

International Multidisciplinary
Research Journal

Golden Research
Thoughts

Chief Editor
Dr.Tukaram Narayan Shinde

Publisher
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor
Dr.Rajani Dalvi

Honorary
Mr.Ashok Yakkaldevi

Welcome to GRT

RNI MAHMUL/2011/38595

ISSN No.2231-5063

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Bakfir English Language and Literature Department, Kayseri
Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Janaki Sinnasamy Librarian, University of Malaya	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pinteau, Spiru Haret University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Anurag Misra DBS College, Kanpur	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, IasiMore
Titus PopPhD, Partium Christian University, Oradea, Romania		

Editorial Board

Pratap Vyamktrao Naikwade ASP College Devrukh, Ratnagiri, MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yallickar Director Management Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary, Play India Play, Meerut (U.P.)	Maj. S. Bakhtiar Choudhary Director, Hyderabad AP India.	S.KANNAN Annamalai University, TN
	S. Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

Address:- Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.aygrt.isrj.in

"GEOGRAPHICAL STUDY OF GROWTH AND LEVEL OF URBANIZATION IN MAHARASHTRA STATE, INDIA"



Sanjay D.Pagar

INTRODUCTION

Urbanization is the process under which population migrates from the countryside to the cities and towns, which are the major industrial centers for providing jobs. In such areas due to higher opportunities of employment and chances of higher earning many people migrates from rural areas to cities and towns. Therefore cities turned into crowded places everywhere in the world. Urbanization is a form of social transformation from traditional rural societies to modern urban societies. It is long term continuous process (T. Chandrasekaryya, T.Parthasarathy, 2013). In India urbanization in some states increasing rapidly. India existing cities are already

Abstract

In this paper an attempt has been made to study the growth and level of urbanization in Maharashtra from the year 1961 to 2011. The secondary data is used for the present study. The district has been taken as a unit for analysis. Mumbai, Mumbai Suburban and Thane districts are highly urbanized in the study region. There are ample job opportunities in mega cities therefore village people frequently migrate to the cities therefore in future also urbanization will be continues in such cities. Especially Pune, Nagpur, Nashik and Aurangabad have potential to absorb the population in future. But proper planning is important. Without the right design and planning it is highly impossible to minimize the burden of urban centers on mega cities, otherwise it creates enormous stress on the local system.

Degree of urbanization is low and very low in those areas where uneven topography and lack of industrialization is found. Such areas are observed in eastern, northern, Konkan and some part of central and south Maharashtra. Medium urbanization is mainly found in those districts where industrialization is growing slowly and agro-based industries are developing.

To control the intensity of urbanization problems in urban area decartelization of some industries towards rural area is important. Due to such decentralization of industries rural to urban migration can be control at some extent and other hand it will control the increasing population pressure on urban. So government and local bodies must do proper planning to create more employment opportunities, which can generates more jobs and services. There is also need to give emphasis to development of agro-based industries, agro tourism, and other agriculture allied areas as per available local resources and infrastructure.

Keywords : Urbanization, Population Density, Decentralization, Economic Growth, Mega city and MIDC.

Short Profile

Sanjay D.Pagar is working as an HOD & Assistant Professor at Department of Geography in MVP Samaj's Arts, Science and Commerce College Ozar Mig, Dist.Nashik Affiliated to Savitribai Phule Pune University.

suffering from a lack of sufficient infrastructure investment (M.Husain, 2011). The present urbanization in India is not evenly distributed. At the state level the pattern of urbanization is very diverse, but economically advanced state more or less show higher level of urbanization. All the southern states, along with Punjab, Haryana, Gujrat, Maharashtra and West Bengal, have higher urbanization level than the national average (R.B.Bhagat, 2011). Like national level at state and district level also such variation is observed.

Generally, urban phenomenon is supposed to be the consequences of economic growth.

HOD & Assistant Professor, Department of Geography, MVP Samaj's Arts, Science and Commerce College Ozar Mig, Dist.Nashik Affiliated to Savitribai Phule Pune University.

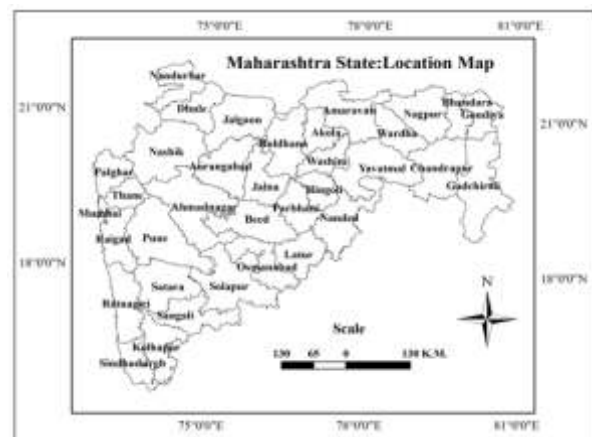
The bases for urbanization vary from time to time. In recent times, industrialization and economic development are found predominantly responsible for urbanization (L.N.Verma, 2008). In case of Maharashtra it is true because urbanization is found more in those areas where industrialization is more. In other hand it is very low in those areas where industrialization not developed too much. Especially in eastern, northern, Konkan and some part of south and central Maharashtra. In some cities it is increasing very rapidly and created tremendous problems. Especially in Mumbai, Thane, Pune, Nagpur, Nashik & Aurangabad are major cities where intensity of such problems are too much. Contribution of these cities to increasing urbanization in their district is also very much. In rest part of Maharashtra urbanization is growing very slowly. In such condition, the study of urbanization of Maharashtra state is very important. Through such study it is possible to highlight the problem and potential regions (districts) of Maharashtra as urbanization is concerned.

Such study also useful to frame the future planning related to urbanization. Rural-urban disparities have for long been one of the causes of concern for policymakers (Suhav Avhad,2014).The planner, policymaker, local authorities, government and concerned authorities gets some clues for making final draft of policy to minimize the burden of urbanization from highly urbanized areas and divert the population through decentralization in potential areas of the state. For this purpose people and administration must work corporation and with positive attitude. It is necessary that studies should be undertaken on the patterns of urbanization observe the process. Taking into consideration the above aspects, here an attempt has been made to highlight the urbanization growth and present pattern of urbanization in the Maharashtra State.

2)STUDY AREA:

Maharashtra State came into existence on 1st May,1960.It extends between 15° 33' 46'' N to 22° 02' 13'' N latitudes and 72° 38'45'' E to 80° 53'17'' E Longitudes. Maharashtra state known to be progressive state of India. Its geographical area is 3.08 lakh Sq.km. It is located along the western coast of Peninsular India.

Maharashtra state is bordered by Gujarat to its northwest, Madhya Pradesh its north, Chhatisgarh to its east and Goa, Karnataka and Telangana are located to the south of Maharashtra. Maharashtra State had population 11, 23.72,972 as per the 2011 census. The average population density of the state is 365 persons per sq.km. and literacy is 82.34 percent as per 2011 census. Location of the study area is showed in Map No.1.



Map No.1

The district is divided into 355 tahsils and 36 districts and grouped them into 6 administrative divisions. It includes Konkan, Pune, Nashik, Aurangabad, Amravati and Nagpur. The Maharashtra State divided into three major physiographic divisions namely the Western Ghats (Sahyadri), The Deccan Plateau and the coastal lowland of Konkan. Godavari, Krishna, Tapi and Pirna are major the rivers of Maharashtra. The climate of Maharashtra is monsoon type. Agriculture is major occupation in rural areas of Maharashtra. The state receives

rainfall from the southwest monsoon winds during the periods from June to September.

3) DATA AND METHODOLOGY:

Present paper is based on the secondary source of data. Secondary data is obtained from the Maharashtra Census Handbook (1981 to 1991 and CD Rom 2001 & 2011) & Economic Survey of Maharashtra State (2002-03, 2012-13 and 2014-15). The district has been taken as a unit for analysis of urbanization in the study region. Statistical tools like percentage, average etc. have been used in the study. The result have been shown with the help of line graph, Bar graph & Choropleth map by using GIS software. For the calculation of degree of urbanization, following formula is used.

$$DUP = \frac{UP}{TP} * 100$$

Where, DUP = Degree of Urbanization (%)

UP = Urban Population
TP = Total Population

Urbanization is the proportion of urban population to the total population. It is expressed in percentage.

4) RESULTS & DISCUSSION: Population and Urbanization Growth:

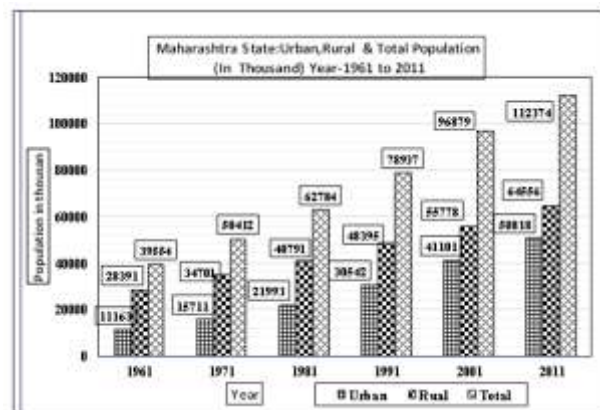
The population of Maharashtra has grown by 72820 thousand during a span of 50 years from the year 1961 to 2011. Table No.1 and Graph No.1 present the population growth of study region from 1961 to 2011. Table No.1 also indicates that the total population of Maharashtra in 1961 was 39554 thousand and it increased to 112374 thousand in the year 2011. It means during the fifty years span it is increased by 72820 thousand. During the same periods the rural population increased from 28391 thousand to 61556 thousand. Urban population also increased by 4.55 times in the same periods. Which is shown in the table No.1 and Graph No.2. The percent of

urbanization was 28.20 in 1961, which increased upto 45.22 percent in the year 2011. Which is indicates in the Graph No.2. It is more than the India's urbanization. The pressure of population on land has been steadily increasing and with it, land man ratio is becoming increasingly adverse. According to 2011 census the density of population in Maharashtra was 365 persons per sq.km. as against the 129 persons per sq.km. in 1961. The density of population during five decades is increased by 236 persons per sq.km.

Table No.1: Maharashtra State: Major Demographic Characteristics-1961 to 2011

Year	Rural Pop. (000)	Urban Pop. (000)	Total Pop. (000)	Decadal Growth	Urbanization (%)	Decadal Growth	Pop. Density Per.Sq.K.m.
1961	28391	11163	39554	---	28.20	---	129
1971	34701	15711	50412	27.45	31.17	10.53	164
1981	40791	21993	62784	24.54	35.03	12.38	204
1991	48395	30542	78937	25.73	38.70	10.48	257
2001	55778	41101	96879	22.73	42.40	09.56	314
2011	61556	50818	112374	15.99	45.22	06.65	365
Change 1961-2011	33165	39655	72820	--	17.02	--	236

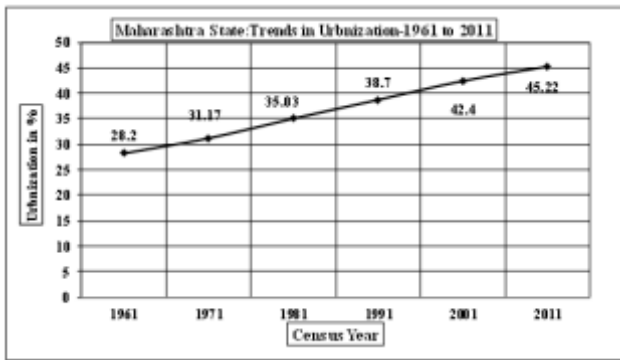
Source: Compiled by Author, 2015, based on Maharashtra State Census Handbook and CD Rom (1971 To 2011)



Graph No.1

Level of Urbanization:

The level of urbanization indicates the proportion of total population residing in urban places. For the detail analysis of level of urbanization, all districts are arranged in to five categories.



Graph No.2

Table No.3: Maharashtra State: Level of Urbanization-2011

Sr. No.	Degree of Urbanization (%)	Level of Urbanization	Names of Districts
1	More than 80	Very High	Mumbai City, Mumbai Suburban and Thane
2	60-80	High	Pune and Nagpur
3	40-60	Medium	Raigad, Nashik, Aurangabad, Parbhani and Amaravati,
4	20-40	Low	Dhule, Jalgaon, Nagar, Sangli, Solapur, Kolhapur, Nanded, Latur, Buldhana, Akola, Yavatmal, Wardha and Chandrapur
5	Less than 20	Very Low	Sindhudurg, Ratnagiri, Nandurbar, Satara, Jalana, Hingoli, Beed, Osmanabad, Washim, Bhandara, Gondiya and Gadchiroli

Source: Compiled by Author, 2015

These categories are based on the degree of urbanization of the year 2011. All categories are shown in the Table No.3 and Map No.2.

1. Very High Urbanization:

This category includes those districts, where degree of urbanization is more than 80 percent. Mumbai City, Mumbai Suburban and Thane districts are included in

Table No.2: Maharashtra Major Demographic Characteristics-2011

Sr. No.	Name of District	Total Population	Rural Population	Urban Population	Urbanization (%)	Density Sq.km.
1	Mumbai City	3,085,411	000	3,085,411	100.00	19652
2	Mumbai Suburban	9,356,962	000	9,356,962	100.00	20980
3	Thane	11,060,148	2,545,470	8,514,678	76.99	1157
4	Raigad	2,634,200	1,664,005	970,195	36.83	368
5	Ratnagiri	1,615,069	1,351,346	263,723	16.33	197
6	Sindhudurga	849,651	742,645	107,006	12.59	163
7	Nashik	6,107,187	3,509,814	2,597,373	42.53	393
8	Dhule	2,050,862	1,479,826	571,036	27.84	285

9	Nandurbar	1,648,295	1,372,821	275,474	16.71	277
10	Jalgaon	4,229,917	2,887,206	1,342,711	31.74	360
11	Ahmednagar	4,543,159	3,630,542	912,617	20.09	266
12	Pune	9,429,408	3,678,226	5,751,182	60.99	603
13	Satara	3,003,741	2,433,363	570,378	18.99	287
14	Sangli	2,822,143	2,102,786	719,357	25.49	329
15	Solapur	4,317,756	2,918,665	1,399,091	32.40	290
16	Kolhapur	3,876,001	2,645,992	1,230,009	31.73	504
17	Aurangabad	3,701,282	2,081,112	1,620,170	43.77	366
18	Jalna	1,959,046	1,581,617	377,429	19.27	254
19	Parbhani	1,836,086	1,266,280	569,806	31.03	295
20	Hingoli	1,177,345	998,612	178,733	15.18	244
21	Beed	2,585,049	2,070,751	514,298	19.90	242
22	Nanded	3,361,292	2,447,394	913,898	27.19	319
23	Osmanabad	1,657,576	1,376,519	281,057	16.96	219
24	Latur	2,454,196	1,829,216	624,980	25.47	343
25	Buldhana	2,586,258	2,037,398	548,860	21.22	268
26	Akola	1,813,906	1,094,165	719,741	39.68	320
27	Washim	1,197,160	985,747	211,413	17.66	244
28	Amaravati	2,888,445	1,851,158	1,037,287	35.91	237
29	Yavatmal	2,772,348	2,174,195	598,153	21.58	204
30	Wardha	1,300,774	877,474	423,300	32.54	206
31	Nagpur	4,653,570	1,474,811	3,178,759	68.31	470
32	Bhandara	1,200,334	966,503	233,831	19.48	294
33	Gondia	1,322,507	1,096,577	225,930	17.08	253
34	Chandrapur	2,204,307	1,428,929	775,378	35.18	193
35	Gadchiroli	1,072,942	954,909	118,033	11.00	074
Total		112,374,333	61,556,074	50,818,259	45.22	365

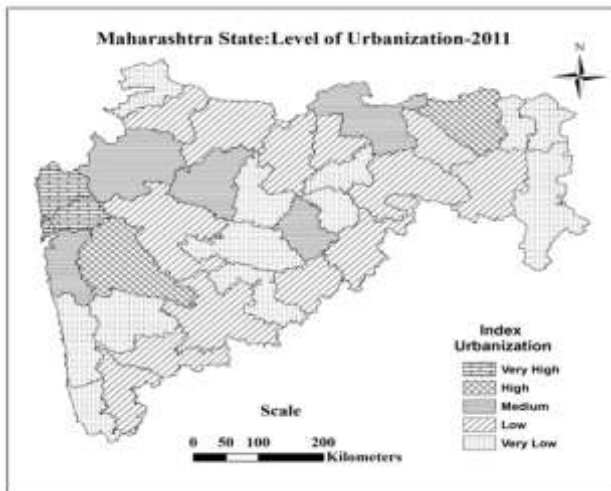
Source: Compiled by Author, 2015, based on Maharashtra census CD Rom 2011

this category. These districts are highly urbanized. Mumbai and Mumbai Suburban had recorded 100 percent urbanized and Thane was 76.99 percent urbanized districts of the study region in the year 2011. These three regions are located very close to each other and provided more employment opportunity to people, therefore mostly people migrated not only from other districts of the state but also from other states of India. Therefore population density of these districts also increased too much. High urbanization creates many problems in urban areas. They are related to transport, water and electricity supply, drainage, waste disposal, traffic jam, public hygiene overcrowding, garbage disposal, sewerage problems, increase in crime rate and various pollution. The intensity of such problems are more in Mumbai and Mumbai Suburban areas.

2. High Urbanization:

Pune and Nagpur districts include in this category, where urbanization was recorded

more than 60 percent and less than 80 percent. Both districts are developing very fastly due to their potentials and favourable condition for urbanization.



Map No.2

Nagpur is the sub capital of Maharashtra and the most important urban center in the district. All types of development is concentrated here and it is sources for various type of jobs and services. In eastern Maharashtra no other cities offered such facilities to people therefore large people migrated here. Pune is second important district, where urbanization if recorded more. Pune and its sub urban area absorbed more population of the district. It is an industrial, educational, commercial and administrative center not only for Pune district but for the Maharashtra also. Therefore population in the district increased naturally as well as due to outside migration. Industrialization is major factor which leads to raise the urbanization in these districts. In both urban places transportation, traffic jam, crime and increasing slums area major problems. With the growing population in urban areas, slums are becoming a major problems for governing bodies to control its intensity.

3. Medium Urbanization:

Degree of urbanization is medium has

identified Raigad, Nashik, Aurnagabad, Parbhani and Amarawati districts, where degree of urbnaization is between 40 to 60 perecent. All districts are attracting rural population since last two decades in large scale. Intensity of urbanization is more in Aurangabad (43.77 %) and Nashik (42.53) district. In all these five districts urban centers are not more. Role of MIDC is very important in these districts to rise the urbanization. Mostly urban population is concentrated in the headquarter place. Problems of urbanization are increasing rapidly in these districts also. It is right time to do proper planning for minimize their intensity otherwise it will create more complication in the future.

4. Low Urbanization:

Low urbanization is recorded in those districts where degree of urbanization is from 20 to 40 percent. This category consisted of districts namely, Dhule, Jalgaon, Nagar, Sangli, Solapur, Kolhapur, Nanded, Latur, Buldhana, Akola, Yavatmal, Wardha and Chandrapur. Geographical condition of these districts is not too much suitable for industrialization. Only few places are having small patches of industrial units. Most part of Dhule, Jalgaon, Nagar, Nanded and Buldhana is dry and basic infrastructure for economic growth is not available in large scale which may help to increase urbanization. Most part of Chandrapur, Akola and Yavatmal is undeveloped and covered by forest and rugged topography. Agriculture is major activity of these districts. Therefore many people enganed in agriculture and setted in rural area.

5. Very Low Urbanization:

Last category of very low urbanization is observed in 12 districts of Maharashtra where degree of urbanization is less than 20 percent. In these category Sindhudurga, Ratnagiri Nandurbar, Satara, Jalana, Hingoli, Beed, Osmanabad, Washim, Bhandara, Gondiya and Gadchiroli districts are included. In these district

degree of urbanization is found very low due to uneven topography and absence of industrialization or other sources of jobs. Mostly people are engaged in animal husbandry and in other primary occupation like agriculture, which are spread in rural areas.

5. CONCLUSION:

The attempt has made to examine the growth and level of urbanization of Maharashtra State and reveals the uneven pattern of urbanization of the study region. Mumbai, Mumbai Suburban and Thane districts are highly urbanized in the study region. There are ample job opportunities in mega cities therefore village people frequently migrate to the cities therefore in future also urbanization will be continues in such cities. Especially Pune, Nagpur, Nashik and Aurangabad have potential to absorb the population in future. But proper planning is important. Without the right design and planning it is impossible to minimize the burden of urban centers on mega cities, otherwise it creates enormous stress on the local system.

Degree of urbanization is low and very low in those areas where uneven topography and lack of industrialization is found. Such areas are observed in eastern, northern, Konkan and some part of central and south Maharashtra. Medium urbanization is mainly found in those districts where industrialization is growing slowly and agro-based industries are developing. MIDC also established therefore industries are developing in these areas.

To control the intensity of urbanization problems in urban area decartelization of some industries towards rural area is important. Like Wine Park at vinchur (Nashik) and Sangli other big companies must be shifted towards rural areas by conducting survey at each district, it will be helpful to localize the new industries at suitable places. Due to such decentralization of industries rural to urban migration can be control at some extent and other hand it will control the increasing population pressure on urban. Making

minimum level of services and facilities in rural areas also reduce the flow of migration from rural to urban areas, because many people migrates in cities only due to city life attractions. So government and local bodies must do proper planning to create more employment opportunities, which can generates more jobs and services in some rural areas like tahsil places or any other big settlement. There is also need to give emphasis to development of agro-based industries, agro tourism, and other agriculture allied areas as per available local resources and infrastructure.

6. REFERENCES:

- 1.Chandana R.C. (2008), "Geography of Population: Concepts, Determinants and Patterns", Kalyani Publications, Ludhiana, Pp.401-413.
- 2.R.B.Bhagat (2011), "Emerging pattern of urbanization in India", 'Economic weekly', Vol.XLVI, No.31, August 2011, Pp.10-12.
- 3.Singh Ravi (2008), "Urbanization in Arunachal Pradesh: Trends and Geographical Pattern", Annals, Vol.28, No.1, June 2008, Pp.83-95.
- 4.Suhas Avhad (2014), "A study on Indian population trend", 'International Interdisciplinary Research Journal', Vol.3, Issue-3, May-June 2014, Pp.1-8.
- 5.T.Chandrasekaryya and T.Parthasrathy (2013), "Urbanization in Andhra Pradesh: A Spatio-Temporal Analysis", 'JIARM', Vol.1, Issue-7, August 2013, Pp.115-126.
6. Verma L.N. (2008), "Urban Geography", Rawat Publication, Jaipur, Pp.72-97.



Sanjay D.Pagar

HOD & Assistant Professor, Department of Geography, MVP Samaj's Arts, Science and Commerce College Ozar Mig, Dist. Nashik
Affiliated to Savitribai Phule Pune University.

Publish Research Article

International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- ★ International Scientific Journal Consortium
- ★ OPEN J-GATE

Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts
258/34 Raviwar Peth Solapur-413005, Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.aygrt.isrj.in