

Spatial and Temporal Variation of Scheduled Caste and Scheduled Tribe Population in Different Arid Districts of Western Rajasthan

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Abstract : The scheduled castes and scheduled tribes together contribute 21.5% of the total population in western Rajasthan. In 1991 census, wide variation was observed in the spatial distribution of scheduled caste and scheduled tribe population and population density in different arid districts. Location quotient method has been used in order to study the concentration of scheduled caste and scheduled tribe population within the study region. Seven districts, namely Churu, Ganganagar, Nagaur, Sikar, Jhunjhunu, Jalor and Pali are the areas of high concentration of scheduled castes whereas, Jaisalmer, Bikaner and Barmer districts are the areas of low concentration. Areas of high concentration of tribal population are Barmer, Jodhpur, Sikar, Jhunjhunu, Jalor and Pali. Here 90.8% of tribal population of western Rajasthan resides. Jaisalmer, Bikaner, Churu, Ganganagar and Nagaur recorded low concentration, where 9.2% of the entire scheduled tribe population resides. Scheduled caste density follows total population density. Jhunjhunu has highest scheduled caste population density (41), whereas, Jaisalmer has minimum (1) population density. In the entire western Rajasthan, the density of tribal population is highest in Jalor (9.1) and least in Bikaner (0.1).

Key Words : Spatial pattern, scheduled caste, scheduled tribe, location quotient method, concentration, density.

Spatial and temporal variations in the density and distribution of total scheduled caste and scheduled tribe population in eleven arid districts of western Rajasthan play a significant role in the field of population geography. Thus, in order to understand districtwise disparities, it becomes inevitable to investigate the most important demographic and human resource dimensions, i.e., the distribution pattern of human beings. Districts included in western Rajasthan are Jaisalmer, Bikaner, Churu, Jodhpur, Ganganagar, Sikar, Jhunjhunu, Jalor, Pali, Nagaur and Barmer.

Materials and Methods

The study is based on the analysis of 1991 census data. Data on scheduled castes and scheduled tribes for 1991 were collected from District Primary Census Abstract, Census Department, Jaipur. Location least quotient

method was used to find the concentration of scheduled caste and scheduled tribes. It is defined as the ratio of the proportion of a particular characteristic in an area to the same proportion in the region. On the basis of least quotients score, the eleven arid districts of western Rajasthan were divided into three categories. Location quotient value above one was higher concentration, between 0.76-1.00 was moderate concentration, and below 0.76 was considered as area of low concentration.

Results and Discussion

Spatial pattern of population distribution

Like general population, distribution of scheduled castes and scheduled tribes also witnessed heterogeneity. In western Rajasthan, as a whole, there were 16 persons per

sq. km of scheduled castes with maximum density in Jhunjhunu (41 persons per sq. km) and minimum density in Jaisalmer (1) (Table 1). With respect to total population, maximum population of scheduled castes was in Ganganagar (23.4%) and minimum in Jaisalmer (1.5%). Scheduled tribe population density was the highest (9.0) in Jalor, followed by Pali (6.5) and Sikar (6.3), and minimum density in Bikaner (0.1). With respect to total population, maximum population of scheduled tribe was in Jalor (21.8%) and minimum in Bikaner (0.7%).

The density of population in western Rajasthan had increased from 65 persons per sq. km in 1981 to 84 persons per sq. km. in 1991. It is clear from Table 1 that scheduled caste and scheduled tribe population distribution in eleven arid districts of western Rajasthan does not follow any fixed pattern. If we study the relationship between population and space, some new facts are observed. Some places are densely and other places are sparsely populated.

Concentration of scheduled caste population

Jaisalmer, Bikaner and Barmer districts were the areas with low concentration of scheduled caste population. The three districts together account for 15.1% of the total scheduled caste, while the area of these districts cover 45.0% of western Rajasthan. From the concentration point of view, these districts can be identified as under developed.

Jodhpur district comes under moderate concentration of scheduled caste population. It accounts for 9.9% of the total scheduled caste population, while the area covered was 10.9% of western Rajasthan.

The area of high concentration includes seven districts namely Churu, Ganganagar, Nagaur, Sikar, Jhunjhunu, Jalor and Pali. These districts have partial irrigation facilities. These districts have 24,84,133 scheduled caste

population which was 74.9% of the total scheduled caste population in western Rajasthan, while the area covered was 44.0% of the total land of western Rajasthan. In Ganganagar district, irrigation is made through Gang Bhakra System. This area, not only in western Rajasthan, but also in whole Rajasthan, has become a centre of population attraction. In Pali district, irrigation was through canals of Jawai and Hemawas dam, which had achieved tremendous success in the field of agriculture as a result of which, concentration of population was more along with agricultural development. In Sikar, Jhunjhunu, Nagaur and Jalor districts, sufficient rainfall, relatively favourable climate, availability of minerals and development of industries were responsible for population concentration. Ganganagar district leads in production of wheat, gram, sugarcane and cotton. Agriculture based industries have also developed considerably. This is the reason for fast increase in population for the last two decades in this region.

Concentration of scheduled tribe population

It is rather difficult to distinguish tribal population on the basis of work and economic conditions, because their habits and actions are not uniform, but numerous scheduled tribes inhabiting the area consist of many "races". Bhil, Mina, Domar, Dhanka, Gorasia, Kathodi, Kokna, Nayaka, Patelia and Sahoriya are the important tribes of the area.

According to 1991 census 4,41,869 or 2.5% of the entire population of western Rajasthan belongs to scheduled tribes. The percentage of these communities was the highest in Jalor district (21.8%). Other districts with high percentage were Barmer (19%), Pali (18.1%), Jodhpur (13.7%), Sikar (11.0%) and Jhunjhunu (6.9%). The scheduled tribe population was highly dispersed in whole of western Rajasthan except Barmer, Jodhpur,

Sikar, Jhunjhunu, Jalor and Pali districts where it had greater concentration as the value of least quotient was greater than unity. These six districts together contribute more than (90%) of western Rajasthan's tribal population. Around 4.01 lacs tribal population live in western Rajasthan. Their largest population was in Jalor (21.8%) and the least in Bikaner district (0.7%). Thus, we may classify the entire western Rajasthan into following three categories of concentration of tribal population.

In Barmer, Jodhpur, Sikar, Jhunjhunu, Jalor and Pali districts, 4,01,047 tribals constituting about 90.7% population of whole of western Rajasthan resides, whereas, the area was 87,924 sq. km, about 42.1% of the entire western Rajasthan. Agriculture is the main livelihood. In the area of six districts, tribals had greater concentration as the value of least quotient is greater than unity.

There was no district in western Rajasthan which falls under moderate category. Jaisalmer, Bikaner, Churu, Ganganagar and Nagaur districts fall under low concentration category. These five districts together cover 40,822 scheduled tribe population, i.e., 9.2% of the entire scheduled tribe population of western Rajasthan. These districts together cover 1,20,827 sq. km area which was 57.9% of the entire western Rajasthan, Jaisalmer, Churu, and Bikaner are sandy with deep ground water and livestock have not yet been able to attract population. Pearl millet, sesame, mung bean, moth bean and wheat were the main agricultural crops of this region.

Density of population

Each district had a limited number of resources. The geographical area, soil, minerals, water, forest resources, industrialization, etc., had finite resources. All these resources are exploited by human beings. In western Rajasthan, we can visualise inequality

in population density (e.g., Jhunjhunu has 264 and Jaisalmer 9 persons per sq. km, respectively). This inequality seems to be the result of combination of many factors.

Density of population depends on combined effects of different factors namely, physical factors, fertility of soils, rainfall, irrigation facilities, economic prosperity of the people and industrial and commercial development. The average density of total population in western Rajasthan had increased from 65 persons per sq. km in 1981 to 84 persons per sq. km in 1991. The density of population in western Rajasthan varied from 9 to 264 persons per sq. km. The most densely populated district of western Rajasthan was Jhunjhunu with a density of 264 persons per sq. km followed by Sikar (238), Nagaur (121), Pali (120), and Jalor (107), while the minimum density was recorded in Jaisalmer, i.e., 9 persons per sq. km.

Density of scheduled caste population

Scheduled caste population density follows the same pattern as that of total population density e.g., Jhunjhunu had highest scheduled caste population density (41). Jaisalmer was the most backward district of western Rajasthan with respect to population density. It had minimum population density (1). Jhunjhunu is the most densely populated by scheduled caste population with population density (41), followed by Ganganagar (38), Sikar (33), Nagaur (24) and Pali (22). Scheduled caste population density of western Rajasthan was 16. The above values clearly indicate the inequality in population density. In seven districts of western Rajasthan, namely, Churu, Ganganagar, Nagaur, Sikar, Jhunjhunu, Jalor and Pali, the scheduled caste population density was more than the western Rajasthan's average population density of 16, whereas, in the remaining four districts, the scheduled caste population density was less

Table 1. Distribution of population and density of general, scheduled caste (S.C.) and scheduled tribe (S.T.) in different districts of western Rajasthan

Districts	Population 1991			Area (sq. km)	Density (Persons/sq. km)		
	General	S.C.	S.T.		General	S.C.	S.T.
Jaisalmer	3,44,571	50,141	16,697	38,401	9	1	0.4
Bikaner	12,11,140	2,25,796	3,195	27,244	44	8	0.1
Barmer	14,35,222	2,25,324	84,232	28,387	51	8	3.0
Churu	15,43,211	3,10,694	7,189	16,830	92	18	0.4
Jodhpur	21,53,483	3,28,920	60,811	22,850	94	14	2.7
Ganganagar	26,22,777	7,75,800	8,945	20,634	127	38	0.4
Nagaur	21,44,810	4,23,273	4,796	17,718	121	24	0.3
Sikar	18,42,914	2,58,201	48,887	7,732	238	33	6.3
Jhunjhunu	15,82,421	2,43,287	30,528	5,928	264	41	5.2
Jalor	11,42,563	2,03,241	96,324	10,640	107	19	9.0
Pali	14,86,432	2,69,736	80,265	12,387	120	22	6.5
W. Rajasthan	1,75,09,490	33,14,314	4,41,869	2,08,751	84	16	2.1

Source : Census of India, 1991. Primary Census Abstract of Rajasthan, Jaipur.

than the average population density of Rajasthan (Table 1).

Density of tribal population

Primary culture, physical environment and tribal population, all are complimentary to each other. In the entire western Rajasthan, the density of tribal population was 2.1. With respect to population density only, six districts namely Barmer, Jodhpur, Sikar, Jhunjhunu, Jalor and Pali of western Rajasthan are important and have higher density (3.0, 2.7, 6.3, 5.2, 9.0 and 6.5, respectively) than the average density of western Rajasthan. The remaining five districts namely, Jaisalmer, Bikaner, Churu, Ganganagar and Nagaur have less tribal population density (0.4, 1.1, 0.4, 0.4 and 0.3, respectively) than that of western

Rajasthan. Districtwise distribution of tribal population was unequal, which indicates that even today the population has its separate and specific concentration zones.

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Reference

Census of India, 1991. Primary Census Abstract of Rajasthan, Jaipur.