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Human Resource Development in Siwane Basin, Hazaribag, Jharkhand; A Geographical Study

ORIGINAL ARTICLE



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Abstract

Population plays a vital role in determining the character of any region. Man was the pivotal point from which all other elements are observed and derive meaning and significance. (Trewartha, 1953). Thus 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 number of town urban population growth is phenomenal. The population of this area experienced a gradual increase in addition to 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, Basin, Urban, Rural, Human Resource, Planning.

Statement of the Problems

It has been rightly called that India is a rich country of poor people, this connotations indicates to the fact that there is an empty treasure of nature resources in India, but the utilization in not being made properly and as per requirement of the present population of the country. According to the human development report 2020 released by UNDP, India occupied 127th rank in world in human resource development. In the view of the importance of human resource development and has been selected for the research purpose in Siwane Basin, Hazaribag, Jharkhand ; A geographical Study.

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. This basin has 158 villages. (Hazaribag district profile 2011). The peculiar feature of the population of the Basin is this that 16.83% of its population is urban while these urban areas constitute only 17.2% area of the Basin. About 83.17% of its population is rural residing in 158 inhabited villages. The population of the Basin is also variable distributed in different Blocks of the Basin. Ichak , Katkamsabndi, sadar Hazaribag have 32.10%, 14.92%, 32.10% of the Basin total population respectively. Daru, Tatijharia record 12.98%, 7.90% and 4.29% respectively.

Literature Reviews

No work on the Siwane Basin has been done on the present form as yet. The present work entitled "Human Resource Development in Siwane Basin, Hazaribag Jharkhand; A Geographical Study."

Krishna (1968) Wrote his doctoral thesis on 'Changes in the demographic character of the Punjab's border districts of Amritsar.

Nath (1970) has contributed a paper on population and resource development of India .

Chandana R.C (2001) Geography of population, Kalyani publisher New Delhi.

Praween Kumar Sharma (2004) in his research work on Pattern of Agricultural Development in Hazaribag District, Jharkhand has been done.

S.C. Bose (1953) presented natural division of the 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 water harvesting tanks of Hazaribag District.

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, Hazaribag, Jharkhand.

Thus we conclude that no work has been done on the present format. However, several books, articles have been published previously to this work.

Research Gap

International, National and local level literature review, it becomes clear that Human resources development has emerged as a broad term in the present times. In which details of human resource developed as well as facts related to them are considered essential. Hazaribag district is an important district of Jharkhand which is rich from agriculture land and food use industrial point of view. In this context, the study presented is "A Geographical Study of human resource development in Siwane Basin, Hazaribag, was selected. Therefore, it can be said that there are immense human resource development possibilities of in Siwane Basin

Importance of Human Resources

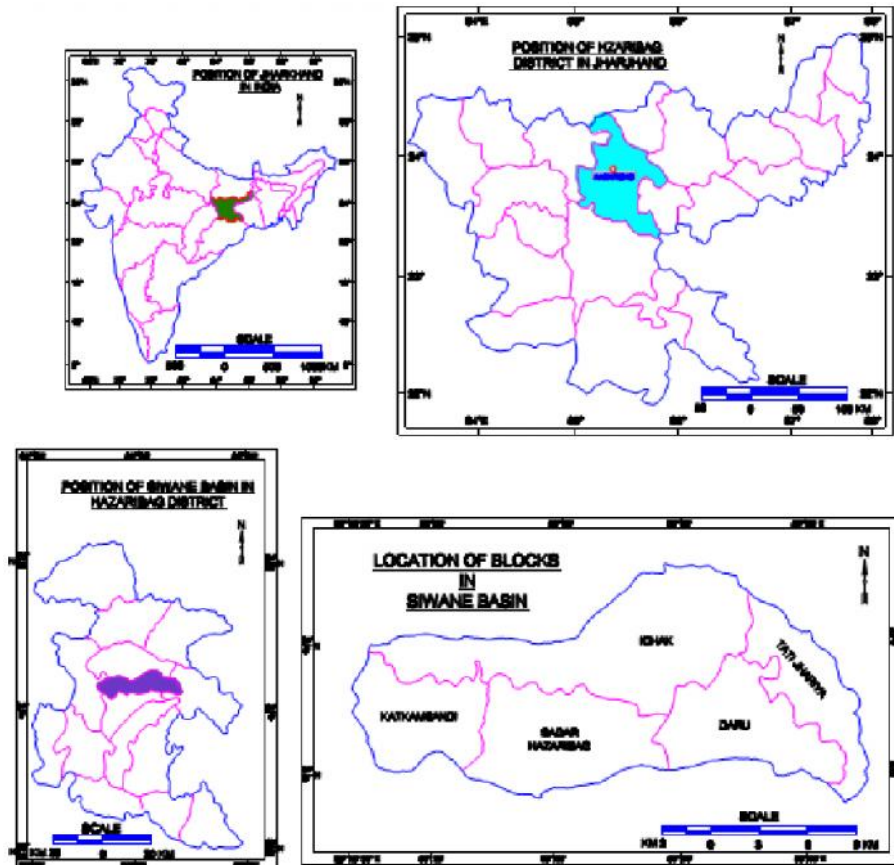
Human Resources are necessary for human beings because of the following reasons Resources when used as a raw material satisfy the needs and comforts of human beings. Natural resource is a source of agricultural activities which add to the economic importance. They also provide employment opportunities.

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 85°15'30" to 85°37'30" East longitude (Fig. 1) the Basin is a part of the Hazaribag plateau in general and the Damodar Valley in particular.

There are 05 blocks partly come within the boundary of Siwane Basin. The total area of the Siwane Basin is 232 square km. constituting of Hazaribag Sadar, Katkamsandi, Tatijharia, Daru and Ichak blocks etc. The Siwane river is the main tributary of Konar Basin, which includes a number of tributaries. The Basin is distinctly undulating with a few. Sporadic hillock. It has geological and structural variations ranging from faulting to intrusions. Thus the area is an interesting geomorphic unit.

Fig 1: Location Map of Siwane Basin



(Source: State Census office of Jharkhand)

Objectives

The main objective of this study is to investigate of the special arrangement and distribution of Human Resources phenomena. Ideally each investigation in Human Resources should involve four stages:

- A) Identification of problems and the collection of relevant data.
- B) Formulation of a hypothesis and the testing and modification of hypothesis to provide an adequate explanation.

Hypothesis

The present study presents a suitable case for study in Population development, Forest is due to degradation of the resource, record phenomenal decrease, and Population has changed here. The period since 1990-91 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 taken place annually. The analysis of population development will be brought with an interval of ten years.

Methodology

This methodology will consist of Five major stages:

- i. Observation and explanation.
- ii. Preparation of basic map and components of Population distribution in Siwane Basin.
- iii. Consultation of books, journals, reports, Census data etc.
- iv. Intensive field study.
- v. Compilation of works, drawing of final maps and giving final shape of the work.

Human Resources Development

Distribution of Population

The distribution of population (Fig. 2) is governed by the site of settlement. It is directly related to the natural facilities available for cultivation. The most important single factor is not rainfall or the facilities for irrigation but the relief of land which determines both the extent of land available for cultivation and the agricultural productivity of the soil. (Dayal, 1953, p. 38)

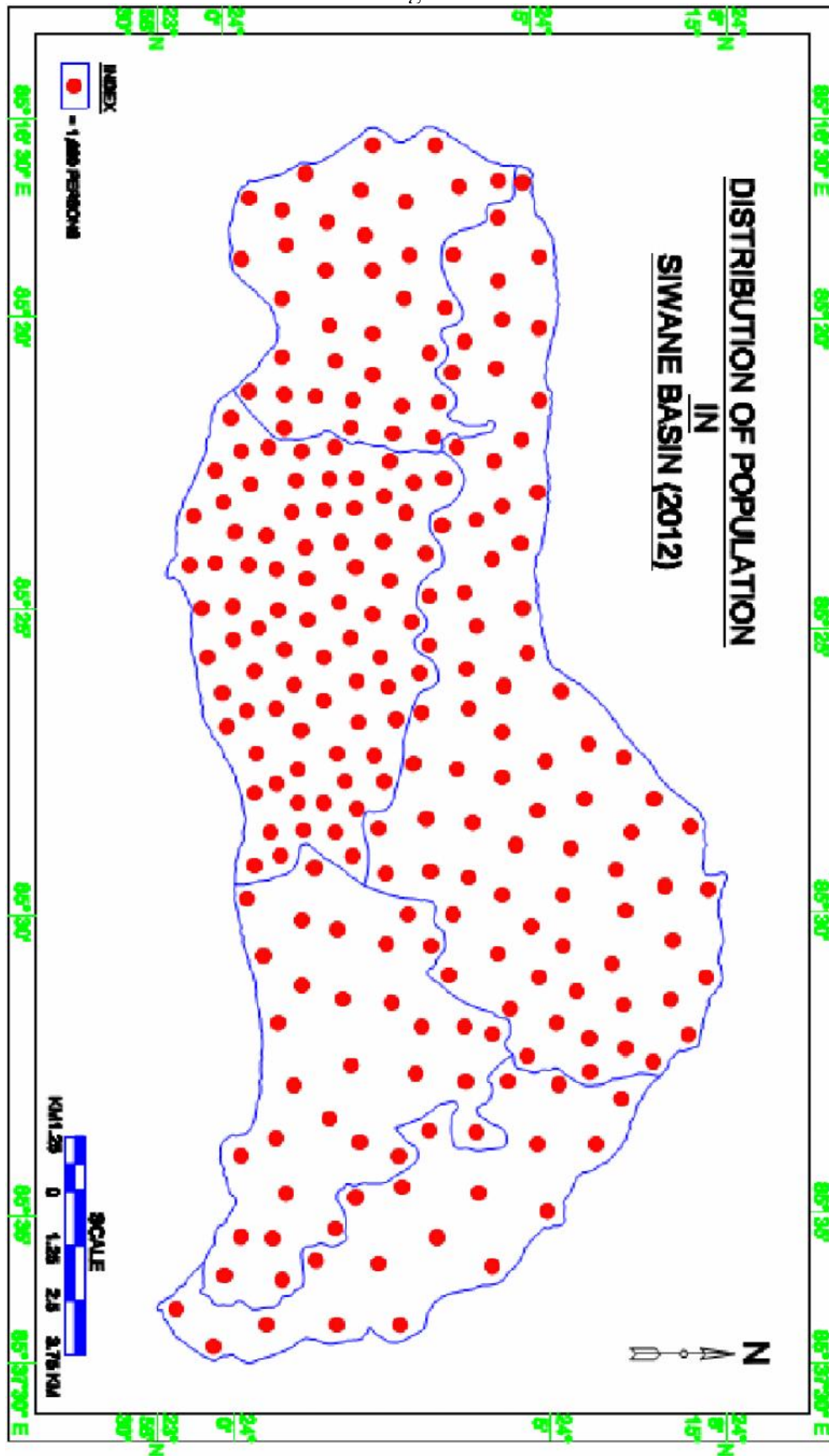
Basin is an unique area of Jharkhand state (Table 1.1). There are five Development Blocks having an area of 232.39 km. There are two urban agglomeration and three census rural area 232 where population has concentrated phenomenally. Ichak, SadarHazaribag, Katkamsandi area, who have the largest concentration of population, constituting 47.63 % of the total urban population of the basin. This urban agglomeration is located, in SadarHazaribag, Development Blocks only having 15.61% of the rural population of the Basin. The other urban agglomeration lies in the Ichak Development Blocks. This urban agglomeration is consists of Daru, TatiJharia This urban agglomeration is named as SadarHazaribag urban agglomeration where 32.10% of area urban population 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. 83.17% of rural population of Siwane Basin is concentrated, within Ichak, Daru, TatiJharia area the urban agglomeration. Remaining 16.83% of the rural population of the Basin is distributed in Katkamsandi, Sadar Hazaribag area of the Basin. Together Siwane Basin records 40114 persons as its urban population constituting 16.83% of the total population of the Basin. The total urban population of this Basin is 40114 persons according to year 2011 census (Male 22526, Female 17588). Sadar Hazaribag, Katkamsandi with complete Ichak of Urbana centre records the lowest concentration having only 14.10% and 2.71% of the basin.

Table1: Blockwise Distribution of Population in the Siwane Basin, 2011

BLOCK	MALE	FEMALE	TOTAL	% OF BASIN
SadarHazaribag	39635	36936	76571	32.10
Rural	20497	22427	42924	17.99
Urban	19138	14509	33647	14.10
Katkamsandi	18598	16986	35584	14.92
Rural	15210	13907	29117	12.21
Urban	3388	3079	6467	2.71
Ichak	39635	36936	76571	32.10
Rural	39635	36936	76571	32.10
Urban	--	--	--	--
Daru	16015	14949	30964	12.98
Rural	16015	14949	30964	12.98
TatiJharia	9063	9768	18831	7.90
Rural	9.63	9768	18831	7.90
Total	122946	115521	238467	100.00
Rural	100420	97933	198353	83.17
Urban	22526	17588	40114	16.83

(Source: Census Handbook – 2011)

Fig 2



(Source: State Census office of Jharkhand)

Growth of Population

Siwane Basin a part of the Hazaribag district so, identification of growth of population becomes difficult. At here, this author has gathered growth of population data since 1991, due to non - availability of population figures for every year. The total population of five different blocks of the study area in the year 2001 was 165739 persons. Average density belt of population 1028/sq.km. (Johns, Erry, 1941, p.41).

The population in this study area grew very rapidly after 1981 and by the 2011 the total population of the Basin becomes 238467 persons. During 1991 the total population of the 05 blocks of the Siwane Basin becomes 108224 persons having a surplus population of 57515 persons. Then, the decadal growth of population of this Basin was 53.14%. However, population growth was also 43.88% between 2001 and 2011. In the year 2011 the population of the Siwane Basin became 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 2001 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 minimum of 03.21% and a maximum of 23.01% second highest growth with 21.9% decadal growth with trade, transport and commerce and the Sadar U.A (Urban Areas). Whether, it is good and bad, the urban hubs of this basin record heavy inflow of population higher from rural areas of the Basin or from outside the Basin. (Table 2 & Fig 3)

Table 2: Growth of Population in Siwane Basin (1991 – 2011)

Blocks	1991	2001	2011
Icak	33232	52236	76571
Daru	16218	21210	30964
TatiJharia	12136	15138	18831
SadarHazaribag	30102	49516	76571
Rural	22612	31211	42924
Urban	7390	18305	33647
Katkamsandi	16537	27639	35584
Rural	16537	27639	29117
Urban			6467
Total	108224	165739	238467

(Source: Census Handbook 1991, 2001 & 2011)

Density of Population

Density of population (Fig. 4) submits a true analytical picture of main land ratio. The total population of the Siwane Basin according to 2011 census is 238467 persons, in which 40114 persons are rural and 198353 persons are urban. The total Geographical area of the area measured to be 232 sq. km.. The average density of population in Siwane Basin is 1028 persons/sq.km. of land. In Ichak and Daru Development Blocks density are 1004 persons and 808 persons/sq.k.m respectively. In other three Development Block of the Basin, the rural density of population varied between a minimum of 666 and a maximum of 1004 persons. (Table 3).

Table 3: Blockwise Average Density of Population of Siwane Basin (2011)

BLOCKS	AREA (in km ²)	POPULATION	DENSITY
Ichak	76.27	76571	1004
Katkamsandi	32.80	35584	1085
Daru	38.30	30964	808
TatiJharia	28.27	18831	666
Sadar Hazaribag	56.43	76571	1357
Total	232.00	238467	1028

(Source: District census office, Hazaribag)

Fig 3: Growth of Population in Siwane Basin

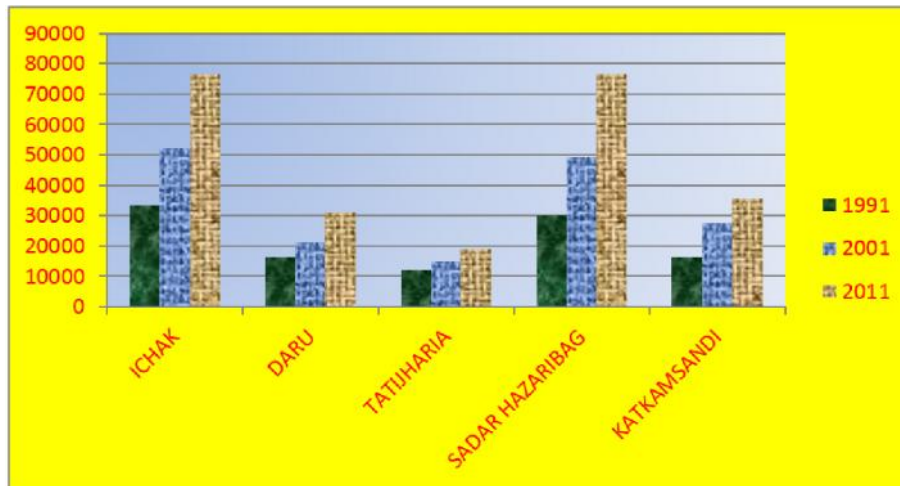
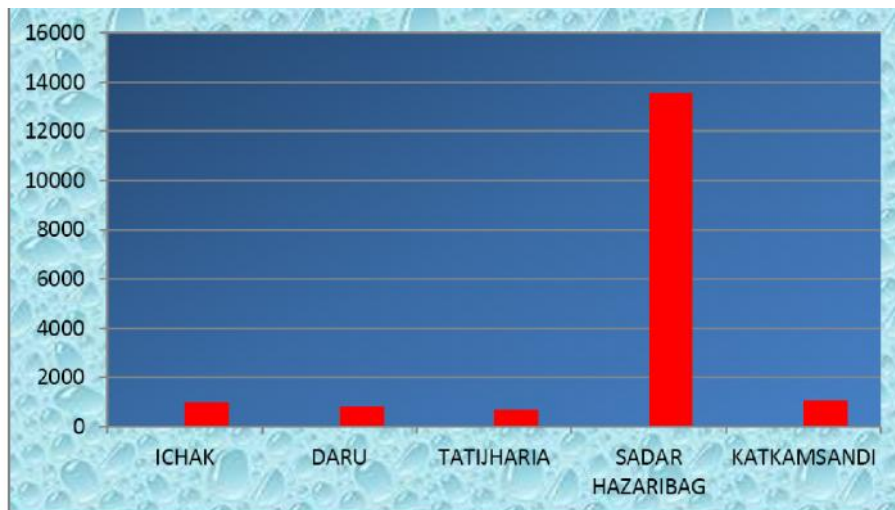


Fig 4: Density of Populaiton in Siwane Basin



Sex Ratio

It has been observed during various censuses that the number of males generally outnumber the females. In the study area of Siwane Basin the proportion of the two also highlights the burden of dependency. In the urban areas such as SadarHazaribag, Katkamsandietc of Siwane Basin high ratio of female population, sows relatively higher burden of on working male population. The out migration of more male workers from the villages there, should be better sex ratio, but sex ratio has not improved due to relatively less care of health of either female child or women in the society of this Basin.

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 male population is 22526 and total urban female population is 17588 and the total rural male population is 100420 and the total rural female 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 to 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 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.

$Nm/Ntx100$ or $Nf/Ntx100$

Where Nm is the number of male

Nm is the number of female and Nt is the number of total population.

In countries like the USA and other it is termed in from of number of male per hundred of females. It is calculated as below.

$Nm \times Nf \times 100$

In some countries like New Zealand, the sex ratio is explained as number of females per hundred of males and it is calculated as follows.

$Nf/Nmx100$

In still other countries like India, it is expressed in terms of number of females per thousand of males. It is expressed as such

$Nf/Nmx100$

Thus according the census for 1991 the sex ratio of Chotanagpur as a whole will be as such

$88,262,000 / 8990819 \times 1000 = 919$

(Golden, Hiltha H., 1968, Vol.9, p412)

The gender ratio is 1000 males : 895 female (2011 census) In the Siwane Basin the average sex – ratio (Fig. 4) as recorded is 915 While in the rural areas it is 849 and in urban areas it is 878 In the rural areas sex ratio vary from a maximum of 941 (Daru Development Block) to a minimum of 918 (Sadar Development Block) In the urban areas sex ratio vary from a maximum of 941 (Daru D.B) to a minimum of 885 (Tatijharia Development Block) In this way, in different five basins Blocks of the basin average sex ratio vary from a maximum of 941 (Daru D.B) to a minimum of 861 (Tatijharia D.B). The biggest urban agglomerative, in Ichak community development block, has the lowest sex ratio followed by Katkamsandi D.B. with second urban agglomerative areas of Sadar D. Block. (Table. 4)

Table 4: Blockwise Sex Ratio of the Siwane Basin

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

(Source: District Statistical Office, Hazaribag)

Occupational Structure

The analysis of occupational structure of population of the Siwane Basin has been based on the census data of year 2011 that workers are considered those persons who a participating in any economically productive activity. The occupation of an 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 number of categories which have to be correlated and modified to manageable heads.

The main workers according to the nature of work are sub- divided in to three categories cultivators, agricultural labourers and other workers in other than agricultural works. The cultivators refers those who are engaged in cultivating their own lands. Man workers, in the Siwane Basin constitute 51.46 of its population. The percentage of cultivators is almost 12% of its population. Agricultural labourers are those who are engaged in agricultural works on wage basis. They are characterized also as land less labourers or they have marginal lands which don't provide even their minimum requirements. On the average Siwane Basin recorded 25.03%

of its population as agricultural labourers. The percentage of agricultural labourers, an different Basin blocks of Siwane Basin vary between minimum of 17.15% and a maximum of 36.18%

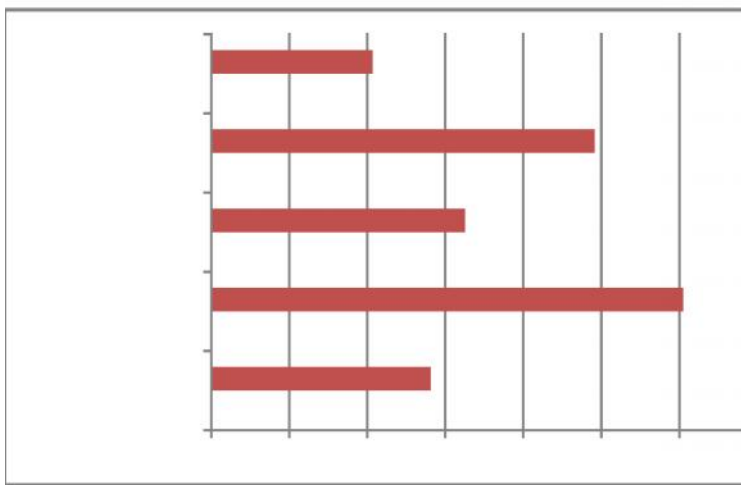
Other workers constitute those workers who work as wage earner or who are employed in different factories, mines, offices, institutions, transport, trade and other as indicated earlier. Other workers constitute 14.43% of the population of the Siwane Basin.

Table 5: Brakeup of Main Workers in Siwane Basin, (2011)

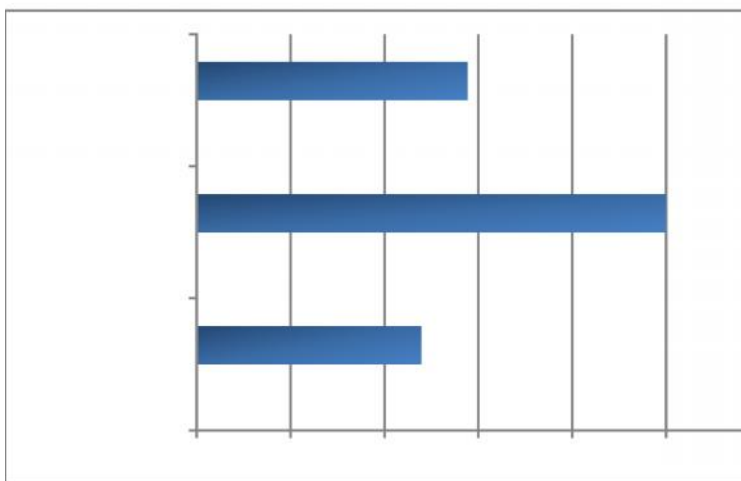
% of cultivators	% of Agri. Labors	% of other workers
12.0	25.03	14.43

(Source: Census Handbook, 2011)

SEX RATIO IN SIWANE BASIN



MAIN WORKERS IN SIWANE BASIN



Conclusion

The Siwanebasin , with an area of 232sq. kms is in the hazaribag district of Jharkhand state. The average density of the population in Siwane Basin is 1028 persons/sq. km. However, the density of population is highly variable from area to area. There are 158 villages and 36 panchayat at present.

References

1. Golden, Hiltha, H. (1968) Literacy, *International encyclopedia of the Social Science*, Vol. 9, p. 412
2. Clarke, John. (1972) *Population Geography*, Peramon Press, Oxford
3. Chandan, R.C. (1986) *A Geography of population*, Kalyani Publishers, New Delhi, p. 161.
4. Mahto. N (2015) *Agricultural Development in Jharkhand*, Rajesh Publications, New Delhi. p. 78-79.
5. Census of India, 2011
6. District Census Office, Hazaribag
7. District Profile, 2011, Hazaribag
8. District, Block office, Hazaribag
9. Trewartha, G.T. (1953) A case for population geography, *World's patterns annals of the association of American Geographers*, Vol. 43, p. 71

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