Demography on tonk

Sociology, Population

The word 'Demography' is a combination of two Greek words, 'Demos' meaning people and 'Graphy' meaning science. Thus demography is the science of people. In the middle of the nineteenth century in 1855, the word 'Demography' was first used by a French writer, Achille Guillard. Even though, the term " Population Studies" is more popular, the word 'Demography' is under wider use these days. It is considered an important subject capable of throwing light on the nature of population education. Since antiquity a number of thinkers have expressed their views on the level of economic development and the size of population. During the time of Confucius, many Chinese and Greek writers, and following them Aristotle, Plato and Kautilya (around the year 300 B. C.) have expressed their thoughts on the subject of population. Thus, as a subject, population education is as old as human civilization. Writers like William Peterson, Hauser and Duncan consider " Population Studies" and " Demography" to be different. According to them, 'Demography' encompasses limited spheres and it studies only the decisive factors of population growth, whereas in 'Population Studies' besides the social, economic, geographical, political and biological aspects of population, their ensuing relationships are also studied. The term demography has been defined both in a narrow and broad sense. The Oxford Dictionary of Economics defines demography as " The study of the characteristics of human populations." According to the UN Multilingual Demographic Dictionary, " Demography is the scientific study of human populations, primarily with respect to their size, their structure and their development." To Barckley, " The numerical portrayal of human population is known as demography. " Similarly, according to Thomson and Lewis, " The

population student is interested in population's size, composition and distribution; and in changes in these aspects through time and causes of these changes." All these definitions take a narrow view because they emphasize only the quantitative aspects of demography. Some other writers have defined demography in wide sense by taking the quantitative and qualitative aspects of population studies. In this context, according to Hauser and Duncan. " Demography is the study of size, territorial distribution and composition of population, changes there in, and the components of such changes, which may be identified as fertility, mortality, territorial movement (migration) and social mobility (change of status)." According to Frank Lorimer," In broad sense, demography includes both demographic analysis and population studies. A broad study of demography studies both qualitative and quantitative aspects of population." Thus, according to Donald J. Bougue, " Demography is a statistical and mathematical study of the size, composition, spatial distribution of human population, and of changes overtime in these aspects through the operation of the five processes of fertility, mortality, marriage, migration and social mobility. Although it maintains a continuous descriptive and comparative analysis of trends, in each of these processes and in its net result, its long run goal is to develop a body of theory to explain the events that it charts and compares." These broad definitions take into view not only the size, composition and distribution of population and changes in them in the long run but also imply human migration and change in the status of population through education, employment, social status, etc. Geographical study of population is fairly a recent development. The recognition of human elements as an important

geographical force may be seen in the very roots of the division of Geography into Physical and Human, which is a very old one. But systematic study of population, which constitutes a pivotal position in geography, remained grossly neglected until G. T. Triwartha forcefully advocated the development of population geography and its elevation as a separate branch of systematic geography in 1951. Since then, significant advancements have characterized the progress of population geography, which is evident from the Bibliographic guide to population geography complied by Zelinsky and also from subsequent population of several books and articles which speak of the growing awareness of the importance of this branch of geography. In our science, the central theme of which is areal differentiation, the dynamic and pivotal element is human life or population. This is not to claim that the people should directly be the object of study to a greater extent than climate, systems of land use, transportation pattern etc, but rather to suggest that fundamentally geography is anthropocentric and if such is the case that numbers, densities and qualities of the population provide the essential background for all geography. Population is the point of reference from which they all singly and collectively derive significance and meaning. It is population, which furnishes the focus. Human beings are the greatest resource group of a country and, if properly utilized, can help in increasing the nations economic output. In geographical analysis initially the focus was on the study in regional studies and economic geography. Now the focus lies on systematic geography. In recent years some studies have been made in spatial perspective. Such studies demand greater attention to conceptual as well as methodological norms. Theoretical approaches in demographic study

and sectorial shifts require training in quantitative techniques. Quantification is used to bring precision in description and also to reach at concrete conclusion. Population geography as a clearly distinguishable sub-discipline of geography appeared in 1950. The presidential address given by Triwartha (1953) to the association of geographers is usually quoted as a benchmark in the development of this field, at least in the English speaking world. It is the contention of this article that the roots of population geography go deeper into the past that antecedent development can be traced in different countries and in different fields. The appearance of this sub-discipline after the Second World War was not sudden, nor was it unexpected. Even the term was used earlier and certainly it cannot be attributed to one man alone, no matter now distinguished and influential. If we accept the early work of George (1951) and Triwartha (1953) some forty year ago as initial modification of population geography, there is a little doubt that since then it has flourished and diversified, becoming a multi faceted field of study, and accounting for more than one in ten of all published geographical papers. Of course from the 19th century a keen interest in population many geographers of the ecological school, both determinists and possibilists from Ratzel and Hattner to Vidal de la Blache and Sorre, had showed phenomena. Since that time, the quantity and quality of work which could be described as population geography has increased markedly and the number of population courses taught in geography departments has grown commensurately, or nearly so. The more important question however centers on the path that population geography has traversed and the methods adopted by its practitioners in their progress towards gaining a better understanding of the

spatial dimension of population and its attributes. Population study by geographers should therefore lead to better understanding of the process, creating areal distribution as expressed in the concepts inherent in, and by the study of, spatial interaction. This last step demands that population study by geographers treat those spatial system, which arise from, or lead to, geographic character of populations. According to Irene Taeuber," With improved data, new techniques and precise measurement of the demographic transition that is occurring, demography has become a science. In fact, it has become an applied science and applied technology." Review of Literature The development of geographic study of population has been late in India. The review of progress presented by G. S. Gosal reveals that significant advancement in this field of geography in this country has been made in the sixties. Earlier the main focus of Indian geographers was mainly on the distribution and growth of population other aspects such as vital rates, migration, sex ratio, literacy, religious composition, occupational structure, urbanization, populated regions etc, remained almost untouched by Indian geographers. Gosal (1958) is the first Indian geographer who carried out systematic analysis of Indian population dealing with the density, growth, internal migration, sex ratio. literacy occupational structure and urbanization. As pointed out by Lorimer, " A demographer limited to the merely formal treatment of changes in fertility, mortality and mobility would be in a position like that of a formal chemist observing the compression of mercury with no information about associated changes in temperature or the constituent of the liquid." Therefore, the scope of demography should include both micro and macro aspects of population. According to Thompson

and Lewis, it should relate to fertility, mortality, information about female population, their health, marital status, distribution and classification of population according to occupation, and collection and study of information about social and economic condition, and migration of population. Kingley Davis points out the following areas of study which require a combined knowledge of demography and sociology: fertility, population changes, structure of labour force, social organization, family with regard to demographic behavior, and internal and external migration. Similarly, Broom and Selznick regard demography as one of the nine elements of sociological analysis such as social organization, socialization, social stratification, primary groups, associations, collective behavior, culture, ecology and population. As pointed out by Bowen " Population growth, size and distribution can not be discussed rationally except in the context of economic growth of change." As pointed out by Ackerman, " Recent geographers have taken the cultural features of the earth, analyzed them generically and genetically in their space relations and established co-variant relations of cultural features with each other and with those of the physical and biotic environment. These distributional features are common to both demography and geography. Hutchinson and Dewey characterise human ecology as " nothing else but bio-demography." According to P. W. Frank, " Ecology provides specific theoretical statements about human population." Some studies using similar methodology were carried out by Krishan (1968) Chandra (1970) and Mehta (1971) A few studies on internal migration have been made by Gosal (1960) Gosal and Krishan (1975) Ray (1979) on the basis of census data. Few have attempted the study of age, sex ratio eg.

Schwartzburg (1961), Triwartha (1966) Krishan and Shyam (1974) Literacy, religion, composition and language. Cast system has also been analysed in a number of basic texts during the period 1951-70, Geog. C (1951), Clark (1959), Zelinsky (1966), Beaujea, Garnier (1956-58), Kosinski (1967), Wilson (1968), Griffin (1970), Demo, Rose and Schnell (1970). A study using similar methodology were carried out by Singh Gajendra (1994). Today the field of study has large number of practitioners around the world practicing different approaches, methods and applications. One of the significant advancement in the field of research in population geography has been made in the students of population in terms of thematic mapping and analysis at local levels for a better understanding of spatial distribution and spatial interaction of different population attributes. The following study on levels of demographic development in Tonk is an attempt in this direction. The study is an interpretative investigation of the demographic attributes of the geographic personality of the region and gives the ultimate details of phenomenal studies. Objectives of study The main objectives of the present study are :- 1. To find out variations in growth rate of population and spatial distribution of population. 2. To study inter regional variations in sectorial shifts in the work force. 3. To examine the level of demographic development with the help of statistical techniques. 4. To make a thematic mapping of data available so as to analyse spatial distribution and spatial interactions of different attributes of the region. Hypothesis Tested Sincere efforts have been made to test the following hypotheses. 1. The development plans have led to the growth of population in both rural and urban areas. 2. The over all literacy rate in Tonk is less than average rate of

Rajasthan. 3. The development plans have led to the sectorial shifts significantly. Methodology The analysis is based on numerous maps prepared on the basis of tehsil wise data. The present study is result of 25 indicators shifted at tehsil level. Various special methods are used to quantity the results. All types of data and statistical formulas are carefully processed with the help of computer. They are as follows. 1. Mean X = âˆ' X/n = âˆ' fx / âˆ' f 2. Standard Deviation (S. D.) = âˆšâˆ' fx² / âˆ' f 3. C. V = S. D / mean x 100 4. Standardized value (S. V) = I — M / S. D Data base In the case of Tonk(s demographic information the database is primarily the census of India 2001. The main sources for the year 2001 needed for the present study are provisional tehsil wise data of the region. 2. Data regarding climate, soil, natural vegetation and water resources are collected from various department of the Tonk District eg. District Agriculture Department, District Mineral Department, Meteorological department, District Irrigation Department, District Statistical Department etc. 3. Various informations regarding Tonk have been collected from District Gazetteer. 4. Base map in reproduced form the census of Rajasthan 2001 from Census Hand Book of Tonk. Tonk is situated on the bank of the famous Banas river. It is 95 km. away from Jaipur in the south on the national highway no. 12 of Jaipur Kota. In the medival time, in the period of Great Akber the ruler of Jaipur named Raja Mansing occupied Tari and Tokra Districts. And accepted the Brahmin named " Bhola" as a ruler called " Bhoop" of 12 villages in year 1643. He letter on beaded this 12 villages and one glossary gave it a new name " Tonk". Tonk as a city of Nawabs is located in between 25°41' north east 26°24' north latitude and 75°19' east to 76°16' east longitudes. Tonk is

delimited by Jaipur on the north, Bundi on the south, Bhilwara is in the west and Sawai Madhopur on the east. Total area of Tonk is 7194km. This district is at the height of 364. 32 meters from mean sea level. Banas River divides the district in south and north part. Tonk comes under semi arid condition with average rainfall of 60 cm. per year. Shape, size and area District Tonk looks like a kite shape with east-west and north south diagonals, joined by the outer boundary lines of the districts of Sawai Madhopur - Bhilwara — Jaipur and Bundi. Its east and western parts are bent inside and southeastern part entered between Sawai Madhopur and Bundi Distircts, which seems touching north and northern boundary of Kota district. Its some part goes to southwestern part in Bhilwara district. Tonk is located at the height of 364. 32 meter from mean sea level. The mountains are rocky (crusty) and covered with bushes. The land is fertile but sandy some where. Underground water is limited. Normal slope is from northwest to southeast direction. physiography There are Arawali Mountains in the district. Its one range goes from Rajkot to northeastern in Banetha to Sawai Madhopur. The other range of the mountain goes to Rajmahal from Todaraisingh. Here Banas river has made a path in mountain where Bisalpur dam has been made. 140 crores rupees have been used for dam. It will be useful for irrigation and drinking water. One another hill is near Malpura. That is at the height of 850 km. of sea level. The big famous river Banas originates from south Rajasthan is flanks of the Arawali (Gogunda). This flows from Aravali's ranges of east between Tonk and Sawai Madhopur districts and joined in Chambal River. Bisalpur dam is made at the joint of two hills at Bisalpur village. Which is the biggest project of water conservation in the district. Except the Banas River

Galwa dam is built on Galwa River in Uniara Tehsil and Masi dam on Masi River for irrigation. The rivers Dahi, Shayodara, Bani are main tributaries. The plain is drained by the Banas. geology There are two main geological structures one is Aravali range and other is Delhi range. Aravali Range: - There are three parallel belts which lies from northeast to southwest. The first belt is Bonli — Anwa that is made of mica's rocks. This range continuous upto Banas river in southwest and goes ahead till Alwar. Second belt continuous parallel to Bonli Anwa range and it is little away from northwest. The third belt is in northwest. It passes from Tonk city. This belt is found at Niwai and Raj Mahal. Delhi Range :- In this structure many scattered hills are found between Tonk and Jaipur. In Newai specific Alwar belt is in maximum number. drainage Banas :- All the small rivers and drains are connected with river Banas system. Banas earlier was a perennial river but now it has changed as a seasonal river. After rainy season many small rivers and streams from it. This rainy water is collects in pits. Although this water is not more useful directly for irrigation but it helps increasing water level of wells, pond, pools etc. Which are useful resources for irrigation. Some water is helpful for filling ponds and small dams. A large dam of Tonk district is Tordi Sagar. Banas is originated from eastern part of Aravali Mountain from Kumbhalgarh hills of Udaipur district. From there it turns towards east and then passes from northeastern corner of Chittorgarh and then enters in Bhilwara district. After passing some km. in Ajmer it enters in Tonk at Negadia of tehsil Deoli. At this place it divides this district in two parts (2/3 in west and north and 1/3 in east and south). After passing from Sureli village near Barwara station it continuous to flow and reaches Madhopur and at last

joint in Chambal river near Rameshwar. The total length is 400km out of 135 km. flows in the Tonk district. Following villages are located on the bank of Banas. Negadia, Bisalpur, Rajmahal, Banthadi, Nandpura, Devpura, Mehandwas, Talpur, Dodwari, Salangpura, Shyopura. Its surface is sandy. Its tributaries are Masi and Sahodara. Masi :- Masi is originated 6 km. away from Silora hills which are located in Kishangarh, Ajmer. It is also a seasonal river. It joins Banas in north side in Tonk district. It flows 113 km. in Tonk district. Sahodara :- It is an important river because it fills Tordi Sagar dam which is main dam of Tonk. It is originated from Agat village, which is 13 km. away from southern side of Ajmer district. It flows about 76 km. in the district. Other rivers :- Other small rivers are Khari and Dahi which flows towards to Ajmer and mixes in Banas river. climate The climate of Tonk plays a dominant role in structuring its physical attributes as well as its biotic environment. The climate is normally semi arid. Mansoon starts from third weak of June to mid September. Winter period starts from mid September to February and summer comes in March and stays till June. January is the coldest month of the year. The average temperature ranges from 10°c to 18°c. Winter is very dry. May and June are the hottest months of the year. During these months dry and hot dusty raising winds. Popularly known as " Loo" and dust storms occur very frequently. The mean temp. during the summer is 40°c. And maximum temperature. reaches 48°c in summer.

Tonk :- Climatic Characteristic 2001 | Station | Temp in °c | Rain fall (mm) | Relative Humidity | | | Max. | Min | | | | | 1. Malpura | 43. 4 | 4. 3 | 342 | 49 | | 2. Newai | 44. 2 | 5. 2 | 168 | 47 | | 3. Tonk | 42. 8 | 4. 6 | 546 | 50 | | 4. Todaraising | 43. 3 | 5. 1 | 486 | 48 | | 5. Deoli | 42. 5 | 4. 4 | 285 | 46 | | 6.

Uniara | 41. 6 | 4. 7 | 381 | 47 | | 7. Peeplu | 43. 1 | 4. 9 | 419 | 46 | Source — District Irrigation Department, TONK rainy season There are a wide variations in the distribution of rainfall in district. The average of rain in whole district is 61. 36 cm. and in real reading is 62. 97 cm. in 2001. About 93% annual rains comes from June to September. July and August are the heavy rainy months. The maximum rain came in 1917 in the period of last 50 years. The maximum rain 297. 4 mm. recorded in Uniara on 14 September, 1943. There are 33 rainy days in one year. temperature The datas are not enough to describe the district's climate. But the neighboring observations give more knowledge. By available datas of this district the temperature of day and night fall slowly. This condition till January which is generally the coldest part of year. January's average daily temperature is 8°c. Some times the minimum temperature falls one or two degree from freezing point. Specially it occurs in January and February. Some times " Pala" or " snow" falls. Temperature is rapidly increases in March. soils In Tonk district Alluvial soil founds. The soil produces a wide variety of crops. Near Banas river medium black soil is also found which is very fertile. natural vegetation The district has two type of forest viz. a) Tropical dry deciduous forest. These types of forests are mostly found on the slope of Aravallies. Dhok, Tendu, Shisham, Khejri are the main verities of trees and Shrubs in these forest. b) Thorny Shrubs :- These types of vegetation are found every where in district. The main verities of natural vegetation are Babul, Thor, Ber, Aok. In the rainy season variety of grasses also grow in Tonk. water resources Water resources are governed by climate. Primary source of water in the run off and flow are available through rainfall . It is the slope, soil and geology that

determines the availability of water. It is available in the surface water and ground water. a) Surface water:- Surface water is mostly confined in the south west parts and mid part of Tonk, where river Banas along with its tributaries drains into the river Chambal after a total flow 400k. m. The river Sahodara and Masi are the main tributaries. The catchments area of river Banas spreads over 48 thousand and 18 square k. m. A huge dam Bisalpur is made on Banas river is spread in 27 thousand 726 square k. m. area. It is very useful dam for drinking water and irrigation. b) Ground water resources:- According to survey conducted by the central ground water board, Tonk has relative high water table depth of less then 10 meters. Along the foot hills of the Aravalli, the water table depth is between 10-20 meters. IRRIGATION While studying geographical back ground of the study area it also become an important to discus here about the Bisalpur Project. Though the initially this project was designed for water supply to Jaipur, Ajmer, Nasirabad, Kishangarh etc. But letter on out of 24 TMC water capacity 8 TMC has left to Deoli, Uniara, Tonk and Todaraisingh tehsils, which are getting irrigational facility by cannels of the Bisalpur Project, which has changed the picture of this economically back ward area. Now the command area of this project Deoli, Uniara, Tonk and Todaraisingh getting very good crops. Which has boosted the economy of the area. Earlier people were migrating to big cities in search of job. In coming day it will change the socio-economic and demographic picture of the area. characteristics of indicators Demographic dynamic is a significant aspect of population studies. Due to varying physical and cultural traits of different areas, population distribution reflects different patterns. Areal distribution patterns of population reflect the economic

potentiality of different areas. Keeping in view these aspects, the growth rate of population in Tonk has been examined with the help of various indicators. They are as follow. I. GROWTH RATE Growth Rate Overall Growth Rate Rural (3) Growth Rate Urban II. DENSITY OF POPULATION 4) Density of Combined Population 5) Rural Density 6) Urban Density III. URBANIZATION AND SEX RATIO 7) Percentage of Urban Population to Total Population. 8) Percentage of Male Urban Population to Total Urban Population. 9) Percentage of Female Urban Population to Total Urban Population. 10) Total Sex Ratio. 11) Sex Ratio in Rural Areas. 12) Sex Ratio in Urban Areas. IV. LITERACY 13) Literacy Overall. 14) Literacy Male 15) Literacy Female 16) Literacy Rural. 17) Literacy Rural Male. 18) Literacy Rural Female. 19) Literacy Urban. 20) Literacy Urban Male. 21) Literacy Urban Female. V. WORK FORCE 22) Main Workers Male. 23) Main Workers Female. 24) Marginal Workers Male. 25) Marginal Workers Female. Growth Rate Overall increase of population in a census decade is known as population growth. It depends on the difference between birth and death rate of a particular place. If birth rate is higher than death rate the growth rate will be positive. But if birth rate is lower than death rate then it will be negative. So in an ideal condition there should be balance between birth and death rate. The birth rate, death rate and migration are the three important determinants of population growth. In the process of population growth, even though fertility is a process of physiology, socio-economic conditions of any country can be known from the birth rate information of that country. In the same way, death rate, too, plays an important role as the determining factor of population growth. As compared to birth and death rates, migration has limited importance as the

determinant of population growth. When migrants (in-migrants or immigrants) come with an objective of setting down in a country or place from some other country or place, population usually increases. Similarly, when people move to other countries or places for permanent settlement, called migrants (out Migrants or emigrants), there is likely to be a decrease in population. In relation to population studies, it is essential to know the meaning of fertility. Fertility is " the average number of children that would be born to a woman, if she experiences the current fertility pattern in her lifetime." According to Thomson and Lewis, " Fertility is generally used to indicate the actual reproductive performance of a woman or groups of women." Fecundity, on the other hand, has a different meaning, " If a female is able to conceive, then she is said to be fecund. In fact, fecundity is the capacity of a man and woman to produce a live child. In ancient times, both the words, 'still birth' and 'live birth' were used. But at present, the word 'birth' is being used only for 'live birth.' The meaning of fertility, in short, is the ability of the female to give birth to a child. Birth rate means the total number of children born per thousand population in a particular area in a specific period. The consequences of population growth on economic development have attracted the attention of economists ever since Adam Smith wrote his Wealth of Nations. Adam Smith wrote, " The annual labour of every nation is the fund which originally supply it with all the necessaries and conveniences of life." It was only Malthus and Ricardo who created an alarm about the effects of population growth on the economy. But their fears have proved unfounded because the growth of population in Western Europe has led to its rapid industrialization. Population growth has helped the

growth of such economies because they are wealthy, have abundant capital and scarcity of labour. In such countries, the supply curve of labour is elastic to the industrial sector so that even a high growth rate of population has led to a rapid increase in productivity. In fact, every increase in population has led to a more than proportionate increase in the gross national product. In terms of geographical area Russia, China, Canada, Brazil, America and Australia are larger than India. Thus India is the seventh largest country in the world. In terms of population, only China is ahead of India. India has got only 2. 4 percent of the total land area in the world but is the home of 16. 7 percent of the world's population. China with 20 percent of the world's population has 7 percent of the land area in the world. According to the 2001 Census, India's population as on 1 March, 2001 was 102. 7 crore comprising of 53. 1 crore males and 49. 6 crore females. Thus India is the second country in the world to cross the 100 crore mark after China. (1) Overall growth rate. Tonk district has registered a population of 1211671 persons at the sun rise of Ist March, 2001 according to 2001 census. Thus there has been a net addition of more than 2 lakh 36 thousand persons during the decade 1991- 2001. Total population recorded in 2001 census 626436 are males and 585235 females. Tonk therefore, contributes only 2. 14 percent to the total population of the Rajasthan. The district with an area of 7180 k. m. ² constitutes about 2. 10 percent of the total area of the state. Growing steadily over the years Tonk has more than doubled its population during the past forty years, having risen from 4. 9 lakh in 1961 to 12. 11 lakh in 2001 census. Except for a fall in the total population in the decade 1911-21 and 1931-41, the district has continued to register larger growth rate, (24. 24)

even than the state (21. 35) and the national rate (21. 34), over the successive decades. The highest growth rate, however was recorded during 1961-71 is 25. 74. The rapid increase in population is strikingly brought out by the fact that the population of Tonk has increased about 9. 5 lakhs during the past 100 years. (1901-2001). Of this, about 1. 5 lakhs person were added during the first fifty years of the present century, while the past ten years (1991-2001) alone yielded a net recorded increase over the first fifty years from 1901-51. The trend in the population growth of Tonk can be well understood by considering the population figures for 1901 and 2001. During the past 100 years the population of the district has gone up by about 9. 50 lakhs, thereby recording an overall increase of about 21. 5 percent. In 2001 census, Tonk has registered a growth rate of 24. 27 percent as compared to the growth rate of 24. 42 percent during the previous decade. The census statistics collected in past census further reveal that apart from the setback received during 1911-21 when epidemics were rampant in many parts of the country. The year 1921 is therefore, known as the year of Great Divide, as was evident throughout the country, population had been rising at the rate of 14 to 18 percent every ten years, up to nineteen fifties. Thereafter, it attained an accelerated rate of 23. 39 percent during the decade 1941-51, 22. 32 percent in 1951-61 and during 1961-71 an all time high growth rate of 25. 74 percent. This led to population explosion in the country. However, the galloping spread with which population of the district had grown in the decade 1961-71 seems to have been restrained. 1981-91 decadal growth of 24. 42 percent tends to approach the 1961-71 figure at 25. 74 percent. This declining trend in the population growth rate is a remarkable and welcome

sign. However the trend of population explosion still persist even now. The highest growth rate 37. 03 was found in Newai tehsil, whereas the lowest 15. 72 is found in Malpura tehsil. The rapid increase in Newai is due to various developmental activities. Only Newai tehsil comes under this range due to many industrial, social, economical development and well connectivity of transportation. Newai is the only railway station of this district so it has higher growth rate comparison to other tehsils. One tehsil Tonk has negative growth rate because a new tehsil Peeplu been formed. There were 6 tehsils and a new tehsil which are formed in 1996 is Peeplu. So there are now 7 tehsils in Tonk district. First category tehsils having less than 17. 34 percent of the growth rate. It does not form a contiguous belt. Only one tehsil Malpura comes in this category. It has less connectivity of transportation, poor irrigation facility and migration. The second category ranging from 17. 34-20. 72 percent covers 3 tehsils - Todaraising, Deoli and Uniara comes in this category. It is due to migration because these areas are not provides job. so people are migrates. The third category 20. 73-35. 37 percent covers the Tonk tehsil due to district head quarter, well developed transportation facility, industrialization, communication, urbanization, health facility, educational facility, many offices, banks, job centers, technical and professional courses and infrastructure facilities. The fourth category registering the highest growth rate cover above 35. 37 growth rate. It is primarily an attribute to various developmental activities like the railway line, national highway and many industries. The government's effort in setting up industrial and development projects, pasture land, drinking water facilities, have contributed to the growth rate of population. Only Newai

tehsil come under this category. All these developmental plans and facilities, have contributed to growth rate of population with the mean value 25, S. D. 9. 01 and C. V. 36. 04 in Tonk. (2) Rural Growth Rate It is a traditional methodology in the census of India to notify the rural and urban population. The use of the word " RURAL AREA" and its meaning is adopted for people living in villages, one which gets affiliation from the general district officer on the basis of the boundaries of land revenue paying villages. In the land revenue paying villages, it is not necessary that there should be population, but it is necessary to have definite protected boundary. With reference to different censuses, the question of necessity of population in a village has been disputed. In the previous censuses, only those villages were counted as villages where uninhabited villages were not accepted as villages. In 1961, the uninhabited villages were also included in the villages but in the 1971 census, those villages were known as uninhabited villages. In 1981, too, this method was adopted. Thus, according to the 1981 census," land revenue paying villages," are those, whose boundaries are well-defined and the registration of land is separate. Later on, the population of that area may live as residential population. This type of known groups are called 'hamlets'. These hamlets neither have the particular well-defined boundary nor do they have any particular marks for their recognition. Hamlets remain within the regional boundaries of villages. Many villages are such that after accepting them as 'villages', they are included wholly or partially in the developed cities. But these types of villages too, with an aim of land revenue, accepts the affiliation as 'villages' by the State Government. Thus, there is negligible population in these villages and they are shown to be uninhabited villages in

the census report. In addition to this, there may be unprotected villages in forests, in areas where only the labourers working in forests and their families reside. Growth rate in rural areas shows in that the mean rural rate is 25 with SD 6. 29 and co-efficient of variation of 25. 16 percent. The highest rural growth rate 28. 07 is observed in Uniara tehsil, whereas the lowest —38. 97 is Tonk tehsil. The rural population growth rate of Tonk tehsil decreased 38. 71 percent because a new tehsil Peeplu was formed in 1996. So some part of Tonk's population transferred to Peeplu. So the growth rate has decreased in turn of increasing. The first category of less than 19. 22 percent is only found in Tonk tehsil. Because a new tehsil Peeplu was formed in 1996 so a big part of population transfer to Peeplu tehsil. So Tonk shows negative growth rate in this decade. In second category ranging from 19. 22 to 21. 30 percent Newai, Malpura and Todaraisingh tehsils have registered under this category due to lack of employment and irrigation. In third category ranging from 21. 31 to 24. 87 percent. Only Deoli tehsil come under this category due to command area of Bisalpur Dame. In fourth category ranging above 24. 87 percent comes under this category. Only Uniara tehsil come under this category due to main canal area of Bisalpur Dame. As our state and country have maximum rural population. Tonk is also not an exception in this regard. As rural population concerned total rural population of Tonk is 958230, which is 79. 10 percent of total population while 1991 it recorded 784586 which is 80. 47 percent, where as state has 76. 61 percent and India has 72. 22 percent of rural population. (3) Urban growth rate In the Indian Census of 1951, whichever area had municipality was called " urban area", even if it did not posses any other urban features. Thus the definition

regarding urban area was given from the administrative point of view. In the 1971 Census, the following strict scale definition of urban area was adopted : i) all places with a municipality, corporation, cantonment board or notified area committee, etc. so declared by a state law; and ii) all other places that satisfy the following three conditions: (a) a minimum population of 5000; (b) at least 75 percent of male working population engaged in non-agricultural pursuits; and (c) density of population of at least 400 persons per sq. km. This definition has since been carried through the Censuses of 1981, 1991 and 2001. The only change in the 2001 Census has been the classification of all places under (i) as " statutory towns" and under (ii) as " census towns". This classification satisfies both administrative convenience and maintenance of comparability. According to Eduardo Arriaga, if we have to make a meaningful comparison then people living in different sizes of cities should be taken rather than of people living in urban areas. For instance, in the 1991 Census of India, urbanization had been shown by the following class of towns. Ist : population of 1 lakh and above. IInd population between 50, 000 and 99, 999; IIIrd population between 20, 000 and 49, 999; IVth : population between 10, 000 and 19, 999; Vth : population between 5, 000 and 9, 999 and VIth : population below 5, 000. This classification is better because it tells us not only about the size of population in towns but also the percentage total urban population living there. As far as urban growth rate is concerned, Newai tehsil registered the highest Urban growth rate of 37. 03 percent, while the lowest urban growth rate was registered is 15. 72 percent is in Malpura tehsil. In Tonk, as far as urban growth rate is concerned the average growth rate was 25 with S. D. 9. 01 and co-efficient of variance 36.

04 percent. The growth of population during 1991-2001 has declined in all the tehsils of the district compared to the growth rate in 1981-91, Newai tehsil has the highest growth rate during 1991-2001 with 37. 03 and Malpura has the lowest with 15. 72 percent. The first category of less than 17. 34 percent is only found in Malpura tehsil due to less developed transportation system educational, health and many infrastructure facilities. In second category ranging from 17. 34 to 20. 27 percent. Todaraising, Deoli and Uniara tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 20. 28 to 35. 37 percent. Tonk tehsil come under this category due to district head quarter, job centers, banks, educational institute, many offices etc. In fourth category ranging above 35. 37 percent comes under this category. Only Newai tehsil come under this category due to well developed transportation system, industrial, social and economical activities. Newai has only railway station of this district. In 2001 census urban population growth rate of India was registered 27. 78 percent while Rajasthan has recorded 23. 39 percent. Tonk's growth rate has recorded 20. 90 percent, is lower than country and state. Tonk has 6 urban centers. They are Malpura, Newai, Tonk, Todaraisingh, Deoli and Uniara. Tonk is a backward district because any type of pull factors like big industries, technology health, education, infrastructure facilities are not present here. So the emigration rate is higher than immigration and it is the main cause of declining. Population Density The total number of persons residing in 1 square km. is known as the population density. One of the important indices of the concentration of population is the density of population. The highest density of population is found on

agriculturally fertile lands, while it is the lowest in desert or rocky areas. Thus, population is not distributed equally in all parts of the country. In some parts of India, people live in small numbers and in other places they live in large numbers. The pattern of distribution of population in any country can be described by its density of population, shown as Density of Population = Total Population / Total Land In other words, the total numbers of persons living per sq. km. area is called the density of population. Men and land are the ultimate elements in the life of human society so that the number of people in proportion to the amount of land is a fundamental consideration in population study. The concept of density or the relationship between people and land is usually expressed as a simple arithmetic ratio, which divides total population by total area. In India the maximum population density was 905 in West Bengal State among the Union Territories it was highest in Delhi (9294). The State with the least population density was Arunachal Pradesh (13) and among the Union Territories it was the lowest in Andaman and Nicobar (43). In Rajasthan maximum population density was 471 in Jaipur and lowest was 13 in Jaisalmer. As well as in Tonk district maximum population density was 189 in Newai and minimum was 126 in Todaraisingh. So Tonk is lower population density in comparison to national and state due to less infrastructural, health, educational, social and economical facilities. Most of the people depend on agriculture but low rain fall and less under ground water also an important factor in this regard. (4) Density of Population It is accepted fact that all parts of the country and state are not equally habitable. This is true with Tonk as well. Today we have 7 tehsils in the district. Equitable distribution of both area and population among the

districts is an impossible ideal. There is a great disparity in area as well as in population among the districts. The area of Tonk is 2. 10 percent of the total area of the state and it has to support 2. 14 percent of the population of Rajasthan. While the density of population in Rajasthan works out to 165 persons per sqr. Km. , it comes 168 in case of Tonk. The density of population of Tonk in 1901 was 36 persons per sqr. Km. During the last 100 years, the figure has gone up by more than four times. The density figures for the State for 1901-2001 are given under. Density of population in Tonk.

Year	Tonk	Rajasthan	India
1901	36	30	77
1911	38	32	82
1921	35	30	81
1931	41	34	90
1941	46	41	103
1951	57	47	117
1961	70	59	142
1971	87	75	177
1981	109	100	216
1991	136	128	267
2001	168	165	324

In 2001 census the density of India was registered 324 while Rajasthan has recorded 165. Tonk has registered 168, is higher than state density and lower than national density. The proverbial concept of a thinly populated district Tonk has to be partially set aside with the density of population per sqr Km. rising form 136 person in 1991 to 168 in 2001. The net increase of 32 persons in the density of population of district during the decade 1991-2001. Newai tehsil is the most thickly populated area, the density being 189 persons per sqr. Km. The lowest density has been recorded in respect of Todaraising tehsil. The highest density in Newai tehsil is due to high rate of urbanization and industries and the lowest density in Todaraisingh is due to lack of transportational and development facilities. The average density of population was 156 S. D. 18. 4 and co-efficient of variation is 262. 8 percent. The first category of less than 138 is only found in Todaraisingh tehsil due to

less developed tranportational, educational, health and many infrastructure facilities. In second category ranging from 138 to 148. Malpura, Peeplu and Uniara tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 149 to 167. Tonk and Deoli tehsils come under this category due to district head quarter, job centers, banks, educational institute, many offices and Bisalpur command area etc. In fourth category ranging above 167 comes under this category. Only Newai tehsil come under this category due to well developed transportational, industrial, social and economical activities. Newai is a only railway station of this district. (5) Rural Density The highest rural density of 148 persons/sqr. Km. is found in Peeplu tehsil and the lowest of 92 persons/sqr. Km. in Todaraisingh with mean 115 S. D. 17. 68 and C. V. 15. 37 percent. The first category of less than 103 is only found in Todaraisingh tehsil due to less well developed transportational, educational, health and many infrastructure facilities. In second category ranging from 103 to 110. Malpura, Deoli and Uniara tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 111 to 133. Tonk and Newai tehsils come under this category due to district head quarter, job centers, banks, educational institute, many offices and etc. In fourth category ranging above 133 comes under this category. Only Peeplu tehsil come under this category. The highest density of population is found on agriculturally fertile land while it is lowest in desert or rock areas. Villages have more area than cities. So the density of rural areas is poor than urban centers. Villages have many problems like infrastructural, educational, administrative, health and employment. (6) Urban Density Urban areas are

the high density areas because they have many factors for increase density are industries, specialization, religious factor, educational factors, health facilities, employment facilities etc. The highest urban density of 6253 is Tonk tehsil. It is due to more occasions of employment and due to head quarter, while the lowest urban density 326 is found in Todaraisingh tehsil with the mean value 2550, S. D. 2309. 4 and C. V. 90. 56. Few very dense or highly populated tehsils are Deoli 4474 and Uniara 2308. The first category of less than 511 is only found in Todaraisingh tehsil due to less well developed transportational, educational, health and many infrastructure facilities. In second category ranging from 511 to 2308. Malpura, Newai and Uniara tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 2309 to 4474. Deoli tehsil come under this category due to job centers, banks, educational institute, many offices and Bisalpur command area etc. In fourth category ranging above 4474 comes under this category. Only Tonk tehsil come under this category due to well developed transportational, industrial, social and economical activities. Many factors affect the density are following :- 1. Industrialization : When the process of industrialization increases, economic development take places and modern sectors like trade, commerce, transport and its allied services also develop. This results in rural-urban migration, because the workforce migrates from agriculture to non-agricultural sectors. Thus industrialization is an important factor for high density. 2. Specialization in Occupations : Another factor responsible for increasing density is specialization. This being an age of specialization, people try to specialize in diverse occupations relating to trade, commerce,

industries and services. So density increases. 3. Political Factors : Political factors are also responsible for high density. Since ancient times the capital city of a country highly dense faster. 4. Growth Sectors : The growth centers of the economy such as manufacturing and services are usually located near cities where they benefit from the flow of inputs, outputs and labour from far and near. This leads to high density of villages, and small towns in the vicinity of such centers. 5. Location of Mineral Deposits : Generally, the location of coal and iron mines accelerates the process of urban expansion as it induces the location of coal and iron based industries in a particular center. Jamshedpur, in India, is an example of this type of urbanization. Also the location of steel plants of the public sector is responsible for the growth of urban centers like Bhilai, Rourkela and Durgapur. 6. Port Towns : Port towns also turn into high dense centers. Cities like Mumbai, Chennai and Kolkata are the living examples of this type of highly dense areas. 7. Religious Factors : Since ancient times religious factors have also been responsible for high density. Location of temples in many cities turns into highly dense cities. Shree Nathdwara, Amritsar, Ajmer, Varanasi, Allahabad, Nasik, Rameshwaram etc. are such examples. 8. Educational and Cultural Centers : The places where the various educational institutions like schools, colleges and universities are located turn into highly dense centers. 9. Transport and Communication Facilities : Cheap and easy availability of transport and communications has been a responsible factor for density expansion. 10. Infrastructure Facilities : Basic facilities and services which are essential for the operation and development of the other sectors of the economy and improving the life of the people. urbanization According to

Philip A. Houser and Judah Metras, " urban area is that area where people live in large numbers and the density of population is high and large part of population is engaged in non-agricultural activities. Against this, rural area is such an area where people reside in less numbers and the density of population is much less and large part of population remains engaged in agricultural field." In the Indian Census of 1951, whichever area had municipality was called " urban area", even if it did not posses any other urban features. Thus, the definition regarding urban area was given from the administrative point of view. In the 1971 Census, the following strict scale definition of urban area was adopted : i) all places with a municipality, corporation, cantonment board or notified area committee, etc. so declared by a state law; and ii) all other places that satisfy the following three conditions: (a) a minimum population of 5000; (b) at least 75 percent of male working population engaged in non-agricultural pursuits; and (c) density of population of at least 400 persons per sq. km. This definition has since been carried through the Censuses of 1981, 1991 and 2001. The only change in the 2001 Census has been the classification of all places under (i) as " statutory towns" and under (ii) as " census towns". This classification satisfies both administrative convenience and maintenance of comparability. According to Eduardo Arriaga, if we have to make a meaningful comparison then people living in different sizes of cities should be taken rather than of people living in urban areas. For instance, in the 1991 Census of India, urbanization had been shown by the following class of towns. Ist : population of 1 lakh and above. IInd population between 50, 000 and 99, 999; IIIrd population between 20, 000 and 49, 999; IVth : population between 10, 000

and 19, 999; Vth : population between 5, 000 and 9, 999 and VIth : population below 5, 000. With liberalization of the Indian economy particularly during the last decade, there has been widespread expansion of consumer goods, and educational facilities in marketing, management, finance, banking, insurance, information technology, etc. which have attracted people to towns and cities for training and employment. There has also been marked changes in the landscapes of towns and cities where high-rise buildings, entertainment centers, shopping malls are fast coming up. They are changing the life-styles of the urbanities. All these are acting as pull factors to urban areas. As opposed to this, the majority of rural areas even after 50 years of planned economic development lack in basic services like access to safe drinking water, sanitation facilities, employment opportunities, educational, medical, and infrastructural facilities, etc. These act as push factors. The rural and urban landscape doesn't differ only in degree but in kind also, because the process of urbanization reflects the development of a distinct way of life, which involves not so much the differences in the density as the contrast in the very character of population. Besides, the towns are also significant as the diffusion centers of modern civilization. They reflect not only the changing demographic personality of a region, but also serve as index of region's economic and social development. The degree and rate of diffusion of these traits determine the speed of transformation of the country side in social as well as economic terms. In return, the demand which the villages make form the town for variety of services and the contribution which villages make, in supplying goods and materials to the towns play their own role in an accelerating the process of

urbanization. Tonk has 6 urban centers. They are Malpura, Newai, Tonk, Todaraisingh, Uniara and Deoli (7) Percentage of Urban population to total population According to Pravin Visaria, " The level of urbanization in the country is substantially affected by the specific definitions chosen by the national authorities." In keeping with this, there was no specific definition of urban area in India till 1941. Accordingly, all towns were included in urban areas in the various censuses. So with the increase in number of towns, the urban population showed a rising trend. The number of cities increased from 1, 917 in 1901 to 5, 161 in 2001. In 2001 census the rate of urbanization in India was registered 27. 78 percent while Rajasthan has recorded 23. 39 percent. Tonk's urbanization rate has registered 20. 90 percent, is lower in comparison to state and national. Tonk is a backward area. It has not more opportunities for jobs. It has less in many facilities like infrastructure, health, education etc. So the urbanization rate in Tonk district is low. The average percentage of total population is 22 with S. D. 17. 72 and C. V. 80. 54. The highest urban population 56. 82 percent is in Tonk tehsil and the lowest 7. 55 percent is in Uniara tehsil. In 1991 Malpura registered 2nd highest urban population but in 2001 census Malpura tehsil was 3rd in 13. 39 percent in urban population comparison to Newai (18. 70 %) tehsil. The first category of less than 10. 57 percent is only found in Uniara tehsil due to less well conveying facility of transportation, educational facilities, health facility and many infrastructure facilities. In second category ranging from 10. 57 to 16. 15 percent. Malpura, Todaraising and Deoli tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 16. 16 to 18. 70 percent. Newai tehsil come under this category

due to job centers, banks, educational institute, many offices. In fourth category ranging above 18. 70 percent comes under this category. Only Tonk tehsil come under this category due to well developed transportational, industrial, social and economical activities. Tonk is district Head Quarter and Newai is an industrial area and both are on national highway. So here urban population increase rapidly. (8) Percentage of male urban population to total urban population. The highest percentage of male urban population is in Tonk tehsil 29. 42 percent and lowest in Uniara (3. 88 percent). The percentage of male urban population in higher in big towns because in these towns many industries and job centers provide job to many people and people mostly male comes to these big towns for job. The average percentage of male urban population is 10 with S. D. 8. 03 and C. V. 80. 3 percent. The first category of less than 5. 70 percent is only found in Uniara tehsil due to less well conveying facility of transportation, educational facilities, health facility and many infrastructure facilities. In second category ranging from 5. 70 to 8. 35 percent. Malpura, Todaraisingh and Deoli tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 8. 36 to 9. 13 percent. Newai tehsil come under this category due to job centers, banks, educational institute and many offices. In fourth category ranging above 9. 13 percent comes under this category. Only Tonk tehsil come under this category due to well conveying of transportation, industrial, social and economical activities. (9) Percentage of female urban population to total urban population. The number of males is higher in cities because males alone go to cities in the beginning in search of jobs. Thus as compared to males, the percentage of

females was low in cities. This is because more employment opportunities are available to males as compared to females. Moreover, in the Indian social set up single unmarried females do not migrate to urban areas. The highest percentage of female urban population is 27. 40 in Tonk tehsil. The lowest urban females percentage is 3. 67 in Uniara tehsil. The average percentage of female urban population is 6. 3 with S. D. 5. 14 and C. V. 81. 58 percent. The first category of less than 4. 87 percent is only found in Uniara tehsil due to less well conveying facility of transportation, educational facilities, health facility and many infrastructure facilities. In second category ranging from 4. 87 to 6. 46 percent. Malpura and Deoli tehsils have registered under this category due to lack of employment and other pull factors. In third category ranging from 6. 47 to 9. 57 percent. Newai and Todaraisingh tehsils come under this category due to job centers, banks, educational institute and many offices. In fourth category ranging above 9. 57 percent comes under this category. Only Tonk tehsil come under this category due to well conveying of transportation, industrial, social and economical activities. The percentage of females comparison to male is very low due to her marriage and fear of alone less. There have been many problems in urbanization are as follows : 1. Economic Problems : The main economic problems of urbanization are the lack of basic services in cities. They are the result of rapid growth of population. Huge slums, shanty towns, lacking in clean drinking water and no access to the simplest latrines, overcrowding, problems of residential accommodation, electricity, water supply, drainage, collection of social wastes, release of domestic and industrial effluents into water ways, air pollution, unemployment etc. 2.

Social Problems : Urbanization breeds many complex social problems. It destroys the values, culture and conventions of the society. Shortage of living space and high cost of living leads to the break up of the joint family system. It leads to crimes, violence, juvenile delinquency, drug addiction, alcoholism, depression, suicidal tendencies, restlessness in educational institutions, social unrest, prostitution, etc. 3. Infrastructural Problems : Infrastructure refers to the existence to basic facilities and services which are essential for the operation and development of other sectors or the economy and improving the quality of life of the people. They are roads, buses, waterways, bridges, sewerage system, houses, electric power, kerosene, administrative building, school, college etc. 4. Administrative Problems : With the growth of urban centers and cities, many administrative problems crop up. they include controlling crime, violence, traffic, protecting life and property, establishing civil protection system, etc. Consequently, the pressure on administration and police force increases. There are always shortages of administrative and police personnel due to ever-growing size of the cities. Urbanization is a natural consequence of economic development of a country. It is characterized by the movement of an increasing proportion of population from rural to urban areas. Urbanization is a product of industrialization. Urbanization has led to decline in birth rate and a shift towards the small family. It has led to an increasing division of labour, growing specialization and shift of many activities from non-market oriented vocations within the family or the village to specialized market-oriented firms. By creating educational and technical institutions, it has helped in increasing knowledge. But the ongoing development process is expected to

further increase the growth of urban population in India. This will lead to more deterioration in the physical environment and quality of life in urban areas. There is already a wide gap between demand and supply of essential services and infrastructure in urban areas, which is bound to increase further. For instance, the demand for basic services like supply of drinking water, sanitation, housing, transport, etc. has outstripped their availability. Urban life has become costlier because of congestion and overcrowding. Consequently, consumer expenditure on different types of consumer goods has increased, especially due to the demonstration effect of the city life. There is a need to bring about rural-urban cohesion. This can be achieved through the process of spatial planning based on the concept of " growth centers" They will attract private investments in developing such centers with all basic and infrastructural facilities. This policy will reduce the pressure on towns and cities and create " nuclei of development". (10) Total Sex Ratio Sex ratio, that is number of females per one thousand males in the population. It is an important demographic indicator, which helps in studying the birth rate, death rate and availability of manpower as also the future growth of population. While higher rate of population growth is considered to be detrimental to the economy, the growth o