
Srirampur	01	21	-	13	01	37
Newasa	-	73	-	29	-	18
Shevgaon	-	98	-	22	-	01
Patherdi	-	70	-	-	-	22
Jamkhed	-	27	-	04	-	24
Karjat	-	28	-	-	-	53
Shrigonda	-	68	01	08	-	08
Parner	-	61	-	02	-	51
Akola		67	-	23	-	63
Sangamner	-	65	-	12	-	56
Kopergaon	-	37	-	17	-	46
Total	01	717	01	143	01	452

Source: Ahmadnagar district census 1971.

**Tahsil wise Number of Villages with Drinking water facility in
the Ahmadnagar district:1981.**

Table No:5.22

Tahsil	Tap water	Wells	Tanks	Tube well	River	Canal	Other	More than one
Nagar	07	112	01	01	34	01	22	59
Rahuri	03	85	-	04	57	-	03	54
Srirampur	24	69	-	04	33	19	13	53
Newasa	05	115	-	01	48	-	44	73
Shevgaon	10	107	-	08	23	-	19	51
Patherdi	02	121	-	02	30	-	49	70
Jamkhed	01	86	-	-	35	-	-	34
Karjat	03	102	04	01	56	02	59	80
Shrigonda	08	97	01	01	20	-	58	70
Parner	03	129	-	06	34	-	61	86
Akola	03	152	07	-	70	07	12	73
Sangamner	01	150	03	19	54	04	21	88
Kopergaon	04	90	-	-	51	09	-	47
Total	74	1415	16	47	545	42	361	838

Source: Ahmadnagar district census 1981.

It is heartening to know that, No doubt drinking water facility is available almost in all the villages and towns in the district. But the detailed examination is not done about the depth of this facility throughout the year. As per 1981 census data, the open well, hand pump and river are the main sources of drinking water in the district. In 74 villages water is supplied through taps; River (545), wells (1415), Canals (42), tube well (47) Supply water to the villages. It is seen that 838 villages have more than one type of source of drinking water supply.

As per above data of 1991 census, in most of the villages open well and hand pump are the main sources of drinking water, in 477 villages water is supplied through taps; River(469), Canal(31), Wells(1251), Tank(27) & River(469) supply water to villages. It is found that 1067 (68.66%) out of 1554 inhabited villages have more than one type of source of drinking water supply. There is improvement in all type of drinking water facility since 1961.

5.2.7. Power Supply:

Electricity is kind of power plays key role in the development of the rural economy .The tremendous progress is achieved in the regard , which can be noticed from the following statistics.

Rural Electrification in ahmednagar district :1960-61& 1979-80.

Table No:5.23

Tahsil	Touns/Cities Electried 1961	Villages Electried	
		1960-61	1979-80
Nagar	✓	-	88
Rahuri	-	-	79
Shrirampur	✓	01+01(Belapur BK.&.Khurd)	74
Newasa	-	-	97
Shevgaon	-	-	90
Pathardi	-	-	76
Jamkhad	-	-	45
Karjat	-	-	66
Shrigonda	-	-	61
Parner	-	-	95
Akola	-	-	111
Sangamner	✓	-	130
Kopergaon	✓	-	100
District Total		01	1112

Source :Ahmednagar District Socio-Ecpnomic Review 1979-80.

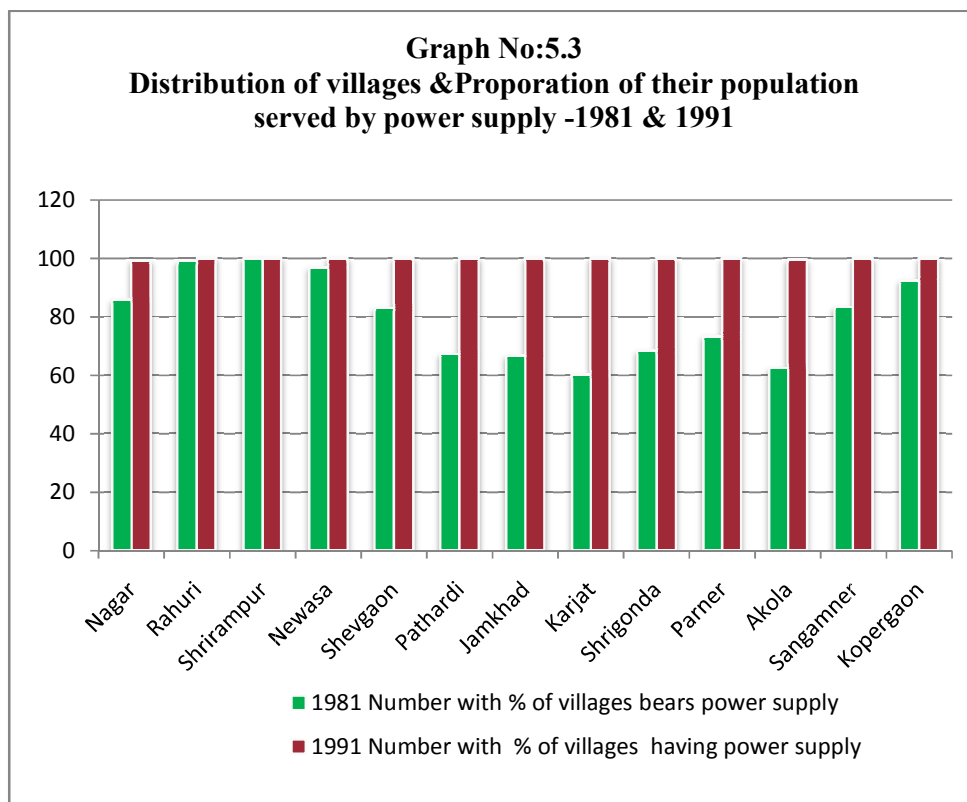
It is seen that in 1960-6, only one village and 04 towns was electrified while at the end of 1979-80, 1,112 villages were electrified. This covers (84%) of the total villages in the district.

Distribution of villages & Proportion of their population served by power supply -1981 & 1991

Table No:5.24

Tahsil	1981		1991	
	Number with % of villages bears power supply	Number with % of rural Population served by power supply	Number with % of villages having power supply	Number with % of rural population served by power supply
Nagar	96 (85.71%)	171017(92.57)	114 (99.13)	260656 (99.95%)
Rahuri	93 (98.94%)	128949(72.99)	95 (100%)	198842(100%)
Shrirampur	76 (100%)	236181(100%)	81 (100%)	261275(100%)
Newasa	124 (96.88%)	207980(98.46)	129 (100%)	273075(100%)
Shevgaon	92 (82.88%)	128163(92.69)	111 (100%)	170507(100%)
Pathardi	82 (67.21%)	114600(77.52)	130 (100%)	166313(100%)
Jamkhad	58 (66.67%)	73319(76.93)	87 (100%)	119278(100%)
Karjat	65 (60.19%)	113016(77.08)	117 (100%)	184331(100%)
Shrigonda	71 (68.27%)	147540(81.33)	114 (100%)	214060(100%)
Parner	96 (73.28%)	147823(83.28)	130 (100%)	211370(99.83%)
Akola	106(62.35%)	136877(77.60)	178 (99.44%)	221612(99.76%)
Sangamner	129(83.23%)	214170(89.12)	162 (100%)	305747(100%)
Kopergaon	97 (92.38%)	233299(95.43)	103 (100%)	249013(100%)
District Total	1185(78.84%)	2052934(87.10)	1551(99.81%)	2838413(99.96%)

Source : District census Handbook 1981 and 1991



The rural electrification accelerated the supply of power in the rural areas. As per 1981 census 1185(78/84%) villages in the district fulfilled the need of power supply .These villages contributes 87.10% of the rural population of the district. It is noticeable that cent percent of villages in shrirampur tahsil have power supply.

According to 1991 census, the proportion of electrification in the district is much improved. All the towns are 100% electrified and 1551 villages out of 1554 (99.81%) are with power supply facility. All the villages in Rahuri, Shirirampur, Newasa, Shevgaon, pathardi, Jamkhed, Karjat, Shrigonda, sangamner and kopergaon Tahsil are cent percent Electrified.

Power supply of electricity is made available for different purpose .s.a. domestic purpose, agricultural purpose, other purposes like industrial, commercial etc. and for all purposes mentioned above. There are 106 villages in the district, which have power

supply for domestic purposes only. Electricity available for all purposes in 548 villages. The total population of electrified villages constitutes 99.96% of the rural population of the district.

Distribution of villages according to availability of power supply: 2010-11.

Table No:5.25

Tahsil	Number of villages having electricity	% of villages served by electricity
Akola	191	100%
Sangamner	169	100%
Kopergoan	79	100%
Rahata	58	100%
Shrirampur	54	100%
Newasa	129	100%
Shevgoan	112	100%
Pathardi	134	100%
Nagar	104	100%
Rahuri	96	100%
Parner	131	100%
Shrigonda	114	100%
Karjat	121	100%
Jamkhed	86	100%
District Total	1578	100%

Source: Socio-economic Review of the District.

The Present Situation is as per 2010-11 district socio-economic analysis, which shows that all the inhabited villages of the district are electrified and People of the district enjoy the facility of electrical Power supply.

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Chapter-VI

**CASE STUDIES OF POPULATION
CHARACTERISTICS AND SOCIO-ECONOMIC
DEVELOPMENT OF SELECTED VILLAGES**

- 6.1:** SAMPLE VILLEGES.
- 6.2:** DECADAL VARITION AND GROWTH RATE OF
POPULATION IN SAMPLE VILLAGES.
- 6.3:** SEX RATIO IN SAMPLE VILLAGES.
- 6.4:** DENSITY OF POPULATION IN SAMPLE VILLAGES.
- 6.5:** LITERACY RATE IN SAMPLE VILLAGES.

In the last chapter Socio-economic status of the district have been studied. This chapter throws light on case studies for sample villages in Ahmadnagar district. The points of discussion deals with population characteristics in respect to the sample villages. These points are Decadal variation and growth rate of population ,Sex Ratio,Density of population And literacy Rate of population.

6.1: Sample Villages:

The villages those are selected for the sample analysis are selected randomly. No any particular criteria is applied for the selection. But it is seen that, they are making representation of the tahsil. During the selection of the representative villages, it is cared that i) They should not at one side of the tahsil. ii) They should not be located one after another. iii) All villages should not be in remote location. Here three villages from each tahsil are selected for the purpose, and in all total forty two villages are selected for the case study.

Sample Villages for the case study in Ahmadnagar district:

Table No: 6.1

Sr.No.	Tahsil	Village-01	Village-02	Village-03
1.	Nagar	Nimblak	Sandave	Ghospuri
2.	Rahuri	Taharabad	Katrad	Davangaon
3.	Shrirampur	Khandala	Karegaon	Naur
4.	Newasa	Sonai	Georai	Bhalgaon
5.	Shevgaon	Ghotan	Balamtakli	Awhane bk.
6.	Pathardi	Kharwandi	Manikdaundi	Raghohivre
7.	Jamkhed	Nannaj	Kharda	Patoda
8.	Karjat	Jalgaon	Rashin	Thergaon
9.	Shrigonda	Mandavgan	Kashti	Dhawalgaon
10.	Parner	Raleganshindi	Bhalawani	Wasunde
11.	Akola	Rajur	Samsherpur	Bramhasnwada
12.	Sangamner	Talegaon	Devgaon	Kelewadi
13.	Kopergaon	Murshatpur	Wari	Pohegaon bk.
14.	Rahata	Shirdi	Dadh bk.	Puntamba

Source: Census hand book of Ahmadnagar district.

6.2: Decadal variation and Growth rate of population in Sample villages:

‘The concept of population change or growth of population is often used to connote the change in the number of inhabitants of a territory during a specific period of time irrespective of the fact whether change is –ve or +ve. Such a change can be measured both in terms of absolute numbers and in terms of percentage. While it is easy to determine the change in absolute number by subtracting the number of inhabitants at an earlier point in time that of at a later point in time.’¹

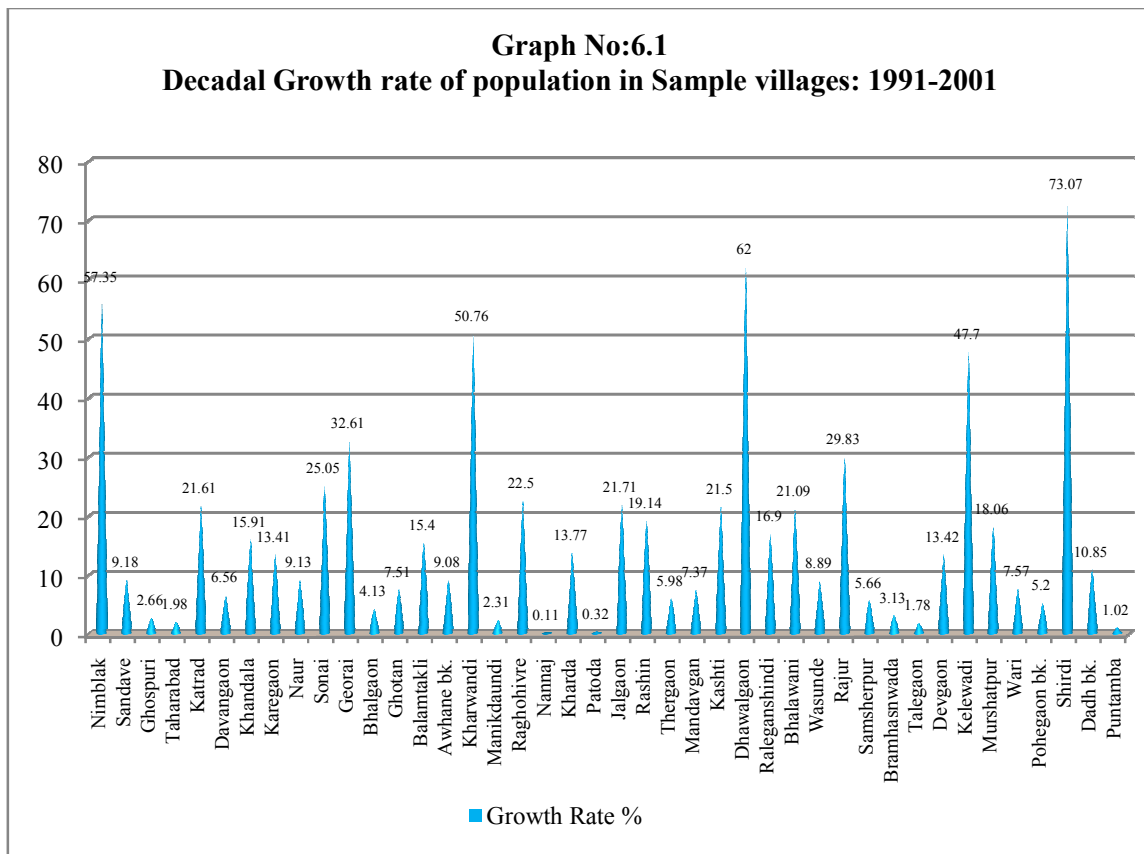
Decadal variation and Growth rate of population in Sample villages: 1991-2001

Table No: 6.2

Sr. No.	Tahsil	Village	Total Populatioin 1991	Total Populatioin 2001	Difference	Growth Rate(%)
1.	Nagar	Nimblak	4671	7350	2679	+ 57.35
		Sandave	1296	1415	119	+ 9.18
		Ghospuri	2701	2773	72	+ 2.66
2.	Rahuri	Taharabad	1918	1956	38	+ 1.98
		Katrad	3462	4210	748	+ 21.61
		Davangaon	1281	1365	84	+ 6.56
3.	Shrirampur	Khandala	4561	5287	726	+ 15.91
		Karegaon	4570	5183	613	+ 13.41
		Naur	1807	1972	165	+ 9.13
4.	Newasa	Sonai	13960	17458	3498	+ 25.05
		Georai	2416	3196	788	+ 32.61
		Bhalgaon	1575	1640	65	+ 4.13
5.	Shevgaon	Ghotan	3011	3237	226	+ 7.51
		Balamtakli	4130	4766	636	+ 15.40
		Awhane bk.	2290	2498	208	+ 9.08
6.	Pathardi	Kharwandi	2362	3561	1199	+ 50.76
		Manikdaundi	2298	2351	53	+ 2.31
		Raghohivre	889	1089	200	+ 22.50
7.	Jamkhed	Nannaj	5492	5498	06	+ 0.11
		Kharda	7240	8237	997	+ 13.77
		Patoda	1876	1882	06	+ 0.32
8.	Karjat	Jalgaon	1529	1861	332	+ 21.71
		Rashin	9141	10891	1750	+ 19.14
		Thergaon	2156	2285	129	+ 5.98
9.	Shrigonda	Mandavgan	5850	6281	431	+ 7.37
		Kashti	10589	12866	2277	+ 21.50
		Dhawalgaon	879	1424	545	+ 62.00
10.	Parner	Raleganshindi	1982	2317	335	+ 16.90
		Bhalawani	3893	4714	821	+ 21.09
		Wasunde	3397	3699	302	+ 8.89

11.	Akola	Rajur	6872	8922	2050	+ 29.83
		Samsherpur	4169	4405	236	+ 5.66
		Bramhasnwada	4561	4704	143	+ 3.13
12.	Sangamner	Talegaon	5725	5827	102	+ 1.78
		Devgaon	1393	1580	187	+ 13.42
		Kelewadi	1025	1514	489	+ 47.70
13.	Kopergaon	Murshatpur	2635	3111	476	+ 18.06
		Wari	7663	8243	580	+ 7.57
		Pohegaon bk.	4861	5114	253	+ 5.20
14.	Rahata	Shirdi	15129	26184	11055	+ 73.07
		Dadh bk.	6516	7223	707	+ 10.85
		Puntamba	12300	12425	125	+ 1.02
					Average Growth Rate--	+ 24.20

Source: Census hand book of Ahmadnagar district 1991 and C.D -2001.



As per table 6.2, all the forty two selected villages shown growth in their population during the decade of 1991 to 2001. The average growth rate for these selected villages is + 24.20 %. The average growth rate of the district during 1991-2001 is + 19.79% which is some what close to the average growth rate of sample villages.

The villages shows +ve growth rate due to increase in their decadal population from 1991 to 2001.

The town Shirdi has shown highest growth rate + 73.07% during 1991-2001, because it is the emerging international pilgrim centre of Saibaba. As a tourism opportunity, migration of the people increased the drastic change in its population during the decade. The village Nimblak from Nagar tahsil also shown large growth rate of + 57.35% among the selected villages. This is also noticeable because Nagar MIDC comes under the jurisdiction of village Nimblak. Most of the workers preferred to settled temporarily as well as parmentally in near by village Nimblak. Other remaining villages of the case study shows normal growth rate during the decade.

6.3: Sex Ratio or Male- Female Ratio in Sample villages:

The numerical measurement of male and female human population is expressed in terms of 'Sex Ratio'. This male and female ratio is calculated by different methods in different countries. In some countries it is expressed in percentage, where it is calculated as –

$$\frac{pm}{pt} \times 100 \text{ or } \frac{pf}{pt} \times 100 \text{ or } \frac{pm}{pf} \times 100$$
 where pm = No. of males; pf = No. of females; pt = Total population.

In India male- female ratio is calculated in terms of number of females per thousand males and calculated as- $Pf/pm \times 1000$

The sex ratio of India is remain 930, 934, 927, 933 and 940 during 1971, 1981, 1991, 2001 and 2011 census respectively. In the state Maharashtra, 930, 937, 934, 922 and 925, and for the district Ahmadnagar, it was 956, 959, 949, 940 and 934 in respective years. The trend is some what similar in the nation, state and district. This trend may predicted as decreasing one because in 1971 it was 930 for the nation and state while 956 for the district. Which minimized to became 940, 925, 934 in 2011 census respectively. This decrease in sex ratio in not proud for the nation. It is not a better sign for population composition as well as the quality of the respective population. 'Frankline (1956 p-168) rightly observes that sex ratio was an index of economy prevailing in an area and was useful tool for sexes upon the other demographic elements like population growth, marriage rates, occupational structure, has also been well recognized (Shyrock,1976, p-105). Thus the knowledge of sex ratio is essential for understanding the employment and consumption patterns and social needs etc. of a community.'²

In the villages for the case studies, the sex ratio of the selected villages are shown in the following table.

Sex Ratio in Sample villages: 1961 to 2001.

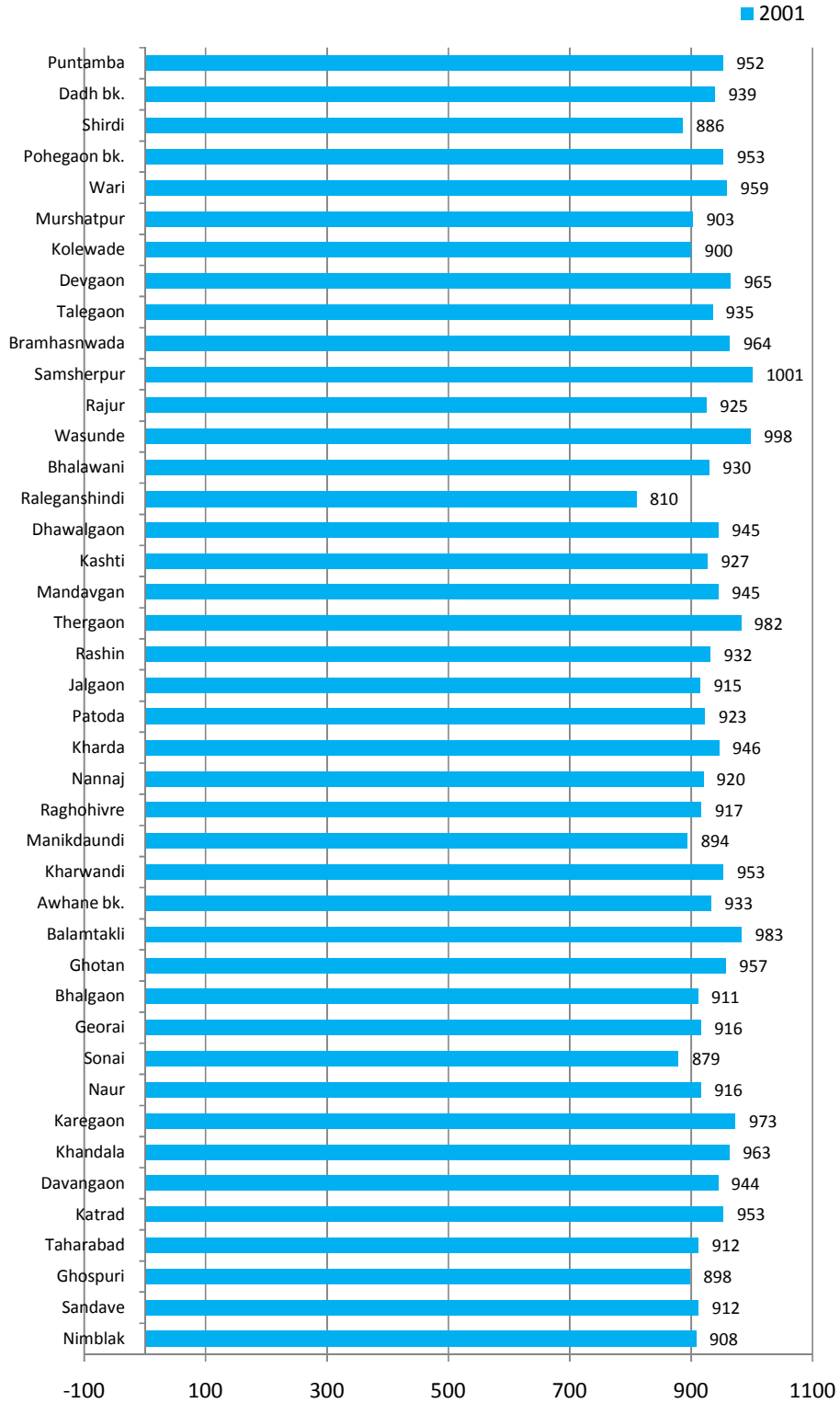
Table No: 6.3

Sr. No	Tahsil	Name of the Village	Sex Ratio				
			1961	1971	1981	1991	2001
1.	Nagar	Nimblak	1027	1047	942	937	908
		Sandave	1019	1036	1080	981	912
		Ghospuri	976	989	931	929	898
2.	Rahuri	Taharabad	968	1000	946	920	912
		Katrad	1002	984	993	979	953
		Davangaon	915	984	1013	965	944
3.	Shrirampur	Khandala	987	946	946	950	963
		Karegaon	895	907	963	1002	973
		Naur	994	927	930	894	916
4.	Newasa	Sonai	898	976	943	875	879
		Georai	918	1069	1009	925	916
		Bhalgaon	959	1044	938	971	911
5.	Shevgaon	Ghotan	928	981	994	951	957
		Balamtakli	978	968	970	986	983
		Awhane bk.	955	791	972	951	933
6.	Pathardi	Kharwandi	914	900	986	955	953
		Manikdaundi	1038	1008	1062	858	894
		Raghohivre	945	966	997	958	917
7.	Jamkhed	Nannaj	960	961	979	966	920
		Kharda	977	948	973	953	946
		Patoda	986	959	952	938	923
8.	Karjat	Jalgaon	966	825	826	905	915
		Rashin	912	926	952	967	932

		Thergaon	960	924	955	941	982
9.	Shrigonda	Mandavgan	925	972	942	894	945
		Kashti	947	959	951	856	927
		Dhawalgaon	1041	1049	997	949	945
10.	Parner	Raleganshindi	911	1028	1013	902	810
		Bhalawani	1014	988	991	1010	930
		Wasunde	1039	1016	970	1041	998
11.	Akola	Rajur	976	947	923	937	925
		Samsherpur	1024	966	963	989	1001
		Bramhasnwada	1003	1006	1025	1068	964
12.	Sangamner	Talegaon	1018	955	989	874	935
		Devgaon	961	928	921	979	965
		Kolewade	947	968	914	1008	900
13.	Kopergaon	Murshatpur	961	990	1045	962	903
		Wari	858	855	891	926	959
		Pohegaon bk.	990	1015	961	962	953
14.	Rahata	Shirdi	899	930	959	920	886
		Dadh bk.	947	965	996	981	939
		Puntamba	920	967	895	865	952
	Sample village average Sex Ratio-		963	966	967	947	933

Source: Census hand book of Ahmadnagar district 1961 to 2001

Graph No:6.2
Sex ratio in Sample Villages-2001



The above table regarding sex ratio in selected villages does not show any uniform trend. Some villages shows decreasing trend while some shows increasing trend. Some villages shows unique trend such as increase at the beginning and decrease at the post decade. The villages like Nimblak, Sandve and Ghospuri, from Nagar tahsil shows increasing trend of sex ratio till 1971-1981 and decreasing in 1991 and 2001. The villages Davangaon, Babhaleshwar, Georai, Taharabad, Bhalgaon, Radhohivere, Nannaj, Dhavalgaon, Ralegansindhi, Murshatpur and Shingave are also shows similar trend regarding sex ratio. The villages poses continuous decreasing trend in sex ratio from 1961 to 2001 are Katrad, Kharwandi and Patoda from Rahuri, Patherdi and Jamkhedtahsil respectively.

The villages which shows increasing in their sex ratio 1961 to 1991 and decreased in 2001 are Chitali, Rashin and Bramhanwada.

Most of the villages shows sudden decrease in sex ratio during the decade of 1991 and 2001. The average sex ratio of these villages in 1961 is 962 per 1000 males, which becomes 935 in 2001. This decline number females is 27 per 1000 males is not a good sign for the socio-economic development of the ahmadnagar district.

The average sex ratio for sample villages from 1961 to 2001 is 963, 966, 967, 947 and 933 respectively. It shows slight increase in early decades while sudden decrease in post decades, that is 1991 and 2001. Which became 947 and 933 respectively.

6.4: Density of population in sample villages: Density is a indicator used for the measurement of concentration of population. Density gives distribution of population, but its calculation depends upon the two variables. One is a number of peoples living in a particular region and another i.e. area either in sq.km or sq.mile. Here, the area in sq.miles is used while calculating density for sample villages. The comparative values are calculated for the year 1991 and 2001.

Density of population in sample villages: 1991,2001

Table No: 6.4

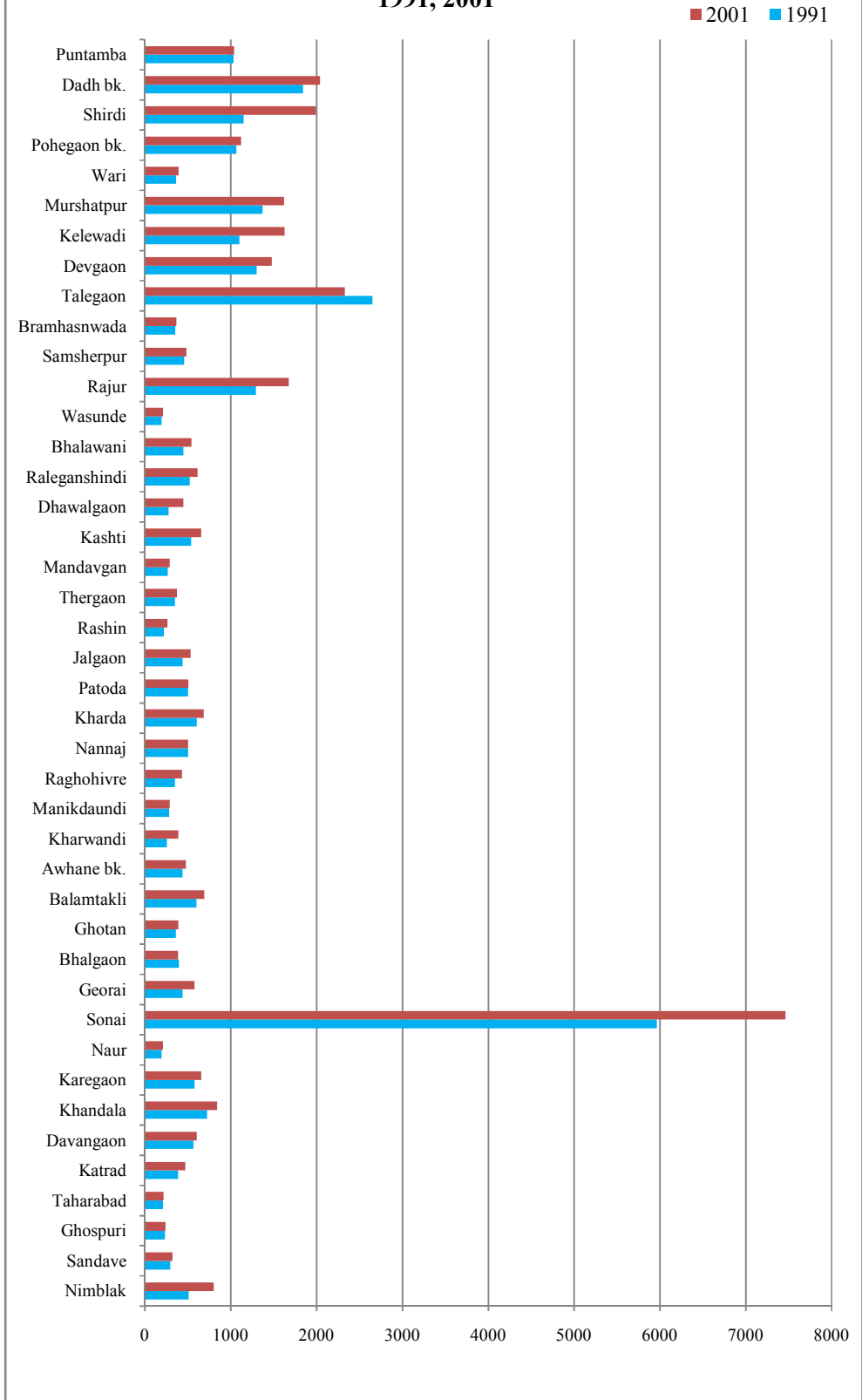
Sr. No	Tahsil	Name of the Village	Area mile ²	Population		Density in Sq. Mile.	
				Popu.1991	Popu.2001	1991	2001
1.	Nagar	Nimblak	9.17	4671	7350	509	801
		Sandave	4.40	1296	1415	294	322
		Ghosपुर	11.54	2701	2773	234	240
2.	Rahuri	Taharabad	9.06	1918	1956	212	216
		Katrad	8.96	3462	4210	386	470
		Davangaon	2.26	1281	1365	567	604
3.	Shrirampur	Khandala	6.29	4561	5287	725	840
		Karegaon	7.91	4570	5183	578	655
		Naur	9.41	1807	1972	192	210
4.	Newasa	Sonai	2.34	13960	17458	5966	7461
		Georai	5.52	2416	3196	438	579
		Bhalgaon	3.99	1575	1540	395	386

5.	Shevgaon	Ghotan	8.33	3011	3237	361	388
		Balamtakli	6.89	4130	4766	599	692
		Awhane bk.	5.24	2290	2498	437	477
6.	Pathardi	Kharwandi	9.15	2362	3561	258	389
		Manikdaundi	8.18	2298	2351	281	287
		Raghohivre	2.52	889	1089	353	432
7.	Jamkhed	Nannaj	10.97	5492	5498	501	502
		Kharda	12.02	7240	8237	602	685
		Patoda	3.73	1876	1882	503	504
8.	Karjat	Jalgaon	3.49	1524	1861	437	533
		Rashin	41.31	9141	10891	221	264
		Thergaon	6.12	2156	2285	352	373
9.	Shrigonda	Mandavgan	21.88	5850	6281	267	287
		Kashti	19.68	10589	12866	538	654
		Dhawalgaon	3.19	879	1424	275	446

10.	Parner	Raleganshindi	3.79	1982	2317	523	611
		Bhalawani	8.71	3893	4714	447	541
		Wasunde	17.63	3397	3699	193	210
11.	Akola	Rajur	5.32	6872	8922	1292	1677
		Samsherpur	9.13	4169	4405	457	482
		Bramhasnwada	12.85	4561	4704	355	366
12.	Sangamner	Talegaon	2.16	5725	5027	2650	2327
		Devgaon	1.07	1393	1580	1302	1477
		Kolewade	0.93	1025	1514	1102	1628
13.	Kopergaon	Murshatpur	1.92	2635	3111	1372	1620
		Wari	21.05 (Km ²)	7663	8243	364 (Per km ²)	391 (Per km ²)
		Pohegaon bk.	4.57	4861	5114	1064	1119
14.	Rahata	Shirdi	13.15 (Km ²)	15129	26184	1150 (Per km ²)	1991 (Per km ²)
		Dadh bk.	3.54	6516	7223	1841	2040
		Puntamba	11.93	12300	12425	1031	1041
					Sample village Average Density	753 per mile ²	871 per mile ²

Source: Computed by Researcher.

Graph No:6.3
Density of population in sample villages:
1991, 2001



The density of the sample villages is expressed in per square mile. The town Shirdi from Rahata and Wari from Kopergaon tahsil are the towns, which shows their density in square km. The average density of sample villages for 1991 and 2001 is 753 and 871 per sq.mile. which is increased during the decade due to increase in their population. All the villages shows increase in their density due to increase in their population during the decade. The village Sonai shows highest (5966 & 7461) density because it's population (13960 & 17458) with area only 2.34 sq. miles.

6.5: Literacy Rate in sample villages: The proportion of literates in the district is not similar in all the tahsils. Tahsil wise literacy shows its relation with accessibility of the region and the access of facility. Therefore it is analysed for the sample villages in the Ahmadnagar district.

Literacy Rate in sample villages: 1961-2001

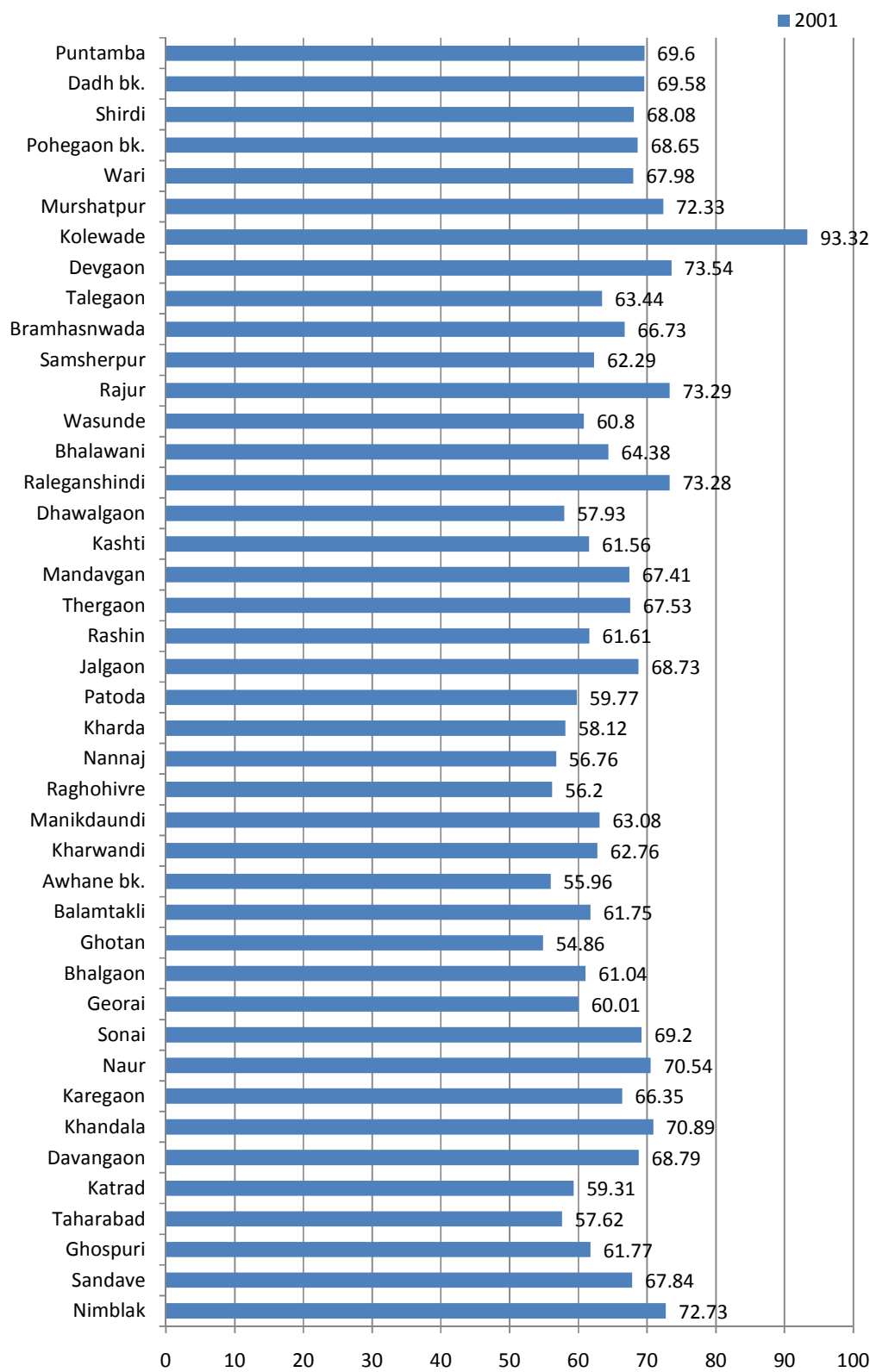
Table No: 6.5

Sr. No	Tahsil	Village	Literates 1991	Literates 2001	Literacy in % 1991	Literacy in % 2001
1.	Nagar	Nimblak	2525	5346	54.06	72.73
		Sandave	696	960	53.70	67.84
		Ghospuri	1375	1713	50.91	61.77
2.	Rahuri	Taharabad	853	1127	44.47	57.62
		Katrad	1665	2497	48.09	59.31
		Davangaon	710	939	55.42	68.79
3.	Shrirampur	Khandala	2395	3748	52.51	70.89
		Karegaon	2403	3439	52.58	66.35
		Naur	1059	1391	58.60	70.54
4.	Newasa	Sonai	7756	12081	55.56	69.20
		Georai	1018	1918	42.13	60.01
		Bhalgaon	527	940	33.46	61.04
5.	Shevgaon	Ghotan	1334	1776	44.30	54.86
		Balamtakli	2152	2943	52.11	61.75
		Awhane bk.	815	1398	35.59	55.96
6.	Pathardi	Kharwandi	1231	2235	52.12	62.76
		Manikdaundi	995	1483	43.30	63.08
		Raghohivre	406	612	45.67	56.20
7.	Jamkhed	Nannaj	1979	3007	36.03	56.76
		Kharda	3623	4788	50.04	58.12
		Patoda	787	1107	41.95	59.77
8.	Karjat	Jalgaon	849	1279	55.53	68.73
		Rashin	4355	6710	47.64	61.61
		Thergaon	838	1543	38.87	67.53

9.	Shrigonda	Mandavgan	3102	4234	53.02	67.41
		Kashti	5608	7920	52.96	61.56
		Dhawalgaon	464	825	52.79	57.93
10.	Parner	Raleganshindi	1009	1698	50.91	73.28
		Bhalawani	2104	3035	54.05	64.38
		Wasunde	1586	2249	46.69	60.80
11.	Akola	Rajur	4484	6539	65.25	73.29
		Samsherpur	1904	2744	45.67	62.29
		Bramhasnwada	2493	2939	54.66	66.73
12.	Sangamner	Talegaon	2997	3189	52.35	63.44
		Devgaon	859	1162	61.66	73.54
		Kolewade	363	1413	35.41	93.32
13.	Kopergaon	Murshatpur	1250	1906	47.44	72.33
		Wari	4587	5604	59.86	67.98
		Pohegaon bk.	2801	3511	57.62	68.65
14.	Rahata	Shirdi	7961	17825	52.62	68.08
		Dadh bk.	3371	5026	51.73	69.58
		Puntamba	7635	8648	62.07	69.60
		Sample Village Average Literacy---			50.04	65.41

Source: Computed by researcher.

Graph No:6.4
Literacy Rate in sample villages- 2001



All the sample villages shows increase in their literacy rate during the decade of 1991- 2001. The villages which are having more than 70% literacy are Nimblak (Nagar), Ralegan Sidhi (Nagar), Khandala (Shrirampur), Rajur (Akola), Devgaon (Sangamner), Kolwad (Sangamner) and Murshatpur (Kopergaon). The reason behind this more literacy is of their location either near urban place or near educational hub. For ex. Nimblak is at the periphery of the headquarter Ahmadnagar and Nagar MIDC also comes under the jurisdiction of the village Nimblak. The village Khandala is close to Shrirampur, Murshatpur close to Kopergaon, Kolwade is near to Pravara Educational Compex. While Ralegan Sidhi is influenced by social movement of honorable 'Anna Hajare'. The average literacy for these sample villages is 50.04 and 65.41. Which is also close to the district average 57.815 (1991) and 72.92% (2001).

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Chapter VII
CONCLUSIONS & SUGGESTIONS

- 7.1 PHYSICAL AND CULTURAL SETUP**
- 7.2 GROWTH OF POPULATION**
- 7.3 DISTRIBUTION OF POPULATION**
- 7.4 DENSITY OF POPULATION**
- 7.5 AGE COMPOSITION**
- 7.6 SEX COMPOSITION**
- 7.7 RELIGIOUS COMPOSITION**
- 7.8 DEPENDENCY RATIO (ECONOMIC COMPOSITION)**
- 7.9 WORK PARTICIPATION RATE (WORKERS AND
NON- WORKERS POPULATION)**
- 7.10 OCCUPATIONAL STRUCTURE**
- 7.11 LITERACY RATE**
- 7.12 CO-OPERATIVE MOVEMENT**
- 7.13 THE PERCENT OF S.C. & S.T. POPULATION IN
AHMADNAGAR DISTRICT**
- 7.14 SERVICES AND FACILITIES**
- 7.15 RECOMMENDATIONS**

The chapter gives main conclusions which are drawn from the comprehensive study in the previous six chapters. The comprehensive study leads to conclude and concentrate some aspects which map out the integrated suggestions.

7.1 PHYSICAL AND CULTURAL SETUP:

Topographically the study region is bounded by three physiographic parts, as--- Sahyadri hill ranges or offshoots, the plateau and the basins. The tahesil Akola comes under hill ranges of Sahyadri to the north east of the district. Three offshoots of Sahyadri are penetrated to the eastward of the district. Primarily the offshoot, named as Kalsubai- Addala range in the north, the second- Balaeshwar range in the middle and the third- Harishchandragad range to the south. The district as a whole is an elevated table land or dissected plateau region named as Akola plateau, Nagar Plateau and Jamkhed plateau. While two major river basins are to the north (Godavari) and to the south (Bhima) with their tributeries (Pravera, Adula, Dhora, Mahalungi, Mula, Ghod, and Sina). Tahsils like Kopergaon, Rahata, Shrirampur, Rahuri, Newasa, Shevgaon are merged in plain area. Sangamner, Parner, Nagar, Jamkhed, fall over plateau while Akola is located over hilly region. Part of some talukas including Parner, Nagar, Rahuri, Pathardi also fall under hilly regions.

The overall physiographic setup has created its impact over the distribution of population, its density and occupational structure of the district. The drainage pattern support the population growth, occupational structure and density of the district.

The climate of the district is Monsoon type which is characterized by hot summer, dry winter and rainfall in rainy

season, receives rain from south-west Monsoon. The district receives 566 mm average rainfall with average temperature ranging from 9⁰c (during December) to 41⁰c (during April & May).

The district is an agrarian one, with 47.35% Cultivators and 26.59% Agricultural laborers (1991). Out of the total population in 2001 census 80.1% live in rural areas 19.89% live in Urban area. As per 2001 census district have 51.55% male and 48.45% female population.

7.2 GROWTH OF POPULATION:

The Decadal growth rate of population in the study region from 1961 to 2001 is fluctuating one. In 1961 it was +25.88%, in 1971 it increased by 1.88% to become 27.76%. In 1981 it is decreased by 8.4% to become 19.36%. In 1991, it is increased by 5.8% to form 24.54% and again decreased in 2001 by 3.34% by 21.20%. Therefore , it is clear that rate of growth becomes slow, i.e. population is increasing but gradually. Achievement of high literacy and awareness cause the fall in figures.

The rural population growth rate is continuously decreasing from 1961-2001 except 1991 decade. In 1961 it was 32.83% which decreased in 1971 as 27.00% and again decreased in 1981 to become 16.82%. But in the next 1991 decade it increased by 20.47%. In 2001 it decreased to 15.67%. The Urban population growth rate of the district shows continuous growth from 1961 to 1991. In 1961 it was 12.41% by which it was increased to 34.76%, 39.29%, 52.14% respectively. This increasing rate is a sign of growth of urbanization in the district.

The tahsils wise decadal growth rate of population shows indefinite pattern. Nagar, Akola, Pathardi Shows alternate

increasing & decreasing trend. Shrirampur tahsil shows continuous decreasing trend as 38.94% (1991), 17.82% (1981) 15.03% (1991) and 24.64% (2001).

7.3 DISTRIBUTION OF POPULATION:

According to 2001 census the Ahmadnagar district holds 4.27% of population to the state over 5.66% of its area. Among the 14 tahsils, Nagar tahsil is the most populated while Jamkhed is the least populated. Other tahsils according to their size of population are- 1) Sangamner, 2) Newasa, 3) Rahuri, 4) Rahata, 5) Shrigonda, 6) Kopergaon , 7) Akola , 8) Shrirampur, 9)Parner, 10) Pathardi, 11) Karjat, 12) Shevgaon.

As per 2001 census 80.11% population live in rural areas of the district. The average per village rural population is 2047. This proportion is highest in Shrirampur tahsil, i.e. 4749 population in each village. Out of the total population, 19.89% population live in urban areas. It is the highest in Nagar tahsil and the lowest in Pathardi tahsil. There are 18 towns in the district. Ahmadnagar headquarter is the most populated among them.

As per village wise population distribution more than fifty percent; 59.65% villages having population up to 1500 persons and quarter 25.81% villages having population between 1500 to 3000. It means that 1351 villages having population below 3000. It shows that 85.46% population is concentrated in these 1351 villages.

Population is unevenly distributed in the district. As per disparities the district is divided as north Ahmadnagar and south Ahmadnagar. The tahsils from north Ahmadnagar contains more population than the south. As per their average population Sangamner (10.15%), Kapergaon (10.07%), Shrirampur (9.46%),

Rahata (7.10%), Rahuri (7.2%), Newasa (7.45)% are the tahsils of north Ahmadnagar contributes 51.61% of total population to the district. While the tahsils of south Ahmadnagar are parner (6.64%), Pathardi (5.72%), Shevgaon (5.35%) Shrigonda (6.72%), Karjat (5.41%), Jamkhed (3.65%), contribute 33.48% of total population. Akola is to the west and hilly region with 6.57% population.

The north Ahmadnagar shows more percentage of population, these tahsils are marked as socio-economically developed and characterized by well channelized irrigation facilities, developed co-operative sector, well established communicative system etc. which reflected in the distribution of population. These are the major factors which are responsible for unevenness in the distribution of population in the district.

7.4 DENSITY OF POPULATION:

Average density of population is increased from 1961 to 2001. The district has an average density of 106, 133, 159, 198 and 237 persons per km² from 1961 to 2001 respectively, which is less than the average density of the State and the National average. Out of 14 tahsils, Shrirampur is the most densely populated tahsil with 221, 307, 362, 393 and 450 persons per km². in successive census year. While Parner taluka is indicating the least density successively 73, 87, 99,114 and 128 persons per km². Shrirampur density determines the economically developed region having with good connectivity in transportation system, canal irrigation, fertile agricultural land between the Pravara and the Godawari basin and co-operative development which promoted high density of population.

It is noticed that the tahsils of north Nagar holds density more than 200 persons per km². in 2001. Kopargaon, Sangamner, Shrirampur, Newasa, Nagar, Rahata and Rahuri tahsils mark the high density. Density of Nagar tahsil is more which is centralized due to district headquarter population. The present tahsils density gives conclusion that well irrigation, economical development with well established transportation network and with progressive co-operative movement etc provide the reasons for high density of population.

The tahsils of south Nagar are Shevgaon, Pathardi, Shrigonda, Karjat and Jamkhed, are covered by the hilly region and density figures range between 130 to 200 persons per km². Parner with least density 120 Per km². It shows the density is lowered in south part which underlines the fact that physical factor, accessibility of transportation , irrigation play an important part in distribution of population.

The above illustration and figures of population give the conclusion that Growth, Distribution and Density of the population in the district is closely associated with physical and cultural factors. i.e. climate, soil, physiography, drainage and irrigation facilities, market facilities, transport and communication facilities and industrial locations.

7.5 AGE COMPOSITION :

It is observed that, young population of the district in 2001 is 0-14 age group is 33.52%. The adult population, 15-59 age group is 56.43% and the old population of above 60 age group is 9.87% respectively.

The young population (0-14) of the district shows some what decreasing trend from 1961 to 2001. It was 42.28%, 43.26%, 39.48% during 1961, 1971 and 1981. and 33.52% in 2001. In comparison to 1961, it is decreased by 8.76%.

The adult age group is the active population group. It is economically considered as the most productive. Its contribution in the district shows increasing trend. In 1971 it was 50.69% which became 56.43% in 2001. Population belongs to this 15-59 is considered as working population. Which mainly participate in economic development of the family and of the geographic region. So the working population of the district is 56.43% of the total population. Remaining 43.39% is the non-working or, dependent population of the district.

The old age group (above 60 years of age) also known as 'Senior Citizens', and considered as dependent population. This population in the district is 9.87% (2001). Which is increasing from 1961. It was 5.16% (1961), 6.03% (1971), and 6.76% (1981) and became 9.87% in 2001.

With comparison between 1961 and 2001, The young population of the district is decreased by 8.76%. While the adult Population is increased by 3.92%. The increasing trend in adult population is the sign for economic development in the district.

7.6 SEX COMPOSITION:

It is noticeable that the sex ratio of the district was 940 during 2001. This sex ratio of the district is much higher than that of the Maharashtra. Within the 14 tahsils of the district sex ratio varies in-between 901 in Nagar to 988 in Parner tahsil. The seven tahsils are marked below the district average and remaining are above the

district average. It is found that rural sex ratio's are higher than the urban areas. The highest sex ratio for rural areas is observed in Parner tahsil (988) and lowest in Kopargaon tashil (931). The female proportion in Parner is more due to the migration of males in search of job to other areas. Even the dry farming, lack of irrigation and hilly region, the less agricultural produce migration of male population to urban places in search of jobs (especially Mumbai, Pune, Nasik & Nagar) resulted into high female population. Lower sex ratio is in the Kopargaon tahsil which is irrigated and economically developed one. The cause of uneven sex ratio lies in the mind set of society. Even educated people are preferring male child as per the convention and the tradition of male domination in the society. Modern medical techniques and facilities are also supporting to sex selective births which have minimized the number of females per thousand males in the district.

7.7 RELIGIOUS COMPOSITION:

After examining religious composition, Hindu, Muslim, Christian, Sikh, Buddhist & Jain are the main religion of the district. Out of these Hindus are major one. According to 2001 census Hindus are 90.69 % followed by Muslims (6.54%), Christians (0.64%), Sikhs (0.14%), Buddhists (0.89%) and Jain (0.95%).

Hindus population is decreased during the decade 1991-2001 by 0.05%. The same trend is found in the religion of Christian, Buddhist and Jains, which is decreased by 0.17%, 0.09% and 0.01% respectively. While population of Muslims and Sikhs are increased by 0.09% and 0.05% respectively during the decade.

The rural and urban religion shows increase in Hindu and Sikh population by 0.58%, 0.47% and 0.03%, 0.01% respectively

during the decade. While other religion shows decreasing trend during the decade.

7.8 DEPENDENCY RATIO (ECONOMIC COMPOSITION):

The percentage of economically active and non-active population determines economic growth. Dependency burden is also plays important role in economic growth. The dependency ratio in 2001 was 76.88% which is decreased from the ratio of 90.35% during 1961. It means number of dependent population of the district is decreasing, i.e. population between 0-14 and 60 above age group is decreasing. It is the indication of economic growth. Similarly both rural and urban dependency ratio shows decreasing trend from 1961 as 91.47% to 80.37% and 81.32% to 64.11% in 2001.

7.9 WORK PARTICIPATION RATE (WORKERS AND NON-WORKERS POPULATION):

The percentage of workers in the district in 1961 was 50.27%, out of, 57.50% male and 42.75% females. While 49.73% non-workers. Out of this percentage 42.50% was male and 57.24% females. This work participation rate of the district shows that WPR of the district in 1961 was 50.27% & in 2001 it was 42.50% , which is decreased by 7.7% this is because of unemployment, high percentage of women population working as a household and growth in population of old age in the district.

It is found that, the figures shown in the study, there was 45.95% of workers and 54.04% non-workers in 1991 in the district. These both are deflected by 0.01% only during 1991-2000 decade. In 2001, among the workers. Male participation rate was 52.59% and female 38.90%. While workers male participation rate in rural

area was 53.17% and females 44.55%. In the urban areas there was 50.28% male and 15.65% female workers.

It is noticed that, the rural female WPR is more than the urban due to their participation in the agriculture as a agriculture labor. While WPR comparison to the state and Nation shows that district has (45.56%) more rate than the state (42.5%) and the National (39.1%) rate.

As per age group wise distribution of population in 2001, the working population (15-59 age group) in the district was 56.43% and the WPR was 45.96%. It shows that 10.47% population from working age group can be considered as unemployed population of the district.

7.10 OCCUPATIONAL STRUCTURE:

It is found that the distribution of workers in nine different categories of economic activities in the district during 1991 was composed as, the cultivators (47.35%) and agricultural laborers (26.59%) together contributes 73.94% where as in the state it was 59.62% for these two categories. This is because agricultural economy of the state and similar reflection is found in Ahmadnagar district.

In 2001 percent of cultivators (44.38%) and agricultural labor (25.32%) together contributes 69.7% which proves that, district has an agriculture based economy. It is denoted that proportion of female labor is more than that of the male labor which is 49.15% and 34.47% respectively. Out of 14 tahsils, the proportion of cultivators is highest in Akola tahsil (60%) due to labor intensive rice crop, which is practiced on large proportion because of high rainfall in the region.

7.11 LITERACY RATE:

It is found that, district has obtained 75.3% literacy with 85.7% male and 64.3% female in 2001. It is improved by 12% than the previous census of 1991. Rural literacy was remained 72.9% with 84.2% for male and 61.1% for female during 2001 and the urban percentage was 84.7% with 91.4 for males and 77.3% for females during 2001.

The literacy group is indicated in the table bring the clear fact .

Literacy - 2001

Literacy Group	Tahsil
Below 50%	-
50 to 60%	Akola, Shevgaon, Parner, Pathardi, Karjat, Jamkhed.
60 to 70%	Kopargaon, Sangamner, Shriampur, Rahuri, Newasa, Rahata, Shrigonda
Above 70%	Nagar

Out of 14 tahsils Kopargaon, Sangamner, Shrirampur, Rahuri, Newasa, Rahata and Shrigonda having literacy in between 60 to 70%. These tahsil are well irrigated, and economically developed one, which improved the literacy of the tahsils. High literacy is reflected in socio-economic development of these tahsils and these tahsils are advanced as compared to other tahsils.

Nagar tahsil holds the highest literacy (76.8%) due to district headquarter population and availability of educational facilities in the city. Akola is hilly and tribal tahsil have low literacy (57.6%). The tahsils, which are economically not much developed, bears literacy in between 50-60% which are Shevgaon, Parner, Pathardi,

Jamkhed and Karjat. Disparities in tahsil wise literacy are responsible for the disparities in socio-economic development of the district.

It can be concluded that the analysis of study shows age, sex, religion, occupation, economic composition, work participation, literacy these characteristics of population influenced by socio-economic situation and development of the district.

7.12 CO-OPERATIVE MOVEMENT:

The district has been known to the world as a pioneer of co-operative movement. Co-operative movement plays a significant role in the socio-economic development of the district. It is linked to every characteristic of population in rural sector of the district.

Co-operative Sector of the district is dominant in its sugar industries, District Co-operative Bank (ADCC), primary Agricultural credit co-operative societies (PACS) and Agricultural, marketing, production and credit co-operative societies.

Primary Agricultural credit co-operative societies (PACS) (Also known as 'Vividh Karyakari Society) are linked to the district co-operative Bank for the financial assistance. At present 1327 PACS are working in the district; their working capital is ₹ 13637171=00 which determines the role of co-operative societies in the socio-economic development in rural areas of the district. Co-operative Banking in the district provided an alternative channel to every farmer to improve their living standard.

Co-operative movement is flourished mainly in the tahsils of Shrirampur, Kopargaon, Rahata, Sangamner, Rahuri and Newasa. Which has not only changed the economical condition of the

peoples but also changed the population characteristics of these tahsils. Therefore ,the growth of population, Density, Literacy, work participation rate is higher in these tahsils than the other tahsils of the district. It is noticeable that, Co-operative movement uplifted the socio-economic condition of these tahsils.

Co-operative movement in the district has significantly contributed variation in characteristics in various tahsils in the district i.e. growth, distribution, density, sex ratio, literacy and employment.

7.13 THE PERCENT OF S.C. & S.T. POPULATION IN AHMADNAGAR DISTRICT:

The important statistics about the scheduled casts and scheduled tribes are made available by the census. These statistics are useful for the planning of socio-economic development in the district by the government. In the census 1961 the percent of S.C. Population was 8.87% and S.T. Population was 6.18%. In 2001 which is formulated as, 12% and 7.5% for S.C. and S.T. respectively. Out of SC percentage population in 2001 of the district 78.25% lived in rural areas and remaining 21.75% in urban areas. Out of ST population of the district in 2001, 95.18% lived in rural areas and 4.82% lived in Urban areas.

7.14 SERVICES AND FACILITIES:

HEALTH SERVICE:

Health service in the district improved during the study period. About half of the districts rural population enjoys health service with in their respective villages. So many private practitioners are also providing these facilities to the villagers. Out of all tahsils the position is the best in Nagar tahsil, where 83.04%

villages are served by this service. The proportion of villages in Shirampur, Newasa, Kopargaon also better one.

EDUCATIONAL FACILITY: -

There is continuous progress in the number of institutions and students from primary to higher education in the district. As per 1991, this facility was available in 1547 villages. Which is about 99.55%. It is reached to 100% in the tahsils of Akola, Nagar, Shriampur, Shevgaon, Pathardi, Karjat, Rahuri, Shrigonda, Parner and Kopargaon, which is remained beneficial for the socio-economic development of the district.

TRANSPORT AND COMMUNICATION:

The total road length is improved during 1961 to 2001. Only one railway route (broad gouge) Daund-Man mad passes through the district in South- North direction covering the length of 197 km. in the district. Post office and net working have to improving the status of the society. This resulted into the accessibility to the region and the marketing relief for the district industry and other major production.

MARKET FACILITY:

The proportion of weekly markets held in the villages is very low in number. But many permanent private shops are providing daily necessities to the villagers. **Banking facilities** are improved during the selected period. **Drinking water** facilities are also improved during the selected period. **Power supply** facility is very important one, which has achieved the cent percent in the district.

Availability of various services and facilities in the study area shows that there is a need and requirement of adequate facilities so it

is necessary to improve and strengthen services and amenities in the district particularly in the rural areas.

The present study gives the findings and brings the conclusion.

- 1) Qualitative population accelerates the socio-economic condition of the region.
- 2) Geographical suitability is not only sufficient for the socio-economic development but population characteristics are also plays important role in the region.
- 3) Topographical accessibility helps to the people for better development while inaccessibility stands as a obstacle.
- 4) The co-operative movement is the very unique characteristic of the study region. Which has made its impact on population characteristics and socio-economic development of the study region.

7.15 RECOMMENDATIONS:

Some important findings have come forward during the research work about the development of Ahmadnagar district by the means of important characteristics of population. According to that, it is necessary to bring up some changes in the district. The following recommendations will prove helpful to make a match of these findings and the required changes.

HUMAN RESOURCE DEVELOPMENT:

- 1) As working population in the district is increasing so that as a human resource, it must be channelized properly for the development of the district.
- 2) Women empowerment through self-help group must be organized on large scale.

- 3) Half of women population is found in inactive zone, if utilized may alter the socio-economy of the district. Favorable condition can be provide-by promoting small-scale household industry and providing the protective market for them.

IMPROVEMENT IN THE SEX RATIO :

Focusing the socio-economic development sex- ratio figures indicate the uneven population of male – female.

- 1) Health care center, village administration ,NGO ,and educational and even the major financial institution can work in collaboration to improve the female status by promoting and encouraging the awareness program and should ensure the full security to the female fetus .
- 2) Cyclonic supervision is necessary to the hospitals performing sex determinations and illegal abortions.
- 3) There is a need of women empowerment and status of women should be respected in the society.
- 4) Variety of programs are needed to bring gender equality in the society.

IMPROVEMENT IN EMPLOYMENT:

- 1) More employment generation is necessary. Which can be achieved by providing facility for the establishment of new industries in the district.
- 2) Agro-processing industrial units should be promoted for increasing employment in rural areas.
- 3) Need based household industries are needed.

- 4) Financial assistance and encouragement is essential for entrepreneurship to young generation.
- 5) Special efforts are needed to improve the skills of young population and it is very important for human resource development.

FOR THE BETTER DEVELOPMENT OF EDUCATIONAL CONDITIONS:

- 1) Considering the importance of education in the development process, enrolment of school going Childs in the primary education is essential.
- 2) To increase the rate of literacy and quality of education in the rural areas and to minimize the percentage of drop out of girls from the primary, secondary and higher education; A special emphasis is needed for the development of educational facilities for girls.
- 3) Schemes like 'Poshan Ahar' to the primary and secondary students should be strengthen.
- 4) Skill-based and need-based education is necessary for primary to higher education in the district.

TO IMPROVE THE HEALTH FACILITY FOR PEOPLE:

- 1) Primary health centers should be in proportion of rural population that is, every village should have primary health centre facility.
- 2) The primary health centre should run a campaign of family planning time to time.
- 3) Medical facilities are needed to the rural population in a reasonable and affordable rate.

NEW EXPERIMENTS IN CO-OPERATIVES:

- 1) Co-Operative farming practices can be adopted to improve the agricultural production.
- 2) Agricultural products may sold through co-operative societies.
- 3) Women co-operative Banks are necessary for the women empowerment.
- 4) Gobar gas plants on co-operative basis can be established in every village for self sufficiency in household fuel requirements.

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