

Dhar, District of Madhya Pradesh: A Geographical Analysis of Its Native Tribal Population

Oshin Tiwari^{1*}, Dr. Chhaya Pandey²

¹ Research Scholar, Madhyanchal Professional University, Bhopal

Email: oshintiwari189@gmail.com

² Supervisor, Department of Geography, Madhyanchal Professional University, Bhopal

Abstract - Humans accelerate evolution. With his abilities, knowledge, and proactive attitude, he converts raw resources into completed items that satisfy his demands. Producers may increase output and growth. This is efficient, tech-savvy, and fundraising. Consumption is his job while buying. Production and consumption skills strengthen mind and body. People manage the economy and environment. The distribution of these clusters affects growth. One must comprehend human features to understand a place's evolution. This paradigm has examined demographic issues impacting agricultural productivity. Land resource strain is assessed by population distribution, particularly in rural areas. Best person allocation is desired. Geographic factors that enhanced population are examined next. A population's cultural features affect labour force quality and quantity.

In 2011, the Dhar population was 21,84,672, or about 3% of the state. The population census ranks this district eighth in Madhya Pradesh by density. The investigated region contained 268 people per square kilometre, above the state average of 236. This 8,153-square-kilometer area makes up 2.64% of the state. The global population is 10,70,405 women and 11,14,267 men. Comprise the population. This municipality has 961 women per 1000 males, above the state average of 930. The ratios above state average. 83.88 percent reside in rural regions, 16.12 percent in cities.

Stochastic distributions exist in urban and rural areas. More than 77.71% work in agriculture. Population is 83.87 percent rural. Ecology affects agriculture's physiological processes and spatial maturation. It's important to have suitable land. Terrain, soil, and weather determine region suitability. Thus, arable land, water storage, and rainfall support large populations. Small populations live on undulating, scattered terrain with poor, erosion-prone soil unsuitable for cultivation.

Keywords - Madhya Pradesh, Dhar, Population, Density, Sex ratio, Ecology, Agriculture

----- X -----

INTRODUCTION

The impact of human beings is the primary driving force behind the acceleration of the evolutionary process. Through the application of his specialised knowledge, understanding, and proactive approach, he transforms natural raw materials into finished goods that meet his specific needs. The aforementioned producer exhibits a high level of proficiency in revitalising the production process and optimising its capacity for expansion. The aforementioned demonstrates elevated levels of efficiency, actively contributes to the advancement of technological innovations, and amasses financial resources. Moreover, he fulfils the role of a consumer while engaging in the purchase of goods and services. There exists a noteworthy correlation between an

individual's aptitude in production and consumption and their levels of physical and mental resilience. Collective efforts are employed by human beings to organise both the environment and the economy. On the other hand, the degree of dispersion of these clusters within a particular region has a significant impact on the development of that area. Acquiring a thorough understanding of human traits is essential in order to obtain a deeper understanding of the development of a particular area over time. This particular framework has been utilised to investigate various human demographic traits that are thought to have an impact on the expansion of agricultural production. The current investigation entails an examination of the dispersion of individuals, specifically those inhabiting rural regions, for the purpose of assessing the degree of strain imposed

on the land resources that are accessible. The primary goal is to determine the optimal allocation of individuals. Following that, an analysis of the geographical elements that have contributed to the population growth follows. In addition, an analysis has been conducted on the diverse cultural characteristics of the population that impact the quality and quantity of the labour force.

The size of the populace

Based on the 2011 data, the populace of Dhar was recorded at 21,84,672 individuals, constituting a proportion exceeding 3% of the entire population of the state. According to the population census, this district is positioned as the tenth most densely populated district in the state of Madhya Pradesh. The area being analysed demonstrates an average population density of 268 persons per square kilometre, which exceeds the comparable state mean of 236 persons per square kilometre. The geographic area under consideration encompasses 8,153 square kilometres, constituting 2.64% of the entire state's land area. The worldwide populace is composed of 10,70,405 females and 11,14,267 males. Together, they form the population. At this specific geographic location, the ratio of females to males is 961 to 1000, surpassing the state's mean of 930. The ratios in question demonstrate a noteworthy rise when compared to the average of the state. The demographic distribution indicates that a significant proportion of the populace, precisely 83.88 percent, inhabit rural localities, whereas a mere 16.12 percent of individuals dwell in metropolitan areas.

The District's population has demonstrated a decennial growth rate of 25.53%, which exceeds the growth rate of the state, currently at 20.30%. The literacy and education rates of the population were marginally lower than 60.57 percent in the year 2011. The proportion in question demonstrates a lower value in comparison to the mean proportion of the state in 2011, which was documented as 70.63 percent. In 2001, a considerable percentage of the labour force, precisely 57.04 percent, engaged in agricultural activities as their principal means of livelihood. During that period, this particular occupation was the most prevalent, and there was only a restricted amount of variation noted. The unavailability of the census data for the year 2011 is a significant observation. The data indicates that a significant proportion of the blocks in the district, precisely seven out of thirteen, have a higher proportion of residents belonging to a Scheduled Tribe compared to the national average, constituting a majority of 54.5 percent. The identification of various blocks is presented in the 2001 report. These blocks include Bagh (90.16%), Dahi (85.43%), Bankaner (78.16%), Gandhwani (76.74%), Tirla (71.78%), Kukshi (61.6%), and Sardarpur (59.63%). The primary economic activities in the region are limited to agriculture and animal husbandry.

Population distribution is a term used to describe the way in which individuals are arranged within a

particular geographical region. The spatial distribution of the population within the neighbourhood exhibits a notable degree of unevenness. After conducting an examination of the block-level population and area statistics from 2001, it is evident that the Dhar and Kukshi Tehsil make up a substantial proportion of the district's overall population, comprising more than 50% or 45.29%, while the remaining five Tehsils are accountable for the remaining 54.71% of the district's total population.

The occurrence of a stochastic distribution pattern has been documented in both urban and rural settings. The agricultural sector constitutes the primary source of employment, with a majority of the workforce, accounting for over 77.71% of the total workforce. Furthermore, a substantial segment of the populace, comprising 83.87 percent, dwells in rural localities. The spatial arrangement of agricultural activities is contingent upon the ecological variables that exert influence on their physiological processes and maturation. The primary consideration to be taken into consideration is the potential of the land, which is determined by its suitability. The appropriateness of a region is impacted by various elements, including the terrain, characteristics of the soil, and atmospheric circumstances. Hence, areas that possess arable lands capable of supporting crop cultivation, demonstrate significant water holding capacity, and receive adequate rainfall have the capacity to sustain high human population densities. On the other hand, areas that have rolling landscapes and broken topography, and are known for having lower quality soil that is prone to erosion and less suitable for farming, tend to support a small or very small population. Areas of this nature generally demonstrate a reduced concentration of inhabitants. The distributional pattern is subject to alterations as a result of the resources associated with agricultural pursuits.

The region showcases a varied range of rural settlement forms and distribution patterns. The designs have been shaped by diverse physical factors, such as topography, hydrology, geomorphology, soil properties, and additional variables. Various socioeconomic factors, such as land utilisation, crop interrelationships, modes of transportation, and communication, have contributed to the configuration of population dispersion, alongside the physical elements that have also exerted an influence. The process of selecting population centres in the middle region that are spatially distributed has been significantly impeded by the existence of rocky terrain, forested areas, and challenging water supply methods. Throughout history, the strategic placement of human settlements has been significantly influenced by the presence of rivers. The characteristics in question are not exclusive to any particular region, as evidenced by the presence of said characteristics in the Tehsils of Badnawar, Sardarpur, and Dhar. Consequently, these tehsils harbour a considerable number of populated regions. The reason for this

phenomenon can be attributed to the presence of flat topography, fertile soil, and adequate irrigation facilities in these regions. The topography of the Vindhya range and the Narmada Valley is distinguished by ruggedness, forest cover, and fragmentation. These areas are characterised by a low population density and numerous small communities. The Malwa Plateau is home to the tehsils of Badnawar, Dhar, and Sardarpur. The regions of Kukshi, Manawar, Gandhiwani, and Dharmapuri are situated on the Vindhyan scarp and the Nimar upland, correspondingly.

The tehsils of Dhar, Kukshi, Manawar, and Sardarpur are characterised by a relatively low population density. Apart from the aforementioned regions, there exist a few insignificant groupings of sparsely inhabited tracts situated within the enclaves of the Vindhyan Escarpment and the Malwa plateau. A considerable portion of the region's total area is comprised of lands that have been deserted. The agricultural sector is impacted not only by rural areas but also by urban centres. The provision of sustenance, specifically food items that are susceptible to decay, is facilitated by the agricultural region in close proximity to urban residents. The agricultural industry additionally provides raw materials to a significant number of urban enterprises.

Population density

The term "population density" may be used to describe the number of individuals residing within a specific geographic location. This method represents the simplest approach to conveying the population's relative association with natural resources, particularly land. The assessment of population density on land has been accomplished through the utilisation of mathematical and nutritional densities, which have been calculated and demonstrated. The relationship between the population's arithmetic density and the overall area and populace is interdependent. The nutritional density is an indicator of the level of strain experienced by the rural populace in relation to each unit of net cultivated land. To enhance comprehension of the demographic pattern's geographical features and its implications for research, it may be advantageous to initially present a concise summary of the diverse population density patterns that can be observed in rural areas.

The present discourse concerns the pattern of arithmetic density.

Arithmetic density is the term used to denote the ratio of land to people. The population density of the neighbourhood is estimated to be 268 individuals per square kilometre. In 2011, this district was ranked 14th among the primary districts in the state owing to its population density, which exceeded the state average of 236 individuals. The population of Tirla Block is 135, while that of Dharampuri Block is 353. Similarly, the arithmetic density's geographical patterns, exhibit a

significant level of population inequality. The utilisation of the Block-wise Density Map clearly illustrates that regions within the city that encompass municipalities or exhibit the greatest proportions of urban inhabitants demonstrate the most elevated densities on the whole. Although the population density of the remaining nine blocks is comparatively lower than the district's average density of 213, it is noteworthy that seven out of the 13 blocks exhibit densities that surpass the district's average. The calculation of density was based on data obtained in 2001, while the population figures for 2011 have not yet been collated.

Population Density

As per the data, the arithmetic density of the region is observed to have a mean value of 213 individuals per square kilometre. Based on the researchers' findings, the mathematical density within the seven block area exhibits a higher value compared to the overall district. The localities of Dharampuri 353, Dhar 294, Kukshi 272, Manawar 268, Nalchha 241, and Nisarpur exhibit the highest population density in this classification, measured in individuals per square kilometre. Bankaner is the urban block exhibiting the second highest population density. The Dharampuri Block exhibits the highest population density in the district, with a concentration of 353 individuals per square kilometre of land. The Blocks are distributed within pockets located in the southern and southeastern regions of the district. The soil in this region is highly fertile and plays a substantial role in the agricultural output of the district, rendering it one of the most productive regions in the area. The Narmada valley, also referred to as cotton soils, and the strategically designed agricultural practises have facilitated the support of significant human populations in these areas. The implementation of irrigation has proven advantageous to the local area. The potential carrying capacity of most Blocks in this category can be increased through the cultivation of agricultural crops with a substantial net sown area.

Low population concentrations refer to areas with sparse human settlement and a relatively small number of individuals residing within a given geographic region.

As per Plate 2.1, the mean density of the blocks of smaller size in the region is comparatively lesser than the mean density of the remaining blocks. The localities with the least arithmetic density are Tirla 135, Sardarpur 163, Bagh 175, Badnawar 186, Dahi 194, and Gandhwani 195. Tirla 135 exhibits the lowest population count in its entirety. The aforementioned blocks constitute a plateau that has undergone fragmentation, resulting in areas characterised by rocky terrain and uneven elevations. Consequently, the regions in question exhibit a low carrying capacity. Furthermore, these

regions exhibit a dearth of both agricultural and mineral resources.

Nutritional density

As per Sharma's (1992) findings, the impact of population pressure on net planted area is more significant in rural areas compared to urban areas. Nutritional density, which is also referred to as the mancropped land ratio, serves as a measure of the level of population pressure that is imposed on rural regions per unit of net sown area. Consequently, it would function as a more dependable indicator of the strain that human population exerts on the planet's resources. The mean population density in rural regions is 291 individuals per square kilometre. What is the proportion of the net-planted area in relation to the total area of the district? The Dhar block accommodates a total of 196 individuals, resulting in a population density of 464 persons per square kilometre. Within the Dahi category. The district had an average nutritional density of 291 persons per square kilometre, while eight neighbourhoods in the region exhibited nutritional densities that exceeded this average.

The spatial and temporal distribution of nutrients.

As per the data presented in Table 2.1, the nutritional density of the region exhibits a mean value of 290.75, indicating a relatively elevated level. The Dahi block exhibits a nutritional density of 464.33, surpassing that of all other blocks. The district's neighbourhoods have been evaluated for their nutritional density, with the highest score being observed in this particular neighbourhood. Following this, Bankaner, Dharampuri, Bagh, Gandhwani, and Nisarapur have been ranked in descending order of nutritional density, with respective scores of 329.11, 452.75, 362.55, 357.85, and 323.64. The nutrient density among these six blocks exhibits a range from 222.75 to 293.48, with the latter being the highest. Accordingly, the Dhar block exhibited the lowest nutritional density, with a value of 195.88.

The localities situated in the south-west and south-east regions of the district encompass the residential block with the highest nutritional density. The nutritional density reaches its minimum value at the north-eastern boundary of the district, and subsequently exhibits a decreasing pattern towards the northern region of the district. The industrial sector of the metropolitan area of Indore and the city of Pithampur is thriving.

Due to the limited extent of arable land, the population residing in this area is concentrated disproportionately on the cultivated land, which is also minimal in quantity. Conversely, the process of industrialization and urbanisation serves to increase the numerical value of the population density in various locations. In actuality, a significant proportion of these areas exhibit moderate rural densities as opposed to being characterised by low densities. There were epochs during which a comparatively significant percentage of

the terrain was sown. Consequently, the rural population exerts minimal or negligible pressure on the overall net planted area.

The phenomenon of human population growth.

The quantitative and qualitative impacts of food demand and supply are significantly influenced by the dynamics of urban and rural population growth, as well as alterations in socioeconomic population structures (F.A.O., 1993: 230). The aforementioned dynamics exert an impact on the uptake of agricultural innovations, which in turn are subject to their influence. Consequently, the topic of population growth in this particular area will be deliberated upon herein.

The population of Dhar experienced a significant increase from 2,93,103 in 1901 to 21,84,672 in 2011. The population has experienced a significant increase. Since 1901, there has been a significant increase in the total population, which has grown by a factor of 645 percent. Similarly, the population of Madhya Pradesh has also experienced a notable increase, with a growth rate of 473 percent. The district's mean yearly growth rate is 1.62%, surpassing the state's average growth rate.

The temporal and spatial dynamics of population growth patterns.

There exists a notable disparity in the rates of population growth between rural and urban regions. The proportion of individuals residing in rural regions relative to the overall populace is declining at a concerning pace. A periodic growth is demonstrated in population at 10-year intervals. There was an upward trend observed between the years 2001 and 2011.

Over the course of the last decade, there has been an annualised growth rate of 2.73 percent in the population residing within the district. Specifically, the population has increased from 17,40,329 individuals in 2001 to 21,88,672 individuals in 2011. The district's population experienced a growth rate of 25.53 percent over the course of the previous decade, surpassing the state's growth rate of 20.30 percent by a significant margin. The urban regions exhibited a significantly greater rate of population growth as compared to their rural counterparts. The decadal growth rate in Nalchha Block was 8.08 percent, which is notably lower than the growth rate of 32.75 percent observed in Dhar Block. The block-by-block analysis conducted indicates a noteworthy degree of variability in the rate of population growth. The blocks of Dhar, Bagh, Manawar, Tirla, and Nisarapur exhibited the most substantial growth rates within the district, with values of 32.75, 31.37, 28.63, and 27.87, respectively. The geographical region under consideration was comprised of a sum total of thirteen blocks. In the year 2001, it was observed that eight blocks exhibited growth rates that were below the district's mean value of 27.27.

Locations experiencing rapid population growth.

Plate 2.3 unambiguously indicates that there has been a substantial increase in population in the southernmost blocks of the district in recent times. Dhar Block exhibits a growth rate that surpasses the district's average by 32.75 percent, thereby distinguishing itself. The significant escalation in the growth rate of this particular region can be ascribed to several factors, such as a substantial net sown area, support from irrigation systems, fertile agricultural land, industrialization, and urbanisation.

Regions experiencing a lack of population growth or a decrease in population.

There exist eight localities exhibiting growth rates below the district's mean value of 27.27%. The district's Northwestern, Southeastern, and Southwest sections are the primary locations where the most notable concentrations of these blocks can be observed. The Nalchha Block exhibits the most minimal population growth rate in the district, amounting to 8.08%.

The aforementioned regions exhibit a topography that is characterised by rugged and steep terrain, however, they lack any agricultural resources. The limited presence of industrial establishments in these communities results in a relatively moderate carrying capacity.

Distinctive features that are specific to the sex ratio of a given population.

As per Smith's (1966, 181) assertion, the gender makeup of a given society exerts a significant influence on various crucial socioeconomic interrelations. The gender ratio in India refers to the numerical representation of females per thousand males in the population. The gender distribution within the district has consistently exhibited a disproportionate representation of males, thereby creating an unfavourable environment for the female populace residing in the region. The district exhibits a gender ratio of 961, surpassing the state's average of 930 in 2011. The district was ranked 15th among the primary districts in the state in 2011. The gender ratio in this district is comparatively higher in favour of males when compared to neighbouring districts including Nimach, Rajgarh, Ujjain, Umaria, Sidhi, Burhanpur, Katni, Khandwa, and Dewas.

The aforementioned locations include Jabalpur, Shajapur, Harda, Rewa, Satna, Indore, Sehore, and Narsinghpur.

The aforementioned locations include Hosangabad, Bhopal, Guna, Sheopur, Tikamgarh, Singroly, and Damoh.

The aforementioned regions encompass Ashoknagar, Raisen, Vidisha, Sagar, Chhatarpur, Shivpuri, Datia,

Gwalior, and Morena districts, along with Bhind. The variation in the aforementioned phenomenon is contingent upon an individual's age bracket and other relevant demographic subdivisions. Historically, the proportion of males to females residing in urban areas has consistently been lower than that in rural areas. According to data from the year 2001, the gender ratio in rural areas was 971 females per 1,000 males, while in urban areas it was 872 females per 1,000 males. The primary reason for the significant disparity in birth rates is attributed to migration patterns that exhibit gender preferences from rural to urban regions. The gender composition of a population has an impact on the engagement levels of various subgroups within the population.

The spatial distribution of male-to-female ratios.

The gender distribution disparity observed in space is significantly pronounced. The Bagh block exhibits a higher count of 991 distinct inhabitants, in contrast to the Dhar block which manifests a lower count of 938 unique residents. At the tehsil level, Sardarpur tehsil exhibited the highest rural sex ratio of 989, whereas Dhar tehsil had the lowest rural sex ratio of 948. According to data from the year 2001, the sex ratio in urban areas varied between 825 and 958, with Dhar tehsil exhibiting the lowest ratio of 825 and Kuksi tehsil exhibiting the highest ratio of 958.

Out of the total of thirteen blocks, a majority of eleven blocks exhibit a higher female-to-male ratio as compared to the district's average ratio of 954. Conversely, only two blocks demonstrate a lower female-to-male ratio. A gradual decrease in the male-to-female ratio when moving from the northern and northwestern regions towards the southern and southeastern regions.

Regions exhibiting a high male to female ratio.

The sex ratio in most of the eleven blocks situated in the southern and southwestern regions of the district exceeds the district-wide average. The Bagh block in the district exhibits the highest female-to-male population ratio, with 991 women per 1,000 men.

Indigenous individuals reside within the confines of these eleven city blocks.

Regions with a low proportion of females to males.

This category comprises of two distinct groups, namely the Nalchha and the Dhar. The Nalchha group has a female to male ratio of 947 to 1,000, while the Dhar group has a female to male ratio of 936 to 1,000. The aforementioned blocks are situated in the eastern region of the district's locality.

In areas where the ratio of males to females is low, women are less likely to require employment as a means of supporting themselves. Conversely, in

areas where the ratio of males to females is high, women face challenges in both securing male companionship and obtaining financial stability. Conducting a study on the levels of participation would elucidate this presumption. Tiwari posits that the sex ratio pattern exerts a significant impact on the social conduct and participation level of females. This discovery is a result of the research conducted by Tiwari. Tiwari (1979) has reported that regions with a significant population of scheduled caste and scheduled tribe exhibit elevated sex ratios.

CONCLUSION

The population density of Dhar exceeds the already elevated national average. The nutritional density of 291 individuals per square kilometre of net sown land is considered to be high. The statement suggests that individuals have been provided with sustenance. The population density in the given area is 213 individuals per square kilometre. The Vindhyan Mountains serve as a natural barrier, dividing the Nimar plain and Malwa plateau. The Malwa plateau, characterised by its abundant vegetation, is situated to the north of the aforementioned mountains. It spans an elevation ranging from 450 to 800 metres. According to statistical data, a significant portion of land remains uncultivated for agricultural purposes, placing additional strain on the limited amount of cultivated land. The southern region is characterised by the presence of elevated mountain ranges that slope downwards in the direction of the Narmada River. The elevation of this site is approximately 240 metres above sea level. Low-population areas exert pressure on farmland resources. Certain regions are experiencing significant agricultural expansion, leading to an increase in their population capacity. In order to achieve faster economic growth than population expansion, it is necessary to consistently and purposefully dedicate efforts towards this goal.

The presence of physiocultural traits imposes limitations on human resources. The demographic of young individuals constitutes approximately 50% of the total population, resulting in a potential scarcity of financial and material resources. Approximately 50% of the population consists of individuals in the younger age bracket. The issue of illiteracy, especially among women, is a significant demographic concern. The issue is further exacerbated by the comparatively low education rates among Scheduled Tribes.

According to the data, it is found that 57.04% of the primary workforce is engaged in the agricultural sector. With the exception of the agricultural sector, there is a limited representation of women in other industries. The practises of forestry and cattle husbandry require significant physical effort. The majority of individuals are employed in the commerce sector and related industries. The allocation of work in several countries is influenced by caste.

The analysis entails evaluating the ages, genders, and additional demographic characteristics of the residents

in order to ascertain the level of adoption of agricultural development. According to Sharma (year), food-collecting societies necessitate members with contrasting characteristics. The presence of these perspectives diverts individuals' attention away from the advancements made at the local level. The absence of apathy is essential for the continuous progress of civilization. The non-tribal population faces challenges in modernising their agriculture and lifestyle due to limited external connections, which result in a lack of expertise, motivation, and resources. Non-tribal individuals experience limited external interactions, leading to various challenges. Despite the government's efforts to introduce new technologies and promote progressive values, the population in question continues to fall behind in terms of technological advancements and societal progress. The agricultural growth of the region is contingent upon effective population planning.

REFERENCES

1. Sharma, S.K., 1992, Resource utilization and Development A Perspective Study of Madhya Pradesh, India, New Delhi, Northern Book Centre, pp.21,24.
2. F.A.O., 1993, "Integration of Population Factors into Agricultural and Rural Development Policies : Future Needs in Population Policy and programmes, New York, United Nations, pp.229-234.
3. Smith, T.L., 1966, Fundamentals of Population Study, New York, Lippincott, p.81.
4. Tiwari, V.K., 1979, Population of Betul-Chhindwara Plateau - A Geographical Analysis, Unpublished Ph.D. Thesis, Sagar University, Sagar, pp.11920, 141-144.

Corresponding Author

Oshin Tiwari*

Research Scholar, Madhyanchal Professional University, Bhopal