

Journal of Research and Development

A Multidisciplinary International Level Referred Journal

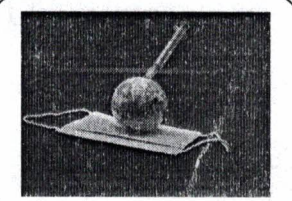
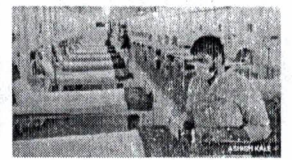
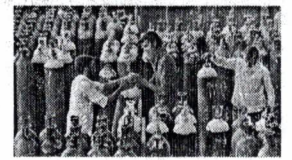
April-2021 Volume-11 Issue-11

Recent Trends in Social Sciences

Chief Editor

Dr. R. V. Bhole

*'Ravichandram' Survey No-101/1, Plot
No-23, Mundada Nagar, Jalgaon (M.S.)*



Address

*'Ravichandram' Survey No-101/1, Plot, No-23,
Mundada Nagar, Jalgaon (M.S.) 425102*

CONTENTS

Sr. No.	Paper Title	Page No.
1	Study of Biodiversity of Phytoplankton and Zooplankton of A Fish Culture Pond and Wild Village Pond of Bhilawadi in Sangli District MS Rakshanda. L. Shinde, Swpnali. B. Lad	1-5
2	Physico-Chemical Characterization of Farmland Soil in Some Villages of Palus Taluka, Dist. Sangli (Maharashtra) Dhanashri V. Bandgar, Urmila V. Bandgar	6-7
3	Studies of Physicochemical Parameters to Assces the Water Quality of River Yerrala for Drinking Purposes in Palus and Khanapur Tehsil (Sangli Distra) Kamble P. D, Lad S. B., Suryawanshi P.T.	8-11
4	Physico-Chemical Analysis of Borewell Water Samples of Palus Taluka Dist-Sangli, MS, India Urmila V.Bandgar, Dhanashri V. Bandgar	12-14
5	Investigation of Antioxident Activity and Total Phenolic Content in Red Raspberry Rakshanda. L. Shinde	15-16
6	Impact of Saltwater Intrusion on the Agricultural Land of Coastal Tract: An Investigation Along Malvan Coast, Maharashtra Nilesh.K. Susware, Jagdish B. Sapkale, Balu L.Rathod, Vinaya N. Susware	17-20
7	The study of natural Symmetry of dihedral group (D_n) Namrata. N.Patil, Rakshanda. L. Shinde	21-28
8	Management and Performance of States in Sustainable Development Goals (SDG): An Analysis Mr. Aditya Rajendra Ankush	29-31
9	An Analysis of Data Visualization Methods and Techniques in MS Excel Rituja Ravindra Vyapari	32-35
10	Exploring Dalit Consciousness in Baby Kamble's The Prisons We Broke Dr. Shivaji D. Sargar, Navale Dattatray Prabhakar	36-37
11	History of Indian Cinema and Women's portrayal Farheen Tai	38-41
12	Challenges and Opportunities in the Sustainable Agriculture Development in India Dr. Ashok Shamrao Patil	42-45
13	Comparative Thermal Analysis Studies on Gel Grown Crystals of Li, Cu and Mixed Li-Cu tartrate Dadaji V. Sonawane	46-48
14	Recent Trends, Methods and Problems in Geographical Education Dr. Jadhav Hanumant Lahu	49-50
15	Education is the Key of Sustainable Development for Future Mr. Suresh Ragho Pagar	51-53
16	Service Industry - Opportunities Challenges and Recent Initiatives in India Dr. G. M. Hugar	54-56
17	"Jhansi Rani of Travancore": Assessing the Pioneering Contributions of Accamma Cherian to the Nationalist Movement in Travancore Abhishek Abraham Mathews	57-59
18	Ecommerce Testing Mr. Dnyaneshwar Fairrao Pathrikar, Mr. Dattatraya Bhikaji Raymal, Mr Hushikesh Rajendra Lahane	60-62
19	Technological Revolution: The Future of Agriculture Mr. Shivaling B. Rajmane	63-64
20	Economic Empowerment of Women in India Mr. Manish Annasaheb Maske	65-67
21	The Role Employee Participation in Human Resource Development Prof. Deepali R. Chandramore	68-70
22	Geographical Study of Tribal Main Workers in Nashik District, Maharashtra Rajendra S. Pawar	71-74
23	An Overview of Digital Revolution for Implementing the New Trends of Online Marketing Dr. Arti C. Lokhande	75-76
24	Over The Top (OTT) Platforms In India: Issues And Challenges - An Empirical Study Sujith.T.S, Dr.M.Sumathy	77-78
25	The Geographical Study of Rural Settlements Size in Daund Tahsil, Pune District(MS) Mr. Parkhe Sakharam Baban, Dr. Chimangunde Vishavraj S	79-82
26	Importance of E-Resources: Issues and Challenges Mrs. Rakte Jyoti Bhausaheb	83-86
27	Importance Enterprise Resource Planning (ERP) in Business: A Study Gourab Das, Subrata Das	87-90
28	Feature Based distance Measurement Approach for Detection, Verification and Authentication of Individual Ghughe Vijaymala Tanaji	91-95

The Geographical Study of Rural Settlements Size in Daund Tahsil, Pune District (MS)

Mr. Parkhe Sakharam Baban¹ Dr. Chimangunde Vishavraj S²

¹Ph.D. Research Student & Dept. of Geography, S.C.S. Mahavidyalaya, Shrigonda- Dist- Ahmednagar, Maharashtra.(India),

²Dept. of Geography, Shri Sant Janabai Mahavidyalaya, Gangakhed. Dist- Parbhani. Maharashtra.(India),

Abstract

The rural villages is a vital part of India and the overall World. The house and settlements is a main of human life. All rural villages part is energetic in the nation. The every rustic settlements has a size. The studying geography of rural settlements, population size, areal size, size of settlements is very significant. The size of rural settlements, average population size and average areal size has been calculated by using statistical formula and SOI toposheets have suitably been used to study the size of rural settlements. In the study region many factors affect the rural settlements size.

Keywords - Rural Settlements Size, Average Population Size, Areality, Total Population, No of Rural Settlements.

Introduction

According to Singh, "Size of the village is determined by population and area of the region. Size and density of rural settlements are closely related with spacing. As the spacing increases, the density of villages must increase at given density of population." (Singh, 1975). "The variation in size and spacing of rural settlements from area to area is a physically established fact, due to the variations in ecological conditions." (Mandal, 1978). "The size speaks about the nature of soil, topography, socio-economic background of the culture group of a particular area." (Singh, 1998). "The size of settlements and their spacing is an important aspect of study in Geography. It has vital importance for understanding the settlement system." (Murthy, 1999).

The size of a rural settlements is one of the greatest vital aspects in the study of rural settlement geography. To define the size of rural settlements, various criteria such as population, density, number of houses, houses types, area of settlement, settlement types etc. were used. There are several elements like physical, social, economical and cultural, which touches distribution, size, spacing, shape and morphology of different settlements. The rural settlements are significantly influenced by physical and cultural elements. The effect of physical - cultural factors can be experiential by studying the rural settlements with respect to their size, spacing, types, patterns, house types and building Material. The following pages an attempt has been made to study the effect of numerous physical and cultural elements on rural settlements of Daund tahsil. This region gets scanty precipitation. The correlation formula is also used for study of correlation between, average population size, average areal size of rural settlements.

Study Area

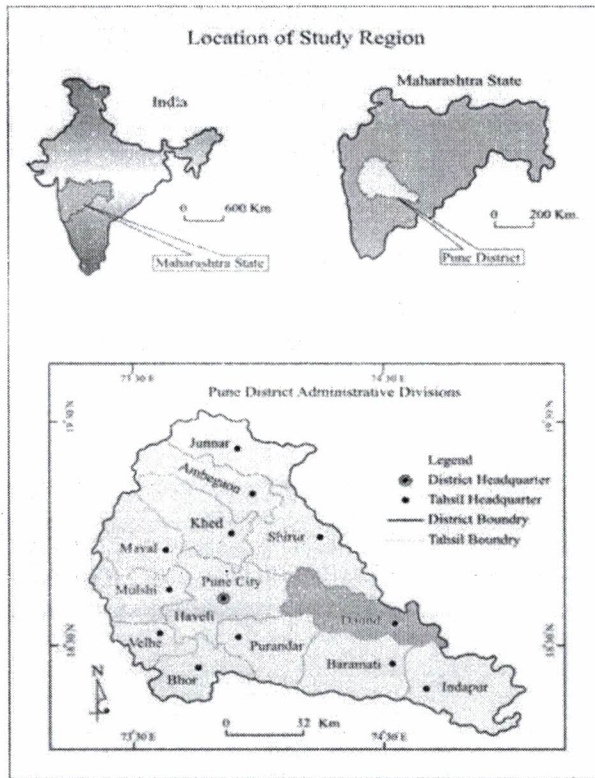
Daund tahsil is located in the western Maharashtra, in Pune district. The geographical area of the Tahsil is between 18° 18" to 18° 40" North latitudes and 74° 06" to 74° 50" East longitude. Daund tahsil total area is 1288.04 Sq. Km. and the total of 13 tahsil in the Pune district. The tahsil total 102 villages and 2 town and Six revenue circle. The study region height is 500 to 600 mt in MSL. The space is separated by numerous river basin like Bhima and its tributary Mula-Mutha. The certain lake are available in study region Warvand, Kasurdi etc. The area practiced semi arid weather and rain shadow zone with light precipitation. In this area black soil founded. The Sugarcane, Bajara, Jawar, Onoion, Groundnut crop taking study part. According to 2011 census, Daund tahsil total population is 3,82,535 (Male-1,98,269 & Female- 1,84,266). The Daund tahsil density is 297 persons per Sq. km. The study area irrigated land is 74,463 hectares (58.05%). The Transport & communication system very good developed in study area. Daund railway junction, Solapur Pune National highway, industrial area, other major state roads are obtainable in region.

Objectives

1. To study the average population size, total population, areality in study region;
2. To understand the rural settlements average population size, areality, area in revenue circle wise distribution in Daund tahsil.

Materials and Methods

1. Census of India (2011), "Registrar General of Census Report", Government of India, New Delhi. (Daund tahsil, Pune district, Maharashtra, India.)
2. Data for study the rural settlements population, area, no of rural settlements of Daund tahsil has been collected from District Census Handbook. (1991, 2001, 2011 census.)
3. This six revenue circle is- Rahu, Yavat, Kedgaon, Patas, Daund, Ravangaon etc.
4. The comparative study of average population size, these six revenue circle in Daund tahsil, Pune district. (M.S.)
5. The Daund tahsil revenue circle wise rural settlements average population size, areality, area use excel and draw a chart.



Results and Discussions

The covariance of spacing of rural settlements depend on such vital aspects as fertility of land, productivity of farming, nature of yields, distribution and availability of water, density and size of rural population, mode of living and several other factors. It is the most important function of nature of soil, topography, availability of water (irrigation), socio-economic and cultural background of the specific region.

$$S = \frac{P}{N}$$

Where,

S = Average size of population of rural settlements in a circle,

P = Total population within circle,

N = Total number of rural settlements within circle.

Average Population Size, Areality, Total population, No of Rural Settlement in Daund tahsil.

S r. N o.	Circle	1991				2001				2011			
		Total Popul a tion	No of Ru ral Set tl.	Ave rage Pop ula tio n	Are alit y Km 2	Total Popul a tion	No of Ru ral Set tl.	Ave rage Pop ula tio n	Are alit y Km 2	Total Popul a tion	No of Ru ral Set tl.	Ave rage Pop ula tio n	Are alit y Km 2
1	Rahu	37703	20	1885 .15	3.4 4	41765	17	2456 .76	3.3 2	46310	17	2724 .11	3.3 2
2	Yawat	37191	18	2066 .16	3.5 7	56882	21	2708 .66	3.3 7	65710	21	3129 .04	3.3 7
3	Kedgao n	56274	23	2446 .69	3.6 0	50640	16	3165	3.5 4	56791	16	3549 .43	3.5 4
4	Patas	-	-	-	-	61540	16	3846 .25	4.2 8	66735	16	4170 .93	4.4 0

5	Daund	61910	21	2948 .09	3.6 5	51162	18	2842 .33	3.0 2	47696	17	2805 .64	2.9 8
6	Ravangaon	37563	21	1788 .71	4.0 3	37195	15	2479 .66	4.0 3	40941	15	2729 .4	4.2 2
	Daund Tahsil	23064 1	103	2239 .23	3.6 6	29918 4	103	2904 .69	3.6 2	32418 3	102	3178 .26	3.6 4

Resource- Computed by researcher.

The average population per rural settlement is shown in table. It is clearly shows that area of Daund tahsil is occupied by southern part is mountainous or undulating area and Northern and north west also occupied by Bhima and Mula mutha river catchment area, medium black cotton soil. In the study area is close to Pune city, so transport facility is very strong in region. National highway no.65 (NH 9) and Central railway line in goes to central part of tehsil all circle, remaining Rahu circle. New Mula mutha canal Irrigation facility is very strong in study area. In 1991 census, Daund tahsil is 5 circle. The highest average size of population is Daund circle and it is 2948.09 persons per rural settlement. The lowest average size of population is Ravangaon circle and it is 1788.71 persons per rural settlement and Rahu circle is 1885.15 persons per rural settlement. The medium average size of population is Yawat circle is 2066.16 and Kedgaon circle is 2446.69 persons per rural settlement. The average size of population is 2239.23 persons per rural settlement in Daund tahsil. In 2001 census, Daund tahsil is 6 circle. The highest average size of population is Patas circle and it is 3846.25 persons per rural settlement. The lowest average size of population is Rahu circle and it is 2456.76 persons per rural settlement and Ravangaon circle is 2479.66 persons per rural settlement, Daund circle is 2842.33 persons per rural settlement. The medium average size of population is Yawat circle is 2708.66 and Kedgaon circle is 3165 persons per rural settlement. The average size of population is 2904.69 persons per rural settlement in Daund tahsil. In 2011 census, Daund tahsil is 6 circle. The highest average size of population is Patas circle and it is 4170.93 persons per rural settlement. The lowest average size of population is Rahu circle and it is 2724.11 persons per rural settlement and Ravangaon circle is 2729.4 persons per rural settlement, Daund circle is 2805.64 persons per rural settlement. The medium average size of population is Yawat circle 3129.04 and Kedgaon circle is 3549.43 persons per rural settlement. The average size of population is 3178.26 persons per rural settlements in Daund tahsil. The size of the rural settlements is well-defined by many geographers. Rural Settlements According to Areality is derived with using the following formula –

$$A = \sqrt{\frac{Ra}{N}}$$

Where,

A = Areality in km².

Ra = Rural area of circle in km².

N = Total number of rural settlements within circle.

With using this formula of areality is calculated of sub division means circle of study area. The areality in Daund tahsil is uneven in 2011 census. It is ranging from 2.98 km² in Daund circle and 4.40 km² in Patas circle. In Rahu circle, is 3.32 km², in Yawat circle 3.37 km², Kedgaon circle 3.54 km² and Ravangaon circle 4.22 km². Areality is very low found in the Daund circle. This circle acquired only 151.637 km² area and the 17 rural settlements in the circle. The high areality Daund tahsil circle like Patas circle, obtainable area is 310.686 km² and number of 16 rural settlements. The areality of circle Ravangaon is second largest areality in study area. In study area the medium areality circle name is Rahu, Yawat and Kedgaon circle.

Conclusions

The average population per rural settlements is shown in table. It is clearly shows that area of Daund tahsil is occupied by southern part is mountainous or undulating area and Northern and north west also occupied by Bhima and Mula mutha river catchment area, medium black cotton soil. In the study area is close to Pune city, so transport facility is very strong in region. National highway no.65 (NH 9) and Central railway line in goes to central part of tahsil all circle, remaining Rahu circle. New Mula mutha canal Irrigation facility is very strong in study area. In 1991, 2001, 2011 census show the increase of population, increase circle, increase rural settlements in study area, but areality are constants.

In the study area, 1991 census only 5 circle, but 2001 and 2011 census 6 circle in study region. In the study area the areality is very slowly changes, because of population increase and new circle and rural settlements created.

References

1. Haggett, P. (1965): - 'Location Analysis in Human Geography', Arnold Publication, London.
2. Singh, S. (1997): 'Geomorphology and Rural Settlement in Arid Environments'. J, vol –
3. XLIV, NO-2.

4. Pawar D.H. and Patil Swati V. (2010): "Spatial Characteristics of Rural Settlement: A Case Study of Panhala Tahsil". *Goa Geographer*, VII (1): 72-76.
5. Powell, Baden, B.H. (1892), *Land systems of British India*, London Vol. P.97.
6. Dr. Chimangunde V. S. & Assit.Prof. Parkhe S.B, (2021 January), *The Geographical Analysis of Rural Settlements History with Prefix- Suffix in Daund Tahsil, Pune district.*
7. (M.S.) Vol. III. Akshar Wangmay.
8. Blache, Vidal de La. (1926), *Principles of Human geography*, New York, P.316.
9. Kumbhar, A. P. (1997): 'Rural Habitat (A study of Rural Settlement in Nira Valley)', Sumeroo Prakashan, TilaknagarDombivli (East) Thane.
10. District Census Handbook. (Pune District - 2011, 2001, 1991. Maharashtra.)
11. Census of India, (2011), "Registrar General of Census Report", Government of India, New Delhi.(Daund tahsil, Pune district, Maharashtra.)
12. Socio-Economics review and District statistical Abstract of Daund tahsil, Pune district. (2011, M.S.).
13. District Gazetteer of Pune district. (M.S.)
14. Topo sheets of Daund tahsil, Pune district, Maharashtra. (Survey of India)