

**Sustainable Development for Human Resources in Siwane Basin Hazaribagh,
Jharkhand: A Geographical Analysis**

Dr. Arti Kumari

Co-ordinator, CRC, GMS Chintamanpur, East Champaran, (Bihar) India

Abstract

Population plays a vital role in determining the character of any region. Man was pivotal point from which all other elements are observed and derive meaning and significance. (Trewartha, 1953). This it was population that furnishes the focus. Siwane Basin has a very phenomenal population growth in the rural area, the population increase was normal but within 232 sq. km² area of the basin, evolution of large numbers of town urban population growth is phenomenal. The population of this area experienced a gradual increase in addition the local growth of population due to high birth rate. But since the establishment of Ichak town, populations have phenomenally increased, the population of the basin.

Key Words: Population. Growth, Birth Rate, Basin

INTRODUCTION

Total population of the Siwane basin according to 2011 census is 238467 persons. Rural population is 198353 persons and urban population is 40114 persons. Average density is 1028 persons sq.km. The basin has 158 villages. (Hazaribagh District Profile 2011). The peculiar feature of the population of the basin is that the 16.83% of its population is urban while these urban areas constitute only area of basin. About 83.17% of its population is rural residing 158 inhabited villages. The population of the basin is also variable distributed in different blocks of the basin. Ichak Katkamsandi, Sadar Hazaribagh have 32.10%, 14.92%, 32.10% of the basin total population respectively. Daru, Tatijharia record 12.98 %, 7.90%, 4.29% respectively.

PREVIOUS OF LITERATURE

Praween Kumar Sharma (2004) in his research work on pattern of agricultural development in Hazaribagh district. Jharkhand has been done S.C Bose (1953)

presented natural division of Damodar basin. S.N Prasad (1978) describes the major irrigation projects of Palamu district; P.K. Singh (2004) presented a paper on problem of irrigation in Palamu division, Jharkhand. Basudeo Prasad (2004) describes the water harvesting tanks of Hazaribagh.

R.K. das (2004) analysed the problem of irrigation in Katkamsandi block. S.K. Dangi (2008) has published a paper on impact of irrigation on agricultural development in Barkagaon block Hazaribagh Jharkhand.

OBJECTIVES

The main objective of this study is to investigate the special arrangement and distribution of human resources. Ideally each investigation in human resources should involve four stages, the identification of problems, the collection of relevant data, the formulation of hypothesis and the testing and modification of hypothesis to provide an adequate explanation.

STUDY AREA

The Siwane basin is a region of physical inequalities and presents a panorama of topographic features. Comprising an area of about 232 sq. km. and lying between latitudes 23° 58'30" to 24° 8'15" North and longitude 83° 15'30" to 85° 37'30" East longitude the basin is a part of the Hazaribagh plateau in general and the Damodar plateau in particular.

There are 5 blocks partly within the boundary of Siwane basin. The total area of Siwane basin is 232 Sq.km. constituting of Hazaribagh Sadar, Katkamsandi, and Tatijharia. The Siwane River is the main tributary of Konar basin, which includes a number of tributaries. The basin is distinctly undulating with a Sporadic Hillock. It has geological and structural variations ranging from faulting to intrusions. Thus the area is an interesting geomorphic unit.

METHODOLOGY

This methodology will consist of five major stages:-

- 1 observation and explanation
- 2 preparations of basic maps and components of population distribution in Siwane basin
- 3 Intensive field study

HYPOTHESIS

The present study presents a suitable case for study in population development. Due to degradation of the resource, record phenomenal decrease and population has changed here. The period since 1990-1991 onwards up to the current year of survey records of changes will be highlighted. It is very different for an individual researcher to provide all micro changes that takes place annually. The analysis of population

development will be brought with an interval of 10 years.

DISTRIBUTION OF POPULATION

The distribution of population is governed by the site of settlement. It is directly related to the natural facilities available for cultivation. The most important factor is not rainfall and the facilities for irrigation but the relief of land which determines both the extent of land available for cultivation and the agricultural productivity of soil.

Siwane Basin is unique area of Jharkhand state. There are five development blocks having an area of 22.39 km. There are two agglomerations and three rural area where population has concentrated phenomenally. Ichak, Sadar Hazaribagh, Katkamsandi area, which have the largest concentration of population, constituting 47.63% of the total urban population of the basin. The other urban agglomeration lies in the Ichak development blocks. This urban agglomeration consists of Daru and Tatijharia. This urban agglomeration is named Sadar Hazaribagh where 32.10% of area is concentrated. During the year 2011 this basin recorded a total population of 238467 persons (male 122946 Female 115521) during the census year 2011 this district recorded 198353 persons (male 100420 female 97933) as rural population. The rural population is unevenly distributed in five development blocks of the basin. The total urban population of this basin is 40114 persons according to year 2011 census (male 22526 Female 17588). Sadar Hazaribagh and Katkamsandi with complete lack of urban center records the lowest concentration having only 14.10% and 2.71 % of the basin.

GROWTH OF POPULATION

Siwane basin is a part of Hazaribagh district. The total population of five different blocks of study area in the year 2001 was 165739 persons. Average density of population 1028/sq.km (Johns, erry, 1941,s p.41).

The population in this study area grew very rapidly after 1981 and by 2011 the total population of the basin becomes 10824 persons having a surplus population of 57515 persons. The decadal growth of population of this basin was 53.14 %. However population was 43.88% between 2001 and 2011. In the year 2011 the population of the Siwane basin 238467 persons having a rise of 72728 persons and recording a decadal growth of 43.88% the growth of population in the rural areas of the basin was low till 2011 but afterwards it became higher nearing the average growth rate of population in the basin between 1991 and 2001 the decadal growth of urban population of this basin was 12.01 % in different towns. The decadal growth of population ranged between a minimums of 03.21% and a

maximum of 23.01% is second highest growth with 21.9% decadal growth with trade, transport, and commerce and the Sadar urban area. Whether it is good and bad the urban hubs of this basin record heavy inflow of population higher from rural area of basin or from outside the basin.

DENSITY OF POPULATION

Density of population submits true analytical picture of main land ratio. The total population of the Siwane basin according to 2011 census is 238467 persons, in which 40144 persons are rural and 198353 persons are urban. The total geographic area of the area measured to be 232 sq.km.

The average density of population in Siwane basin is 1028persons/sq.km of land in Ichak and Daru development blocks density is 1004 persons and 88 persons /sq.km respectively. In other three development blocks of the basin, the rural density of population varied between minimum of 666 and maximum of 1004 persons.

Blocks	Sex Ratio	Rural	Urban
Ichak	876	876	
Sadar Hazaribagh	918	915	902
Katkamsandi	861	910	886
Daru	941	941	
Tatijharia	885	885	
Total	915	849	878

OCCUPATIONAL STRUCTURE

The analysis of occupational structure of population of Siwane basin has been based on the census data of year 2011. Workers

are considered those persons who are participating in any economically productive activity. The occupation of any individual refers to his trade, profession and type of work. The occupational

structure of a society is the product of a number of intimately related factors. In the Siwane basin exists a large numbers of categories which have to be correlated a modified to manageable heads.

CONCLUSION

The Siwane basin, with an area of 232 sq.km. is in the Hazaribagh district of Jharkhand state. The average density of the population in Siwane basin is 1028 persons /sqkm. However the density of population is highly variable from area to area. There are 158 villages and 36 panchayat at present. The total population of Siwane basin is 238521 persons in which total male population is 122946 and total female population is 115521. The total urban population is 22526 and total female population is 17588 and total rural

male population is 100420 and total rural male population is 97933 here. The sex composition of families has more striking effects on its working, education, health and other cultural aspects. Although number of two sexes is not widely divergent, their disparity is of interest. The sex ratio is the proportion of men two women in the population at any given time. The numerical measurement of sex composition of population is often expressed in term of sex ratio. This ratio is calculated in different countries. There are at least four ways to records sex ratio. This ratio is calculated in different countries. There are at least four ways to record sex ratio. In countries like Russia and others, it is computed as the percentage of male or female to the total population as under.

REFERENCES

1. Golden Hiltha H (1968) Literacy, international encyclopedia of social science, Vol9, p.412
2. Clarke, John, (1972) Population Geography, Peramon press, Oxford
3. Chandan, R.C (1986) a Geography of population, Kalyani publishers, New Delhi, P161
4. John Erry (1964) Human Geography London P41
5. Mahto. N (2015) Agricultural Development in Jharkhand, Rajesh Publication, New Delhi.pp78-79
6. Census of India, 2011
7. District Census Office, Hazaribagh
8. District Profile, 2011, Hazaribagh
9. District, Block office, Hazaribagh
10. Trewartha, G.T., (1953) A case for population geography "world's pattern annals of the association of American Geographers Vol.43, p.71