

LEVELS OF DEMOGRAPHIC DEVELOPMENT AND DISTRIBUTION OF SOCIAL AMENITIES

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ABSTRACT

Evolution of demographic development in population geography requires analysis of cause-effect and application of cartographic techniques. Population of any region has two fold relevance to development. Population is an integral part of the resource base and also an outcome of development. Development can never be conceived without population and its requirements. The inter-relation between man and development is dynamic which constantly changes with innovations and discoveries. Such a dynamic relationships are clearly visible both in temporal and spatial perspectives.

Keywords: Demographic Development, Population Geography, Cartographic Techniques.

Introduction

Population characteristics are clear expression of the levels of development. Fertility and mortality rates of population are generally emphasised as indicators of demographic development.

To analyse demographic development following 11 indicators have been used. These variables are given in the parenthesis.

Density of Population

- Density of population combined
- Rural density

Sex Ratio

- Sex ratio

Literacy

- Literacy total
- Female literacy
- Rural literacy
- Rural female literacy

Work Force

- Main workers (male)
- Main workers (female)
- Marginal workers (male)
- Marginal workers (female)

Description of the Indicators

Demographic dynamism is a vital aspect of population geography. There are varying patterns of population distribution in different areas. The components of population changes determine the demographic character of 'places'.

Areal patterns of population growth clearly shows the changing economic potentialities of different areas. The growth of population is also helpful in the study of different demographic attributes.

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Density of Population and Rural Density

Man and land are the core elements of the society. Number of persons in proportion to land is a major consideration in population. Thus it has always been found essential to analyse the distribution of population in terms of land.

Density of population in the area is 247 persons per sq.km., which is more than the State average (100 persons/square km) and more than the National average (221 persons per sq km). Jaipur district average is 215 persons per square km. The highest density in the region is 782 persons per sq. km. in Shahpura town. The lowest density is 7 persons per sq. km. in Chak-Sanga-Ka-Was. The mean of the total population density is 247.04.

Rural density shows more or less the same picture. The rural density is 239 per square kms. The highest density (582) is found in Amarpura village and the lowest (7) in Chak Sanga-Ka-Was. The mean of rural density is 239.10.

Density of Population (Rural)

Density	Below 150	150- 200	200- 250	250- 300	300- 350	Above 350
No. of village	14	13	15	7	8	14

Above table displays that 60 per cent villages of the study area have rural population density below 250 persons per square km. All the above-mentioned tehsil fall in the fertile alluvium soil regions. Irrigation facilities, power supply, transport facilities and growth of new industries have accentuated the development of population.

Sex-Ratio

Shahpura tehsil shows that sex-ratio is averse to women. Peeplod village is the least populated village. It has the lowest sex-ratio of 773 and the highest is 1066 in Majipura village. The sex-ratio over the entire region is 925 with 68.09 Standard Deviation and 7.36 per cent variability.

Literacy and Female Literacy

Literacy is an important characteristic of population. The degree of education is a measure of its progress towards modernisation. Demographic attributes reflect the level of sophistication, socio-economic position, the degree of cultural upliftment and information on the parts of individuals. In this sense education status has a wide and direct relevance ranging from measurement of fertility, mortality and other demographic events to inventories of human resource and possibilities of systematic social change. Consequently literacy and education status of individual of a society serve as one of the best indicators of quality of population. Lastly the progress of literacy and education is often responsible for changing employment and occupational pattern and also accelerates mobility of population. Generally a literate person makes himself a more productive labourer in a factory, a more progressive farmer keen to use new knowledge in farm operation.

The average literacy in Shahpura tehsil is 20.05 per cent according to Indian Census (1981). Highest literacy was 34.57 per cent in Amarsar village and the lowest is 7.57 per cent in Shakatpura. And Shahpura tehsil literacy mean is 20.05 per cent with 6.16 Standard Deviation and 30.75 per cent variability.

Female literacy rate is the most important factor affecting fertility pattern and women attitude to family size (Srivastava, I.C., 1983). Rajasthan is a highly backward region where literate female population is too low. The mean of female literacy is 2.09 per cent with Standard Deviation of 2.006 and variability of 95.99 per cent. Again the highest female literacy rate is in Amarsar (8.90%) and the lowest is in Gona-Ka-Sar (0.16%).

Rural Literacy and Female Literacy

78.84 per cent of the entire population of the area under study live in rural areas. Thus, it is essential to promote literacy in the rural areas.

The average literacy in rural part of Shahpura tehsil is 19.50 per cent with 5.96 per cent Standard Deviation and 30.56 per cent variability. The maximum literacy (34.57%) is observed in Amarsar village of Shahpura tehsil and the lowest (7.57%) in Shakatpura village. Rural female literacy average is 1.25 per cent, Standard Deviation is 1.89 and C.V. 97.05 per cent. The highest female rural literacy is in Amarsar (8.90%) and the lowest female literacy is Gona-Ka-Sar (0.16%) village.

Work-Force (Main Workers and Marginal Workers, Male & Female)

Occupation is the most significant social attributes influencing man's life. It reflects the degree of employment and exerts influence on social, on social, economic and demographic character of the population. In the area under study male workers predominate in the working population. The portion of male workers to main- workers is 48.58 per cent. The female workers proportion is only 3.06 per cent. Male workers of the region are more than 50 per cent main-workers whereas only 3.06 per cent female workers are in the working population. Figure 5.8 and 5.9 shows that the highest male and female main workers are 31.55 per cent and 18.10 per cent in Chhaterpura and Ghasipura. And the lowest male and female main-workers 10.00 are and 0.12 per cent in Chak-cent per Dhelawash and Mamtori Kalan. Male main-workers mean is 23.01 per cent with S.D. 5.83 per cent and the variability of 25.35 per cent. Female main-workers average is 1.80 per cent with 3.59 Standard Deviation and the C.V. is 199.49 per cent.

Very small proportion constitutes marginal workers in the Shahpura tehsil. Figure 5.10 and 5.11 displays the highest male marginal workers percentage being 7.59 per cent in Dhelawas and the lowest is 0.11 per cent in Kant. The average of marginal workers (male) is 1.10 per cent with the standard deviation 1.59 per cent and C.V. 145.20 per cent. Highest marginal workers (female) is observed 25.00 per cent in Chak-Sanga-Ka-Was and the lowest is 0.13 per cent in Lakhni. The average of marginal workers (female) is 9.28 per cent. Standard Deviation of the female marginal workers is 6.61 per cent. The coefficient of variation is 71.24 per cent.

Distribution of Social Amenities

From the very beginning of human civilization, man has tended to concentrate settlements in the most favourable climatic regions so to obtain maximum facilities for his well-being. This tendency has determined man's life style in terms of social interaction and organisation through ages. The socio-economic and demographic characteristics specify the pattern of infra-structural facilities and other amenities. The available social facilities and amenities not only measure the standard and status of a region but also meet its welfare needs and play an important role in the process of integrated development".

In India, in contrast to rural settlements, most of the urban settlements enjoy almost all the social amenities. It had accelerated migration from rural to urban areas. Since there is threshold level in terms of a minimum population for each specific social amenity, each and every amenity cannot be provided in every rural settlement. But this argument deprives small settlements of even the minimum social amenities. Keeping in view this factor, the distributional pattern of social amenities in the villages of Shahpura tehsil has been discussed.

The following are the main facilities which are further classified into sub-categories:

S. No.	Social Facilities Main Categories	Sub-categories
1.	Education	A. Primary
		B. Middle School
		C. High School
		D. Adult Literacy Centres
		E. Others
2.	Medical	A. Primary Health Centres
		B. Dispensary
		C. Others
3.	Communication	A. Post Office
		B. Post & Telegraph
		C. Telephone
4.	Transport	A. Unmetalled Road
		B. Metalled Road
		C. Bus-stop
5.	Drinking Water	A. Wells
		B. Tank water
		C. Hand Pump
		D. Tape Water
		E. Others
6.	Electricity	A. Electricity

Educational Facilities

Education is one of the key factor in the development of any society. The culture, standard of living, occupational structure and mode of production etc. of any region are of any region are greatly affected by the level and standard of education received by the population living in it. It is an accepted fact that the level of education represents the economic status of the population in any region. Hence, the need of education cannot be ignored as far as planning at macro, meso and micro levels are concerned.

Shahpura tehsil is relatively a developed tehsil of Rajasthan. The educational institutions located in the tehsil are primary school, middle school, high school and college.

Primary Schools

There are 53 schools in 73 settlements, covering 72.60 per cent of the villages. The distribution of these schools in different size-class of settlements are as follows:

- There are seven settlements in this category. They have below 200 size-class of settlements without a primary school.
- In the category of 200-499 size-class of settlements there are 11 settlements. Four of them have primary schools, serving 36.36 per cent of the villages.
- In village size-class 500-999, out of total 14 villages, 13 have primary schools, covering 92.85% of the villages.
- In the category of 1000-1999 population size-class of settlements, 19 schools are there in 19 villages.
- In fifth category 2000-4999 population size-class of villages, there were 12 school in 17 settlements, percentagewise it is 70.58%.
- In the last 5000 above population size-class, size-class, there are 3 villages having five schools.

Table 1: Distribution of Primary Schools in Shahpura Tehsil - 1981

S. No.	Size of Villages	No. Villages	No. of Primary Schools	% of Villages having Primary Schools
I	Below 200	9	–	–
II	200-499	11	4	36.36
III	500-999	14	13	92.85
IV	1000-1999	19	19	100.00
V	2000-4999	17	12	70.58
VI	Above 5000	3	5	166.66*
	Total	73	53	72.60

* Shows that some of the village have more than one primary school.

Middle Schools

Like primary schools, middle schools are also important to promote the education of any region. Above Table shows distribution of middle schools in different categories of villages. In all, there are 29 middle schools providing education in 73 villages. The distribution of these 29 schools in different size-class of settlements are uneven. The first two categories have no middle school. Out of 14 villages only one has got two middle schools. 19 villages having population in size-class 1000-1999 only 8 have middle schools. In 17 villages having population size-class 2000- 4999 all have middle schools. Lastly in three biggest villages having more than 5000 persons there are 3 middle schools.

Table 2: Distribution of Middle Schools in Shahpura Tehsil 1981

S. No.	Size of Villages	No. Villages	No. of Middle Schools	% of Villages having Middle Schools
I	Below 200	9	–	–
II	200-499	11	–	–
III.	500-999	14	1	7.14
IV	1000-1999	19	8	42.10
V	2000-4999	17	17	100.00
VI	5000 above	3	3	100.00
	Total	73	29	39.72%

High Schools

The following table shows the distribution of 13 high schools. There are no high schools in villages having less than 1000 population. Out of 19 villages belonging to population class size 1000-1999 only 3 having high schools, seven high schools are located in 17 bigger class-size villages, whereas each of the three largest size villages having more than 5000 people have high schools.

Table 3: Distribution of High Schools in Shahpura Tehsil – 1981

S. No.	Size of Villages	No. of Villages	No. of High Schools	% of Villages having High Schools
I	Below 200	9	–	–
II	200-49	11	–	–
III	500-999	14	–	–
IV	1000-1999	19	3	15.78
V	2000-4999	17	7	41.17
VI	Above 5000	3	3	100.00
	Total	73	13	17.80

Adult Literacy Centres

The following table shows distribution of 15 Adult Literacy Centres in different population size-class of settlements. Percentage-wise 27.27 per cent are in population size-class 200-499, 14.28 per cent in 500-999 size class, 21.05 per cent in 1000-1999 size-class and the highest 35.39 per cent in villages having population size-class 2000-4999. There are also some other educational institutions which include Pre-University Course Training Centres, Sanskrit Schools and College.

Table 4: Distribution of Adult Literacy Centres - 1981

S. No.	Size of Villages	No. of Villages	No. of High Schools	% of Villages having High Schools
I	Below 200	9	–	–
II	200-499	11	3	27.27
III	500-999	14	2	14.28
IV	1000-1999	19	4	21.05
V	2000-4999	17	6	35.29
VI	Above 5000	3	–	–
	Total	73	15	20.54

Medical Facilities

No society is considered to be civilized if it is denied medical facilities. Medical facility contributes substantially in raising the productivity and quality of the working force.

The medical facilities available in the Shahpura tehsil have been examined in this part. medical facilities have been classified into two groups:

- Primary Health Centres and Dispensaries,
- Other medical facilities, like Maternity and Child Welfare Centres, Family Planning Centres, T.B. Clinics, Nursing Homes etc.

Distribution of medical facilities in facilities in total 73 villages, 34 had P.H.C. and Dispensaries and 38 have other medical facilities. The distribution in different population size-class shows that villages of size below 200 did not have any P.H.C. and dispensary. The villages above 500 population are better served by medical facilities. All settlements having population size-class above 2000 have greater medical facilities.

Communication Facilities

Communication is the basic need of development. Communication helps in the spread of ideas, views, easy and quick movement of people. The communication facilities include telephone, post and telegraph services available in the area under study. Out of 73 villages, 43 have post-offices (58.90%). The distribution of post-offices in different population size-class of settlements depict that 20 settlements having less than 400 population are deprived of this facility. In the population size-class 500-999 only 35.21 per cent villages have post-offices. In the population size-class 1000-1999, 13 villages out of 19 have post offices. All the settlements having more than 2000 to 4999 population size-class have post offices, while in three 5000+ population size-class villages there are 5 post offices. Telegraph and phone facilities are available at Manoharpur, Shahpura, Kareeri, Amarsar, Khori with Sherpura. Population of these settlements are more than 4000.

Transportation

Transport is the true index of development. Means of transportation and communication are necessary ingredients of economic and social prosperity. They play key roles in getting land into production, marketing primary and secondary commodities. According to Pandit Jawaharlal Nehru :- "Transport and communication have become the pulse of world and an essential part of the human life and human progress and approaches all the time, measure and university". Transportation has an important impact on industrial development and land utilization hence in the present study transportation facilities are analyse keeping in view their impact on developmental activities. There are two types roads viz., metalled and unmetalled in the area under study. The distribution of villages connected by metalled roads. Only 46.57 per cent villages are connected by metalled roads. The three biggest villages of 5000+ population size- class are served by metalled roads. There is no relationship between size of settlement and metalled roads. All the 73 villages are linked by unmetalled village roads. These rural roads are no less important in the economy of the rural areas, but their up keep and maintenance require a lot of investments which are badly lacking in India. From the above analysis, it is obvious that better transportation facilities are badly needed to connect that small size villages with metalled roads SO as to accelerate the pace of development of the area under study.

Drinking Water Facility

Drinking water facility include wells, tank water, hand pump, tap water and other sources. Out of 73 villages, 3 villages did not have any source of drinking water. Percentage of villages served by different sources of drinking water is as follows:

Wells	:	93.15% villages served
Tank water	:	8.21% villages served
Hand pump water:		26.02% villages served
Tap water	:	27.39% villages served
Other sources	:	10.95% villages served.

Seventy villages have potable wells and tap water. Tap water is available mostly in villages having more than 2000 population

Rural Electrification

Table 5 shows distribution of electrified villages. Most of the villages have electricity mostly used in the operation of tube-wells and flour mills.

Table 5: Distribution of Electrified Villages in Shahpura Tehsil - 1981

S. No.	Size of Villages	No. of Villages	No. of Electrified Villages	Percentage of Electrified Villages
I	Below 200	9	5	55.55
II	200-499	11	7	63.63
III	500-999	14	13	92.85
IV	1000-1999	19	16	84.21
V	2000-4999	17	17	100.00
VI	Above 5000	3	3	100.00
	Total	73	61	83.56

In all 61 villages have electricity which is 83.56 per cent of the total. There is direct and positive relationship of villages electrified and the size of settlement. Out of 73 villages 61 are electrified (83.56%). The distribution of electrification in different population size-class of settlements depict that in the population size-class less than 200, 5 villages out of 9 are electrified. The villages in the population size-class fifth and sixth are completely (100%) electrified.

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