

CHAPTER IV

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CHAPTER IV

IMPACT OF GEOGRAPHICAL FACTORS ON SEX-RATIO

4.1 INTRODUCTION:

Sex-ratio is a significant demographic and cultural index and valuable to population geographer in a discussion of regional characteristics. The ratio can reflect the Biological, Social, Economic and Emigrational characteristics of human population. Social Economics and community life are affected in many by a large imbalance in sex composition. A great imbalance in the sex-ratio originates from various social and demographic factors (Maya Banerjee 1977).

Sex-ratio signified the number of females per thousand males. An inverse enunciation of the ratio (i.e. the number of males per thousand of females) is also given sometimes. Sex-ratio may vary between different regions. The ratio of sex affects social and economic conditions in many ways. If there are more males than females of marriageable age there would be smaller proportion of married men. A high proportion of males also mean more workers available for economic activity. Sex-ratio is an important factor for determining death ratio of any population. Women generally have lower death rates than men at most ages in most countries. If females constitute more than half of the population, the death rate is considerably affected. The scarcity of either women or men of adult age will reduce marriage rate and this will affect birth rate. Sex-ratios of population are related to the extent of employment of women outside home, status of women, amount of population and so on. Abnormal differences in sex-ratios are produced by war and migration. The abnormal sex-ratio results in social diseases like prostitution, V.D. and so on. The excess of males over females tends to lower the age of marriage for females. Early Marriage leads to disparity in age husband and wives. (Ghosh B.N.1984).

Physical, socio-economic (Agriculture, Industrial, Irrigation, Medical facilities, Education and Literacy) and demographic factors (Age-group, Fertility, Mortality and Migration) are directly and indirectly affects on sex-ratio of any particular region. Bhudargad tehsil is one of the tehsil of Kolhapur district; majority of the part of this tehsil is hilly, mountainous and rural in nature. Out of five circles three circles are generally remote in nature. Mostly western and southern part of the Bhudargad tehsil is hilly and mountainous in nature; high proportion of this region is

covered by vegetation, so it is remote, inaccessible and under developed area. Especially male and female population of this area migrated from this region to another region for seeking jobs, education, trade and commerce and to get good infrastructure facilities. They migrated to developed villages or cities. Migration of young male population is dominant, so it is mainly affected on the sex-ratio of the study region.

4.2 IMPACT OF PHYSICAL FACTORS ON SEX-RATIO:

4.2.1 RELIEF:

Physical elements are directly affects on population distribution; various physical factors that affect on the distribution, density and sex-ratio of population are Climate (Temperature and Precipitation), Landforms, Soils, energy resources, and mineral raw material and space relationship (accessibility).

Landforms, the geological destructive configuration or conformation of earth's surface have fundamental influence on the pattern of human life and activity. The direct influences of topographical features on men are obvious. In the mountainous region population density is low and rate of out migration is high. The plain region is densely populated, because rich agriculture resources and good network of transportation, therefore, human life may flourish there.

Western and southern part of the Bhudargad tehsil is mostly hilly, mountainous in nature, which situated in Sahyadri ranges in Maharashtra. 25.75% area of under forest cover. 90 villages out of 114, nearby 80% villages in the study area are included in this hilly tract, mountainous and forest region. Viz. Kondoshi, Bhalekarwadi, Vasnoli, Tiravade, Thadyachiwadi (N.V.), Kadgaon, Mamdapur, Vengrul, Sheloli, Nhavyachiwadi, Varapewadi, Padkhambe, Sonurli, Navale, Nandoli, Kudatarwadi, Chandamwadi, Tambale, Anturli, Shivdav, Shivdav Kh., Patgaon, Tambyachiwadi, Chikkewadi, Mani, Anap Kh., Karambali, Deulwadi, Megholi, Devarde, Vesarde, Mhasarang, Palyachahuda, Mathagaon, Chivale, Dele, Antivade, Karivade, Ukirbatale (N.V.), Dasewadi (N.V.), Anup Bk. (N.V.), Manope (Kadgaon circle), Nagargaon, Pal, Bhendvade, Helewadi, Barve, Naganwadi, Pangire, Bamane, Pimpalgaon, Dindewadi, Murukate, Manavale, Jakinpeth-Jotewadi,

Kelewadi-Todalewadi, Begavade, Bediv, Aralgundi (Pimpalgaon circle), Morewadi, Mhasave, Mharwadi, Kolavan, Palewadi, Hedvade, Girgaon, Phaye, Devakewadi, Ranewadi, Madur, Nishnap, Khedge, Yerandape, Nitavade, Donawade, Pacharde, Paradewadi, Kumbharwadi, Karadwadi, Bidri (Karadwadi circle), Palshivane (Gargoti circle) and Tikkewadi, Pandiware, Minche Bk., Nawaraswadi, Lotewadi, Bhatiwade, Minche Kh., Pachawade, Basarewadi (Koor circle) villages are prominently included in hilly regions.

70% villages of the study area is facing problem of road network and transport facilities, lack of water resources for domestic and agriculture and low industrialization.

4.2.2 CLIMATE:

Climatic conditions are influences on human life like population distribution, density and sex-ratio. In the areas of good climatic conditions densely populations are observe and in bad climatic conditions populations are rarely observed. The western part of the Bhudargad tehsil experiences salubrious and pleasant climate with chilled weather. Relatively eastern part of the Kolhapur district undergoes through hot winds during April and in May. However, generally the nights are cool because of the influence of the cold breezes drafting from the Western Ghats region. Climate of Bhudargad tehsil can be segregated into three consecutive periods of hot weather from March to May, rainy from June to October and cold weather period from November to February.

In the months of March, April and May are comparatively hotter than other months of the year. There is considerable rise in the temperature of the tehsil in the month of April; this is the hottest month of the year with a mean maximum temperature of 29°C. Rarely this temperature goes up to more than 40°C. this temperature favorable for human being.

Bhudargad tehsil situated in Sahyadri ranges in Kolhapur district of Maharashtra. So it has high proportion of rainfall. The tehsil receives rain from the South-West in summer by storm-cyclonic rainfall. There is unequal distribution of

rainfall is found. The area of Kadgaon Circle, Karadwadi Circle and Pimpalgaon Circle is mostly hilly and mountainous so, these circles receives copious rainfall, due to the location of Koor and Gargoti circles to the east both circles receives moderate rainfall.

Table-4.1

Bhudargad Tehsil: Annual Rainfall (2004-2012)

Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Rainfall(mm.)	1725	2678	2299	1846	1668	1690	1776	1725	1378

Source: Based on Tahsildar Office, Gargoti.

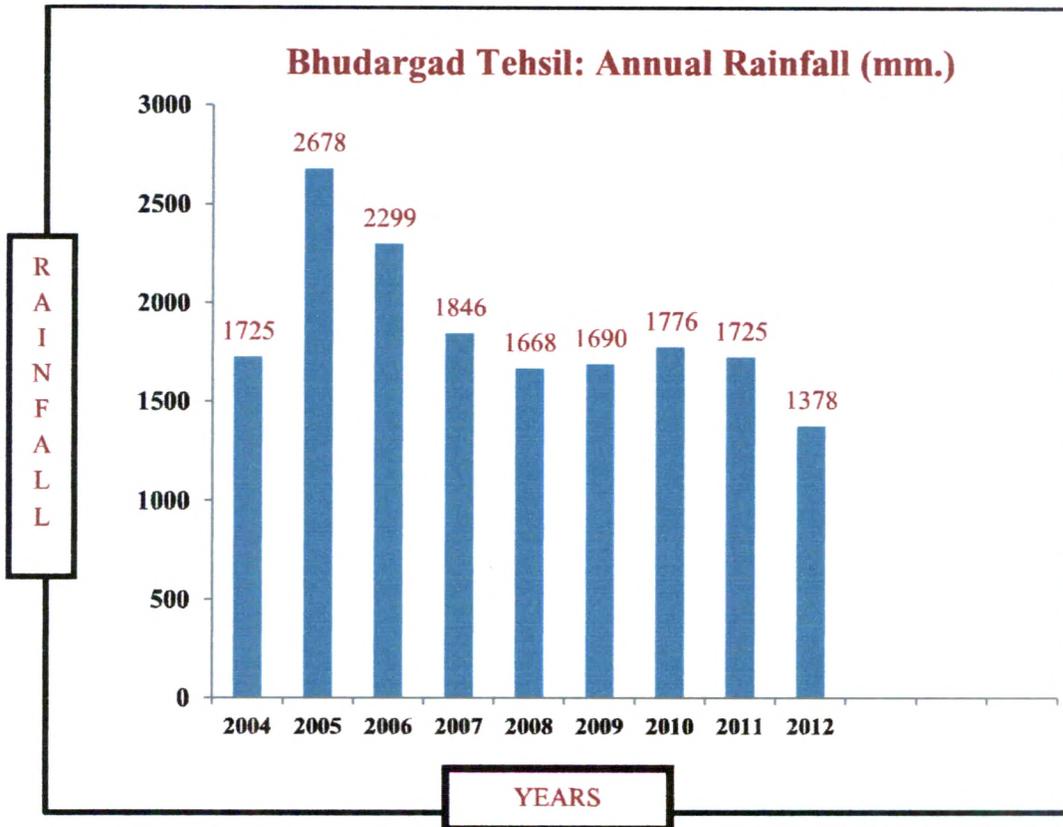


Figure 4.1

Figure shows the rainfall distribution of Bhudargad tehsil in the year 2004 to 2012. High proportion of rainfall was recorded in the year 2005 (2678 mm.)

and low proportion of rainfall was found in 2012 (1378 mm.) the average rainfall from the year 2004 to 2012 was 1865 mm. This statistical information depicts high proportion of rainfall in Bhudargad tehsil.

4.2.3 SOILS:

Many of the soil types are observed on physical earth, some are fertile and some infertile or barren land. High density of population occurs in the region of fertile soil and in the region of infertile soil populations are rarely observed.

The Coarse shallow laterite type of soil is found in western part of the region particularly it is found in hilly regions, looking slight brown in color and covers large portion of western region. Because of high content of alumina and Iron. This soil is not fertile. This type of soil located at the river course of western part. It covers the areas of Patgaon, Mathgaon, Karivade, Antivade, Shengaon, Nishnap, Paradevadi, Kondoshi, Bhalekarwadi, Vasnoli etc.

Medium and deep laterite soil located on moderate steep slope and dark brown-red in colour. This is not fertile soil; it is rich in alumina and iron too.

The Coarse shallow soil located in the eastern part of the northern and southern hill ranges; particularly it is found on slopes and foot hills. This is light brown in color and loamy and sandy, poor in nutrient status so this is moderately productive. Groundnut, Jawar, Barli, but now-a-days people take a crop of sugarcane in some areas, if the water is available. This soil is found in Yerandape, Khedage, Hedavade, Tikkewadi, Palshivane etc.

Medium deep black soil is loamy found in Adamapur, Mudal, Waghappur, Vhangutti, Koor, Nadhavade, Konavade, Nilpan, Gangapur etc. This is suitable for taking crops like Sugarcane. Wheat, Jowar and chilies etc. Alluvial soil is rich soils, medium brown, and gently sloping and suitable for rich crops like sugarcane. It is found in villages along the Vedganga river.

4.3 IMPACT OF SOCIO-ECONOMIC FACTORS ON SEX-RATIO:

Socio-economic factors like Agriculture, Irrigation facilities, Transportation and Education, which are affects on human sex-ratio of any geographical region. In the study area of Bhudargad tehsil and its five revenue circles, there observed the changing nature of sex-ratio, because of the impact of socio-economic factors in the study area. The socio-economic conditions of circles, which are different from each other and this condition, is responsible for the variations in the sex-ratio of circles. Some circles have observed high sex-ratio and some have low.

Following socio-economic factors are affects on sex-ratio of Bhudargad tehsil.

4.3.1 AGRICULTURE:

Agriculture is the backbones of Indian economy. Majority of populations are engaged in this sector. Agricultural development affects on population aspects of any region. In the areas of good agricultural development density of population is high and less and undeveloped areas density of population is low. The total geographical area of Bhudargad tehsil is 64446 hectares. 23790 hector area under forest, 35322 (25.75%) hector area under cultivation, non-agricultural land is 3429 hectares. Mostly populations are engaged in primary sector viz. Agriculture, Animal husbandry, gathering of medicine plants. etc. Total farmers are 40494 and farm labors are 9053 in Bhudargad tehsil.

Rice is the dominant crop in the Bhudargad tehsil, 12586 hectares area under rice, and another crops are Barli (3500 hect.), Sugarcane (3362 hect.) and Groundnut (3051 hect.). Similarly Wheat (390 hect.), Jowar (53hect.), Millet (01hect.), Maize (210 hect.), vari (22 hect), Sava (121 hect), Gram (1000 hect.) are another crops which are rarely cultivated in Bhudargad tehsil.

Rice is occurs in all the five circles of the tehsil Viz. Koor, Gargoti, Karadwadi, Kadgaon and Pimpalgaon. High proportion of rice crop is in Pimpalgaon, karadwadi and Kadgaon circles. Barli is another seasonal crop occurs in Bhudargad tehsil, total 3500 hector area under this crop. This crop cultivates in the areas of hilly and inadequate irrigation facilities. This crop is occurs in Tikkewadi, Pandiware (Koor circle), Palshivane (Gargoti circle), Phaye, Devakewadi, Nishnap, Khedge,

Yerandape, Nitavade, Paradewadi Kumbharwadi, Bidri (Karadwadi circle), Kondoshi, Bhalekarwadi, Vasnoli, Tiravade, Thadyachiwadi, Nhavyachiwadi, Varapewadi, Padkhambe, Sonurli, Navale, Nandoli, Kudatarwadi, Chandamwadi, Tambale, Anturli, Shivdav, Shivdav Kh., Patgaon, Tambyachiwadi, Chikkewadi, Mani, Anap Kh., Karambali, Deulwadi, Megholi, Devarde, Vesarde, Mhasarang, Palyachahuda, Mathagaon, Chivale, Dele, Antivade, Karivade, Ukirbatale (N.V.), Dasewadi (N.V.), Anap Bk. (N.V.), Manope (Kadgaon circle), Nagargaon, Pal, Bhendvade, Helewadi, Barve, Naganwadi, Pangire, Bamane, Pimpalgaon, Dindewadi, Murukate, Manavale, Jakinpeth-Jotewadi, Kelewadi-Todalewadi, Begavade, Bediv, Aralgundi (Pimpalgaon circle). This crop is largely cultivated in the areas of Karadwadi, Kadgaon and Pimpalgaon circles, because there mostly found hilly region and lack of water availability.

Sugarcane is cash crop which occurs in the riverside of Vedganga, Chikotra and Doodhganga sub-canal in Bhudargad tehsil. This crop only occurs in the area of good irrigation facilities. Sugarcane is finds its location out in all the circles, in Bhudargad 3362 hectares area under this crop, this is the third most cultivated crop in Bhudargad.

3051 hectares area under the cultivation of groundnut. This is also occurring in hilly and plateau region of tehsil, where lack of water and irrigation facilities. Groundnut occurs high and low proportion in all the five circles in the Bhudargad tehsil.

Wheat, Jowar, Millet, Maize, vari, Sava and Gram these crops are rarely found in five circles of Bhudargad.

4.3.2 LIVE STOCK:

With the agriculture most of the farmers are engaged in dairy-farming. Buffalos and cows are used for milk production, besides this farmer maintains sheep, Goat and poultry-farming. Total numbers of buffalos are 19133, cows are 4085, sheeps are 1888, Goats are 12645, bulls are 8302 and poultry 37542. Bulls are used for transportation of agricultural production and cultivation of agriculture.

Occupation of Dairy-farming Buffalos and cows are uses for milk production and bullocks are used for cultivation of agriculture.

4.3.3 INDUSTRIALIZATION:

Industrialization plays the important role in the development of the any region. Mostly industrialization provide job opportunity to young male population, because of this, it affects on population aspects of the region. As compare to other regions high density of population occurs in developed industrial regions and it is responsible for changing sex composition of the region.

Nature of Bhudargad tehsil is hilly and totally rural. Majority of the people have engaged in primary sectors like agriculture, animal husbandry and hunting. There is lack of industrialization one women's sugar factory established at Tambale and Hutatma Swami Warake Cotton mill at Mudal. Total 442 workers working in women's sugar factory at Tambale. Some small industries are also available in Bhudargad viz. Leather Workers, Bricks industries, Transportation, Trade and Commerce etc.

4.3.4 IRRIGATION:

'Water is our Life' it is basic needs of human being to live. Uneven distribution of water is occurs on the earth surface, many regions having good or access water availability and some regions having scarcity of water, it affects on the distribution of population where the good irrigation system that areas are populated and where water scarcity that areas are less populated.

Vedganga is Major River in Bhudargad tehsil, which is originate at Tambyachiwadi. There is Patgaon dam on river Vedganga. Vedganaga basin is drained by lot of small tributaries and notable big nala's are Mor-Ohol, Abundi. Vedganga River flows in Bhudargad tehsil from Tambyachiwadi to Waghapur. Chikotra is another river flowing in Bhudargad tehsil. The main sources of water for domestic and agriculture purpose are medium irrigation projects, small irrigation projects,

wells, Vedganga River, Doodhganga Sub-canal, Filtration tank, K.T.Weirs, Mor-ohol and tube wells. In Bhudargad tehsil two medium irrigation projects at Patgaon and Chikotra, four Small irrigation projects Faye, Megholi, Kondoshi and Dindewadi-Barve, in 2011 the total wells in Bhudargad tehsil are 1540; K.T.Weirs are 25 and 4 filtration tanks. The total length of Vedganga river is 57 km., from Tambyachiwadi to Waghapur, under Doodhganga project the Koor Sub-Canal is flowing from Mudal to Minche Kh. it is 17 km.in length, total 14 villages are under canal irrigation.

Because of the Physical setting of the study region most of villages have facing the problem of water for drinking and agriculture in the month of April and May. Only the villages which are situated on riverside of Vedganga, Chikotra and on the bank of Doodhganga sub-canal having good and sufficient water supply for domestic use and agriculture.

The villages of good and sufficient supply of water have densely populated and rare population density observed in that villages where lack of water supply facilities. Majority of the villages are facing the water problem viz, Tikkewadi, Pandiware, Nawaraswadi, (Koor Circle), Ambavane, Shindewadi, Palshivane (Gargoti Circle), Morewadi, Hedvade, Girgaon, Devakewadi, Ranewadi, Nishnap, Khedge, Paradewadi, Kumbharwadi, Bidri (Karadwadi Circle), Kondoshi, Bhalekarwai, Thadyachiwadi (N.V.), Nhavyachiwadi, Varapewadi, Padkhambe, Navale, Anturli, Chandamwadi, Shivdav, Shivdav Kh., Chikkewadi, Mani, Karambali, Deulwadi, Devarde, Palyachahuda, Chivale, Dele, Antivade, Karivade, Ukirbatale (N.V.), Manope (Kadgaon Circle), Nagargaon, Pal, Bhendvade, Helewadi, Barve, Pangire, Bamane, Dindewadi, Murukate, Manavale, Jakinpeth-Jotewadi, Kelewadi-Todalewadi, Begavade, Bediv, Aralgundi (Pimpalgaon Circle).

4.3.5 EDUCATION AND LITERACY:

Today education becomes a basic need of human being. It increases literacy rate of the society. The literacy rate is high in developed areas and it lowest in less or undeveloped areas. Education changes the awareness of the society, where the varieties of educational facilities are mostly available there population density is high, so it is responsible for the changing pattern of sex composition of any region.

Gargoti is recently developed town in this tehsil; it is main administrative place as well as oldest education center for surrounding rural areas. The Mouni Vidhyapith is one of the institute which runs many education programmes like diplomas in Engineering, Science, Commerce, Arts, graduate-level programmes, D.Ed. and B. Ed. courses. Similarly in other villages establish educational centers i.e. Mudal, Pal and Kadgaon.

Table-4.2

Bhudargad Tehsil: Educational Centers (2011-12)

Sr. No.	Type of Institutes	Number of Institutes
1	Primary schools	179
2	Secondary schools	49
3	Higher secondary schools	08
4	colleges	02
5	Technical & vocational	09
6	polytechnics	03
Total		250

Source: Based on Socio-Economic Review of Kolhapur district, 2011-12.

Table shows that available educational centers in Bhudargad tehsil. In the study area number of higher secondary schools, senior collages, Technical & vocational schools and polytechnic colleges are very limited, and available facilities are concentrated in Gargoti and nearby big villages. So the students from migrates for seeking education from Kadgaon. Pimpalgaon and Karadwadi circles to Gargoti or places out of Bhudargad tehsil. Majority of the students are getting admission in Gargoti.

Table-4.3**Bhudargad Tehsil: Circle wise Literacy and Sex-Ratio**

Sr. No.	Circle	Literacy (%)			Sex-Ratio		
		1991	2001	2011	1991	2001	2011
1	Koor	64.04	74.33	79.06	996	955	942
2	Gargoti	76.73	79.30	83.65	923	955	952
3	Karadwadi	56.89	70.88	75.55	1029	992	992
4	Kadgaon	55.99	67.91	74.26	1095	1037	1016
5	Pimpalgaon	55.91	69.81	72.44	1158	1074	1048
Total		63.13	72.92	77.71	1024	995	983

Source: Based on District Census Handbook of Kolhapur 1991-11.

Table shows circle wise relation between literacy and Sex-Ratio from the Census year 1991 to 2011.

In 1991, high literacy rate (76.73%) observed in Gargoti circle where sex-ratio (923) was low and low Literacy rate (55.91) was observed in Pimpalgaon circle where sex-ratio (1158) was high.

In 2001, high literacy rate (74.33%) observed in Koor circle where sex-ratio (955) was low and low Literacy rate (69.81%) was observed in Pimpalgaon circle where sex-ratio (1074) was high.

In 2011, high literacy rate (79.06%) observed in Koor circle where sex-ratio (942) was low and low Literacy rate (72.44 %) was observed in Pimpalgaon circle where sex-ratio (1048) was high.

Rate of Literacy is observed high in the areas of low sex-ratio and it is low in the areas of high sex-ratio. Bhudargad Tehsil has decreasing sex-ratio with increasing literacy.

4.3.6 MEDICAL FACILITIES:

Medical facilities provide to man a good and healthy life; it is also basic need of human being. Where the availability of good medical facilities, there population density is high and in the areas of hilly and mountainous there is lack of medical facilities, it is responsible for the changing pattern of sex-ratio of any region

In Bhudargad tehsil one government hospital at Gargoti, 5 health centers and 30 health stations. Some private doctors and hospitals are available at Gargoti and around the big villages. Civil hospital at Kolhapur which is 50 km. from Gargoti and good medical facilities are available in Kolhapur city, for further medical treatment people goes to Kolhapur.

Table-4.4

Bhudargad Tehsil: Medical Facilities (2011-12)

Sr. No.	Medical facilities	No's
1	Government hospital	1
2	Health centers	5
3	Health sub-stations	30
Total		36

Source: Socio-Economic Review of Kolhapur district, 2011-12.

4.4 IMPACT OF DEMOGRAPHIC FACTORS ON SEX-RATIO:

4.4.1 AGE-GROUP:

Table-4.5

Bhudargad Tehsil: Age-Groups (2011)

Sr.no.	Age-group	Male	Female	Difference	Total
1	Child Population	8067	6767	1300	14834
		54.38%	45.62%	8.76%	100%
2	Above 6 years	67757	67777	-20	135534
		49.99%	50.01%	0.02%	100%
Total		75824	74544	1280	150368
		50.43%	49.57%	0.86%	100%

Source: Based on Socio-Economic Review of Kolhapur District, 2011-12

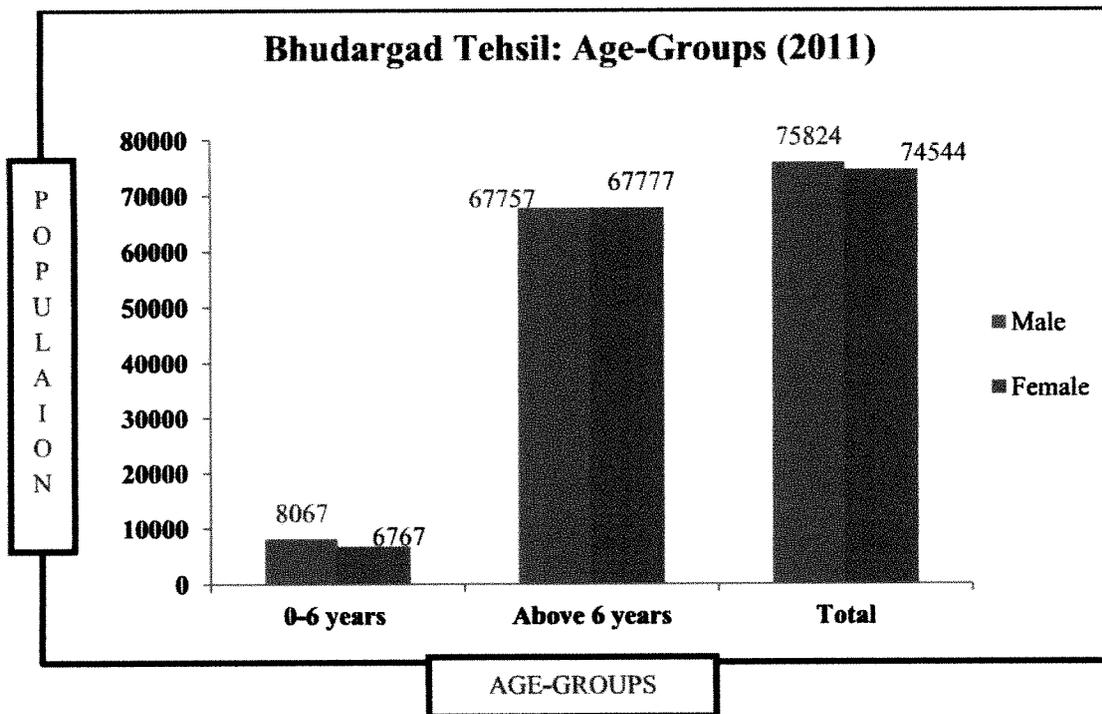


Figure 4.2

Total Child populations in Bhudargad tehsil were 14834 (9.87%), as per the Census year 2011; therein 54.38% males and 45.62% were female populations. Growth of male population was high as compare to the female populations; male population was 8.76% extra from female population, it shows low birth rate of female populations in Bhudargad tehsil, so high difference in sex-ratio was observed in this age group.

Child population in Bhudargad was 135534, as per the Census year 2011 therein 49.99% males and 50.01% were females. Female populations were 0.02% extra from male populations in Bhudargad tehsil, so in this age group observed slightly difference in sex-ratio.

Total populations of Bhudargad tehsil were 150368 in the Census year 2011; it was 3.88 % of Kolhapur district. Male populations were 50.43% and females were 49.57 %, male population was 0.86% extra than females in Bhudargad tehsil, so there observed slightly difference in male and female populations.

4.4.2 FERTILITY:

Fertility is one of the dominant aspects of population study. The crude birth rate is the most common index of fertility, and is merely the ratio of the number of live birth in a period of time, usually one year, to the total population, often at the mid-point of the year. The fraction is invariably multiplied by 1000 or 100. (Clarke J.I, 1977).

Table-4.6

Bhudargad Tehsil: Fertility (2008-2011)

Years							
2008		2009		2010		2011	
Male	female	Male	female	Male	female	Male	female
1094	908	1012	817	962	811	947	735
54.65%	45.35%	54.26%	45.74%	54.26%	45.74%	56.30%	43.70%

Source: Based on Socio-Economic review of Kolhapur District 2009- 2012.

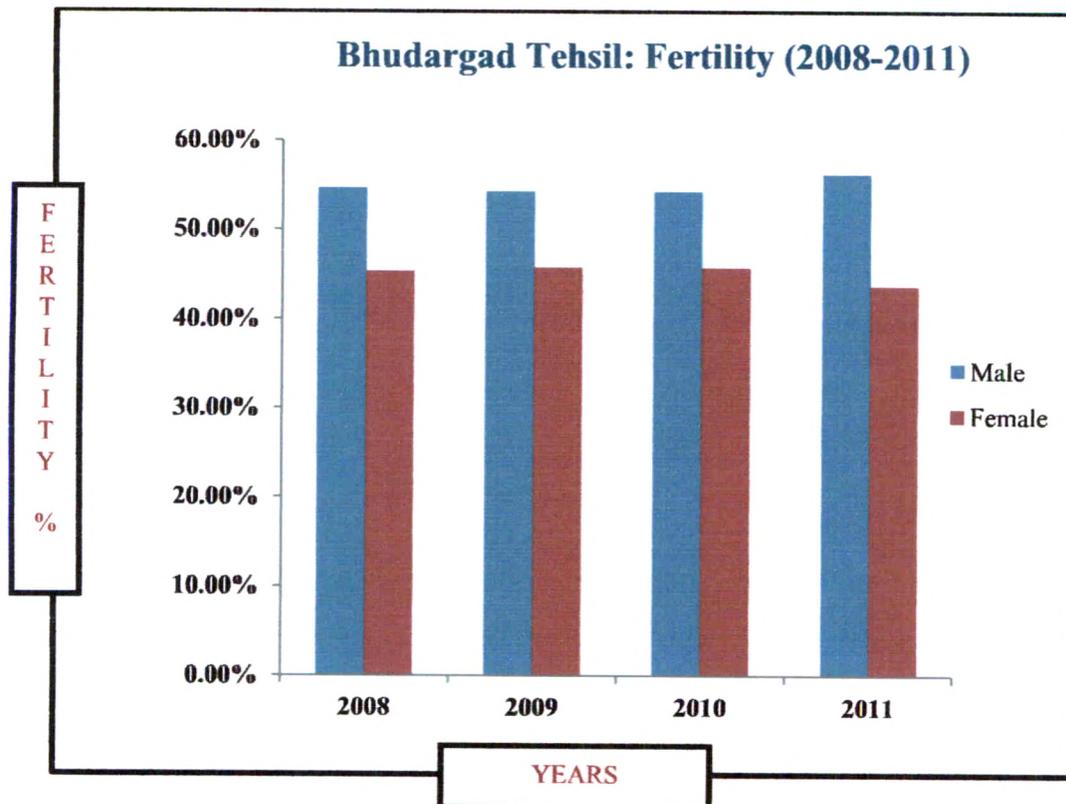


Figure 4.3

High Fertility rate of male populations were observed in Bhudargad tehsil from the Census year 2008 to 2011 and in this period female Fertility rate was low as compare to male population.

Table shows high fertility rate of male population as compare to female population from 2008 to 2011, it was 54.65% in 2008 and 56.30 % in 2011, and female fertility rate was 45.35% in 2008 and in 2011 it was 43.70%., male fertility rate was increased and female fertility rate was decreased.

4.4.3 MORTALITY:

The crude death rate is merely the number of deaths per thousand inhabitants and may be calculated for the population at the mid-point of the year or at the beginning of the year. (Clarke J. I, 1977).

High mortality rate of male population was observed in Bhudargad tehsil from the Census year 2008 to 2011 and in this period female mortality rate was low as compare to male population.

Table-4.7

Bhudargad Tehsil: Mortality (2008-2011)

Years							
2008		2009		2010		2011	
Male	Female	Male	Female	Male	Female	Male	Female
490	432	497	425	625	458	822	420
53.15%	46.85%	53.90%	46.10%	57.71%	42.29%	66.18%	33.81%

Source: Based on Socio-Economic review of Kolhapur District 2009-12.

Table shows high mortality rate of male population as compare to female population from 2008 to 2011, it was 53.15% in 2008 and 66.18 % in 2011 and female mortality rate was 46.85% in 2008 and in 2011 it was 33.81%. Male mortality rate was increased and female mortality rate was decreased.

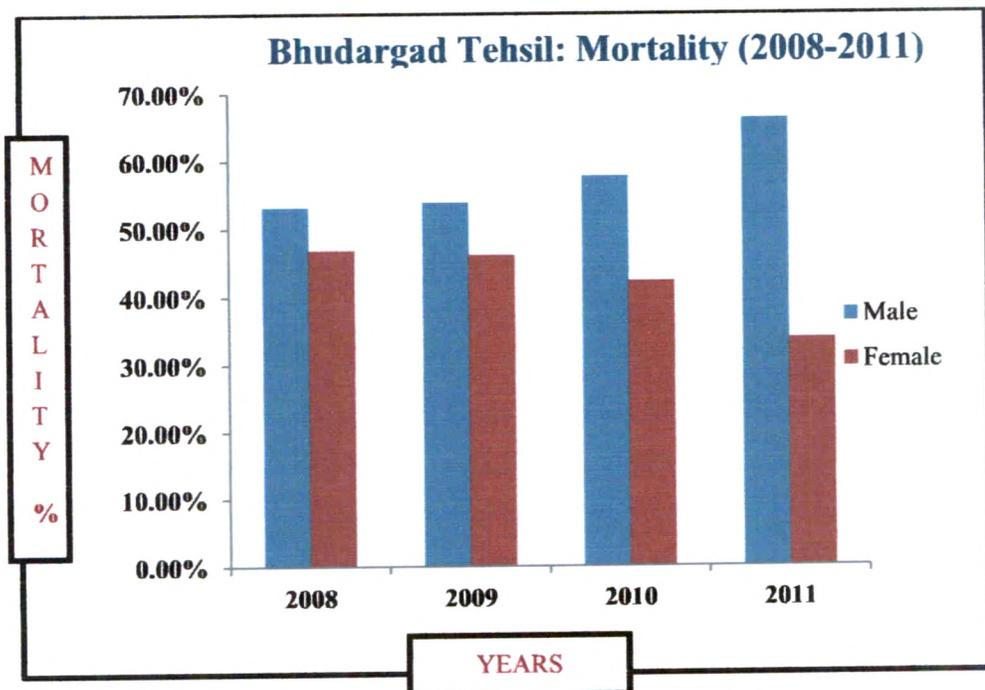


Figure 4.4

4.4.4 MIGRATION:

Migration broadly considers it as a permanent or semi-permanent change of residence with no restrictions on the distance involved in the movement. (Lee 1966 p.49).

Similarly, selectivity among migrants may also occur by sex. In certain situations more males may move than females, while in others, females may move more than the males. For example, in India, all marital migrations involve the movement of females from the place of their parental residence to the place of residence of their spouses at the time of marriage. (Chandna R.C.,1994 p.151).

Western and southern part of the Bhudargad tehsil is hilly and mountainous in nature; most of the area of this region is covered by vegetation, so it is remote, inaccessible and under developed area. People of this area migrated from this region to another region for seeking jobs, education, trade and commerce and to get good infrastructure facilities. They migrated to developed villages or cities Viz. Gargoti, Kolhapur, Ichalkaranji, Gokul Shirgaon, Kagal, Hupari, Pune, Mumbai, Tarapur, Nashik, Aurangabad and Sindhudurg, Ratnagiri districts of Konkan Division etc. migration of young male population is dominant so it is mainly affected on the sex-ratio of the region.

Table- 4.8

Bhudargad Tehsil: Circle wise Migration

Sr. No	Circle	Migration (In %)			Sex-Ratio
		M	F	T	
1	Koor	2.77	0.72	1.78	942
2	Gargoti	2.13	0.54	0.55	952
3	Karadwadi	2.60	0.33	1.50	992
4	Kadgaon	3.66	0.56	2.06	1016
5	Pimpalgaon	5.31	0.86	3.04	1048

Source: Based on Questionnaire Data.

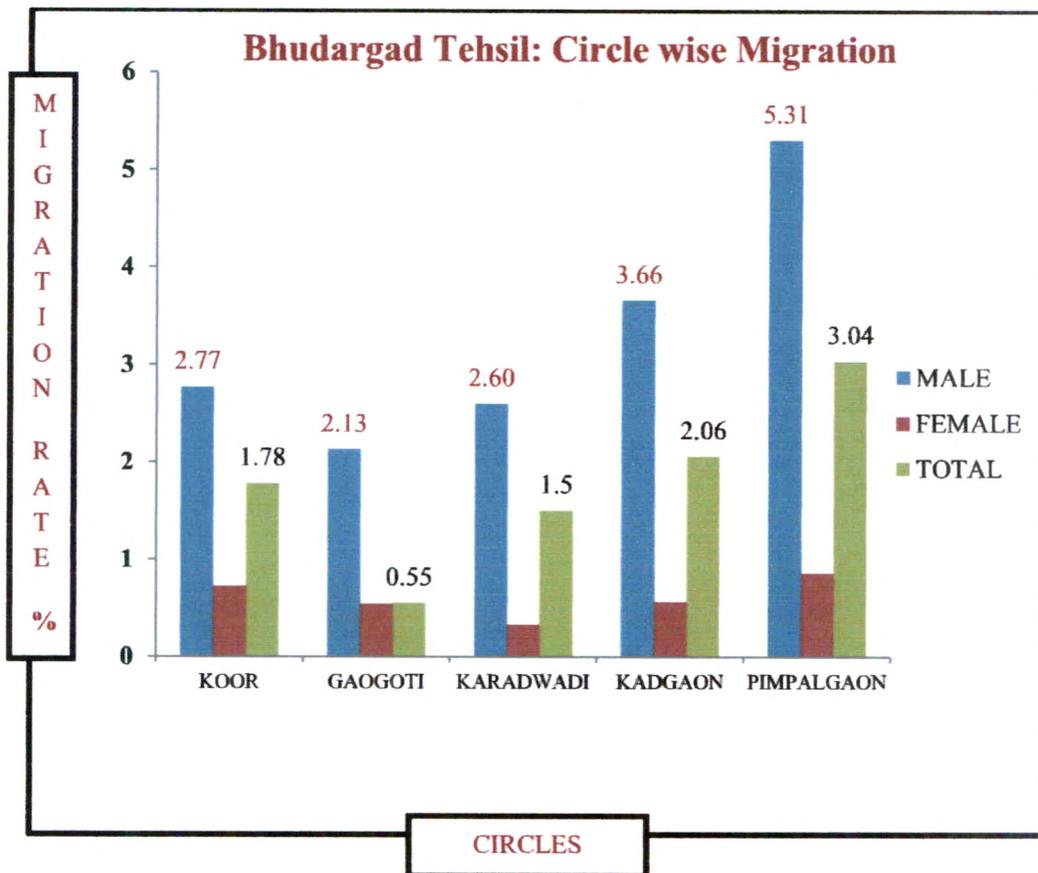


Figure 4.5

Table shows that circle wise migration rate in Bhudargad tehsil, low migration rate was observed in Koor and Gargoti circles, where sex-ratio was lowest, there migration rate was 1.78 % and 0.55 % and sex-ratio was 942 and 952 females per thousand males in Koor and Gargoti circles respectively. Moderate sex-ratio was observed in Karadwadi circle, where migration rate was 2.06% and sex-ratio was 992 females per thousand males. Kadgaon and Pimpalgaon circles having observed highest sex-ratio and there migration rate was also high. Migration rate was 1.78 % and 3.04 % and sex-ratio was 1016 and 1048 females per thousand males in Kadgaon and Pimpalgaon circles respectively.

Rate of Migration is observed high in the areas of highest sex-ratio and it is low in the areas of lowest sex-ratio migration affects on sex-ratio, because as compare to female migration mostly young male population was migrated from all circles of Bhudargad. So it affects on sex-ratio of particular circle or Bhudargad tehsil.

REFERENCES:

- Agarwal, Bina. (1994): *A Field of One's Own: Gender and Land Rights in South Asia*, Cambridge, Cambridge University Press.
- Alam, Moneer, (2006): *Ageing in India: Socio-economic and Health Dimensions*, New Delhi, Academic Foundation.
- Anandalakshmy, S. (1994): 'The Girl Child and the Family: An Action Research Study' (sponsored by DWCD). New Delhi, pp. 44.
- Arnold Fred, Sunita Kishor and T. K. Roy (2002): 'Sex Selective Abortions in India,' *Population and Development Review*, 28 (4): 759-785.
- Athreya, V. and Chunkath, S.R. (2000): "Tackling Female Infanticide, Social Mobilisation in Dharmapuri, 1997-1999", *Economic and Political Weekly*, Vol. 35, No. 49, pp. 43, 45-48.
- Barah Bamal (2002): 'Sex Composition in Assam: A Geographical Analysis', *The Deccan Geographer*, Vol. 40, No. 1, and Pp. 43-52
- Bhasin, M.G. (1980): "Adult population In India-Challenges and Opportunities", Unpublished Paper.
- Bhende, A.A. and Kanitkar, T. (2010): "Principles of Population Studies", 38-44.
- Bhosale, K. M. and Kate, K. B. (2006): 'Loksankhyashatrya', Phadake Publishing house, Kolhapur.
- Banerjee Maya (1977): "The Pattern of Sex Ratios in Singbhum District, Bihar", *Geographical Review of India*, Vol. 39, No.1 to 4, pp.30-38.
- Bhattacharya, A. (1978): "Population Geography of India", Shri Publishing House, New Delhi.
- Chakraborty, L., and Sinha, D. (2008): "Determinants of Declining Child Sex-Ratio in India: An Empirical Investigation" *MPRA Paper No. 7602*.
- Chakrawarthy, K. (2006): 'Geography of Population', Mohit Publications, New Delhi, Pp. 116-117.

- Chandana, R.C.And Sindhu, M.S. (1980): 'Introduction to population Geography; Kalyani Publisher, New Delhi.
- Chandana, R. C. (1986): 'A Geography of Population', Kalyani Publishers New Delhi. Pp. 217.
- Chandana, R. C. (2006): 'Geography of Population, Concepts, Determinants and Patterns', Kalayani Publishers, New Delhi. Pp. 344-345.
- Chandana, R. C. (1969): 'Changes in Demographic character the Rohtak and Gurgaon Districts', Published Thesis, submitted to Punjab University, Chandigarh.
- Clark, J.F. (1965): 'Population Geography', The common wealth and international Library, Prigaman, oxford Geography, oxford.
- Clark, J.F. (1972): 'Population Geography 2nd Edition', Pergamon Press, oxford.
- Clerke, J. I. (1977): 'Population Geography', Robert Maxwell M.C. Publishing, London.
- Das Gupta, M. (1987): 'Selective Discrimination Against Female Children in Punjab, India', Population and Development Review, Vol. 13, No.1, pp.77-100.
- Das Gupta M., and P. N. Mari Bhat (1997): 'Fertility Decline and Increased Manifestation of Sex Bias in India', Population Studies, Vol. 51, No. 3, pp. 307-315.
- Despande, C.D.(1971): 'Geography of Maharashtra', National Book Trust, New Delhi.
- Dube, R.S. (1990): "population pressure and Agrarian change",Rawat Publication, Jaipur.
- Garmer Beajuea (1966): "Geography of Population "Free Press of Glence.
- Ghadage, K.D.(1994):'Impact of Economic Development on Population Characteristics in Pune Division', Unpublished M. Phil. Desertion Submitted to Shivaji University, Kolhapur.

- Gharage, R.R.(2007): 'Spatio-Temporal Changes In Population Structure and Pattern: A Study of Upper Krishna Basin', Unpublished Ph. D. Thesis, Shivaji University Kolhapur Unpublished Ph. D. Thesis, Shivaji University Kolhapur
- Ghosh, B. N. (1984): 'A dictionary of Demography', Arnold-Heinemann Publishers (India) PVT, Ltd, New Delhi, Pp.130, 131.
- Ghosh, B. N. (1985): 'Fundamentals of Population Geography', Sterling Publishers PVT, Ltd, New Delhi, Pp.25.
- Goel, N.P. (1994):"Readings in Population Geography" Mohit Publicaions, New Delhi.
- Gosal, G.S. (1974): 'Population Growth in India 1961-71': A Spatial perspective, Asian profile.Vol – 2.
- Gosal, G.S. (1982): 'Recent Population Growth in India'. Population Geography Vol. – 4.
- Government of India: "Women and Men in India 2012: Central Statistical organization of statistical and Programme implementation."
- Guilmoto, C.Z. (2007): "Characteristics of Sex ratio imbalance in Indiaand Future Scenarios", *4th Asia Pacific Conference on reproductive and Sexual Health and rights*, United Nations Population Fund.
- Hansraj (1986): 'Population Studies, Surjeet Publication, Delhi
- Majid, Husain, (1997): Agricultural Geography, Rawat Publication, New Delhi.
- Mayer, P. (1999): "India's Falling Sex Ratios", Population and Development Review, Vol. 25, No. 2, New York: pp. 323-343.
- Miller, B. (1997):"The Endangered Sex: Neglect of Female Children in Rural North India." Oxford: Oxford University Press, 223 p.
- Mitra, Ashok (1989): 'Implications of sex ratio in population Geography'. Heritage publishers, New Delhi.
- Natarajan D. (1951): "Changes in sex-Ratio", Census Centenary monograph No.6 New Delhi.

- Nirbhawne, N.(January 1996): The Indian Couples and Gender Preferences for their Offspring. *Journal of Obstetrics and Gynaecology in India*, 1996. pp. 12-16.
- Pednekar, H.M.andSita, K. (1980): ‘Spatial Patterns of sex Ratio in South Konkan (Maharashtra) 1951 and 1971, *population Geography Vol- 2*.
- Patel, Vibhuti (2004): An Update on the Declining Sex Ratio in India. *Indian Journal of Medical Ethics*, 2004, April-June, 12(2), pp. 46-51.
- Sawant and Athawale (1994):“Population Geography”, Mehta Publishing House, Sadashiv Peth, Pune.
- Shrivasti, R.K. and Koshal, R. (1998): Changing sex ratio of senoi district, p. 36.
- Singh, A.K. (1980): *National Geographer*, 15, 83-96.
- Socio-Economic Survey of Kolhapur District 2011-2012, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai – 2005-2006.
- Sunanda, K.S. (1995): *Girl Child Born to Die in Killing Fields*, Chennai: Alternative for India Development, 108 p.
- Sundaram, K.V. and Nangia Sudesh (1985): ‘Population Geography Contribution to Indian Geography, VI’ Heritage Publishers, New Delhi.
- Trewartha, G.T. (1953): A case study for population Geography Analysis of Association of American Geography Vol.43.
- Victor Petrov (1985): “India-Spotlight on Population”, Progress Publishers; Moscow.