Abstract for Ph. D. degree titled **A Human Resource Progress and Socio-economic Study in Shrigonda Tahsil of Ahmednagar District.**

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<td><strong>Date of Registration</strong>: 07-12-2011 (Ref No.PGS/Ph.D./1451 dated 15 May 2012)</td>
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**Introduction:**

During the early years, there was enough land to support the limited population but today population explosion has remarkably reduced the man-land ratio. Geographers and other scholars have realized the importance of intensive and proper use of land and start to pay serious attention to the problem.

The success of national planning depends upon the proper utilization of our socio-economic components. Every economy whether underdeveloped, developing or developed should aim at the welfare of man, only capital formation is not enough, what is the use of wealth accumulation or capital formation if it does not benefits the human beings. But at the same time capital is necessary. Man is more important than money but money is also important because it fulfills the needs of man. In other words human labor, human skill, human mind and human energy should be involved, engaged and employed at optimum levels to form capital which may further be used as a means, for the development of human resources and not only for capital formation.

Agriculture and industry are the two sides of the same coin of our economy. Now, both are equally important, despite the fact that India is basically an agricultural
country. If we give higher priority to agriculture sector, it will make us self-sufficient in the sphere of food grains and also improve our export potential.

Today increasing population and changing needs of time requires development of land utilization. The study of socio-economic makes it imperative to present an excellent opportunity to rectify past errors and to over rule further error through scientific methods. The success of national planning is dependent upon the proper vital role of socio-economic condition.

In modern era man has advanced to new heights reaching out into outer space and the population explosion. Thus, there is a great need to study man in relation to this technological advancement and his social processes. Therefore, this is important to study the socio-economic components in the urban and rural population in Shrigonda tahsil. This was followed by works, which studied man-environment relationship. Here again the emphasis is on the man’s comfort in the environment surrounding him. Man-environment relationship has several components; some of them are physical, economical, demographic and cultural.

**The Purpose of the Present Study:**

The present work is undertaken to assess the potential of human resource and socio-economic condition in Shrigonda tahsil of Ahmednagar district. The study area comes under the drought prone zone of Maharashtra state. An attempt has been made in the present study to find out the relationship between different demographic properties. Therefore detailed knowledge about the population characteristics from the data collected from Secondary data as well as field observations. Extensive fieldworks have been carried out frequently in socio-economic progress for overall distribution of the same in the study area. The Physical and Cultural condition plays a very important role in the evolutions of the study area, which subsequently which is responsible for development of human resource is focused in this study.

Man-environment relationship has several aspects like physical, economical and cultural. All these along with many other aspects influence socio-economic characteristics such as distribution, growth, density, literacy, occupation structure, sex ratio and use of land. In this study, five types are selected. One representing physical
aspect, i.e. physiography, second is demographic aspect, called as structure third representing economic aspect, namely land use and forth is electrification and lastly human resource and environment. Impact of these five aspects is studied on the above-mentioned socio-economic elements at the village level.

**Study Area:**

Shrigonda tahsil is located in the southern drought prone zone of Ahmednagar district. The tahsil situated partly at Bhima, Ghod and Kuakdi river and canal basin. Tahsil length is 60 Km. from East to West and 51 Km. from North to South. The height of tahsil is recorded 600 Mtrs. above the sea level. Generally slope of tahsil is North to South.

The latitudinal extend is 18° 27’ 18” to 18° 51’ 54” North and longitudinal extend is 74° 23’ 24” to 74° 52’ East. It is surrounded by Parner and Nagar tahsil to the northern part, Pune district to the west and south - east Karjat tahsil. It’s an area of 1630 Sq. Km. is the third rank of tahsil in Ahmednagar district. Shrigonda is the third largest tahsil in the Ahmednagar district. It is historical and religious which is situated on the bank of river Saraswati. Shrigonda tahsil, the study area, is a part and parcel of the Maratha and Peshvaj region, which has distinctive geographical personality. The historical events starting from pre-historic time to present provide an ideal cultural background.

**The Human Resources:**

People can make the best use of nature to create more resources when they have the knowledge, skills and the technology to do so. That is why human beings are a special resource. People are human resources. Education and health helps in making people a valuable resource. Improving the quality of people's skills so that they are able to create more resources is known as human resource development.

Human Resource refers to the number (quantity) and abilities (mental and physical) of the people. Though, there are differing views regarding treatment of human as a resource, one cannot deny the fact that it is skills of human that help in transferring the physical material into a valuable resource.
Peoples are a nation's greatest resource. People use natural resources to make buildings, bridges, roads, machinery and vehicles, which are known as human made resources. Technology is also a human made resource.

**The Concept of Socio-Economic Development:**

The Socio-economic development of any area depends upon the natural and cultural setting of the area and their optimum utilization. Hence, socio-economic characteristics of the study area have been studied at village level. These characteristics are related to available human resources and present status of economic activity. It includes population structure, literacy, S.T. population, type of worker, i.e. main, marginal and non-workers. The data about proportion of workers engaged in various activities like cultivators, agriculture labores, household industry etc. have been analysed. Heberlein and Shelby (1977) have mentioned that carrying capacity has been applied to land use planning and growth management and other aspects of human activity, as planners have enlarged the definition of carrying capacity to include the many variables inherent in manmade systems.

Social development is when redefined as "greater capacity of the spatial system, social structure, institutions and policy to utilize resource to generate favorable change in level of living integrated in the broad sense as related to accepted social values, and a better distribution of income, wealth and opportunities (Pieris Relph, 1976)."

**Objectives of the Research Work:**
The specific objectives of the present study are as follows:

1. To know the progress of human resource at circle wise in Shrigonda tahsil.
2. To examine the development of social amenities in Shrigonda tahsil.
3. To identify the demographic characteristics in Shrigonda tahsil.
4. To analyze the land use and cropping pattern of study area.
5. To study the geographical situation and development of irrigation in Shrigonda tahsil.
6. To obtain information about socio-economic development through the selected sample villages.
7. To prepare suggestions for worthwhile developments of the study region.
Hypothesis:

This research work has taken the following hypothesis regarding the socio-economic development. There are different factors related to rural development, out of them irrigation, electricity, agriculture and social amenities are considered.

1) The irrigation is responsible for development in rural area.
2) The electricity helps to increase irrigated area in tahsil
3) Social amenities are responsible to change social progress.
4) The impact on socio-economic development changes from land use and cropping pattern.
5) The human resource progress makes impact on social and economical status of Society.

Research Methodology:

The present investigation aims at understanding the problems and prospects of study region. For this, it is necessary to quantify, and analyse variety of aspects related to physiography, population and socio-economic setup of the tahsil. Thus, the data and information collected from different sources have been processed and finally the proportion and percentage have been calculated as per requirement. In the present study, various methods and techniques have been used. The details regarding the database, methodology and techniques have been presented as the relevant part of the present report. The data analysis includes both the empirical and theoretical approaches. Various simple statistical techniques have been used to analyze different aspects of relevant subject. However, brief idea of the methodology adopted in the study is given in the following points.

1) Since the study area is large enough for detailed human resource and socio-economic survey and analysis it has not been possible to study on village level data. Primarily the study is based on block level published and unpublished data and detailed study of revenue villages has been made on the sample survey of villages. Therefore primary survey has been conducted to collect data for the parameters like occupation, agriculture, family size, structure of housing, social amenities, level of
income, development of rural area as for expectations in people etc. The stratified random sampling method has been used for selecting 10 percent i.e. 15 villages from the total 114 villages. The study is dependent upon data collected in the primary surveys. The Stratified random sampling technique has been used to selected 15 villages i.e. 10 percent of these villages.

2) In the selection of sample villages (groups) circle has been taken because the selection of sample villages is considered an important factor determining the accuracy and usefulness of the results. The objectives of sampling are to select a small number of individual’s cases, which will present a reasonably true picture of the entire area.

3) Normally sample survey is done on the basis of certain percentage of the total number of the units in the area but only six groups have been selected from different areas. All six villages (groups) represents all the problems and prospects of social and economic operations and land utilization for the entire area have been taken for the study on the basis of several varying physical and socio-economic condition.

4) While selection of seven villages for case study the consideration of the history of region, location, physiography, potentialities of the land, sources of irrigation, communication and socio-economic condition of the people. First of all it is decided to select one group from each block. Then selecting one village in each group the consideration of physiography, population structure, irrigation facility, agriculture land utilization, electricity, occupation structure, social amenities.

5) Cartographic Analysis: Usual cartographic techniques have been used for presentation of the data. Some of the distributional maps have also been prepared using cartographic techniques. Further all sorts of published and unpublished data were processed and then suitable maps and diagrams use the GIS and Remote sensing techniques, represented data, several choropleth maps, graphs, pie charts has been constructed and interpreted. Prepared a base map of tahsil for analysis of the subject matter. We are studying the methods necessary to subject. e.g. population density, growth, sex ratio, literacy, social amenities, occupation structure, land utilization etc.
The vector based GIS technique like Arc GIS, Arc-view, has been used for analysis of information and presentation of maps, for this the village boundary map of the tahsil has been digitized using rasterised maps obtained from the census. The contour map has also been prepared with the help of raster image of toposheet.

6) Statistical Analysis: Simple quantitative technique like mean, SD, Coefficient value, Density, Sex ratio, Literacy, Population growth, Sampling techniques, Percentage, Ratio, Proportion, Crop combination etc. have been used in the comparative approach. Composite score method has been used to identify levles of human resource development. Crop combination method has been found to be suitable to understand village and district level cropping pattern.

7) Computer Techniques: As the study has adopted parametric approach it has become necessary to use computer technique. The data will be processing of which requires computer techniques. Some computer based cartographic techniques have also been used to the data.

Organization of Chapters:

1) Chapter first gives introduction to the topic, purpose of present study, selection of topic and importance of study area, conceptual framework of human resources and socio-economic development, review of literature, objectives, hypothesis, and methodology adapted in the study, source of data and characterization of the work.

2) Chapter second covers physical situation of the study region which includes introduction, history of the region, location, position of the tahsil, ranking of the tahsil in the district, physiography, topography, drainage, climate, soil, natural vegetation and water resources in the study area.

3) Chapter third deals with the Human Resource Development in Demographic Perspective consisting of the socio-economic facilities, population growth, population density, literacy, sex ratio, educational institutes, student enrollment, health facilities, drinking water facilities, and transport-communication facilities distributed among villages according to the availability of different amenities and population served by study area.
4) Chapter fourth covers the analysis of human resource and socio-economic development in rural sector at micro level study of villages in the study area, which includes population size of villages, group-wise study of the villages, population according to size of villages, rural villages analyzed with the help of growth, density, literacy, sex ratio, work participation rate, distribution of social amenities with the level of development in these villages, occupation structure, identification of coefficient index of human resource development with the help of score method which is potential of the village group.

5) Chapter fifth is devoted to the economic analysis with the help of agricultural development, land use, cropping pattern, irrigation facilities, area under different crops, land utilization, irrigated area, progress of rural electrification, electricity used for agriculture, livestock and identification of crops in crop combination method which is a comparative study of study area and district.

6) Chapter sixth includes human resource investments and rural development in study area with the help of case study of fifteen sample villages. This chapter discusses the analytical study of sample villages. It includes the problems and development of sample villages. The selected sample villages for each group to examine in the socio-economic elements and parameter. We selected fifteen sample villages and ten percent household samples and analyzed the data. The data have collected from field survey from filling questionnaire.

7) Chapter seventh gives total essence of thesis in brief as well as important observations, conclusion, problems and suggestions for the study region. Cartographic work is neatly presented through colored maps using Arc GIS 9.3 software, diagrams and graphs which enhance the value of study. Natural Break Method has been used for the analysis.

Overview of the Research Area:

Chapter 1: Introduction

Chapter I gives idea about human resources and socio-economic development with reference to the study area. It provides information of the design for the present work. Included with Man-environment relationship is several components; some of them are physical, economical, demographic and cultural. The present work is
undertaken to assess the potential of human resource and socio-economic condition in Shrigonda tahsil of Ahmednagar district. An attempt has been made in the present study to find out the relationship between different demographic properties. The Physical and Cultural conditions play a very important role in the evolution of the study area, which subsequently is responsible for development of human resource and also has been considered in the present work. One representing physical aspect is physiography, second is demographic aspect, called as structure, third representing economic aspect, namely land use and forth is electrification and lastly human resource and environment. Impact of these five aspects is studied on the above-mentioned socio-economic elements at the village level. It gives the information regarding scope of the work and also considers the objective, hypothesis of study area. It is here necessary to study the parallel work done earlier in concerned field of human development. This will enable the researcher to include most recent and advanced techniques of analysis which will improve quality of the present research work.

A brief survey of literature related to the present work has been made. Several such studies have been undertaken in the past. Some of them deal with socio-economic characteristics of a region, some have studied relationship between some aspects either physical or economic or social with socio-economic components, some others have studied human resource elements.

People can make the best use of nature to create more resources when they have the knowledge, skill and the technology to do so. That is why human beings are a special resource. People are human resources. People use natural resources to make buildings, bridge, roads, machinery and vehicles, which are known as human made resources. Technology is also a human made resource. People are nation’s greatest resource. Nature’s bounty becomes significant only when people find it useful. It is people with their demands and abilities who turn them into resources. Hence human resource is the ultimate resource. Healthy, educated and motivated people develop resources as per their requirements. Human resources are not equally distributed over the world. They differ in their educational levels, age and sex. Their numbers and characteristics also keep changing.
Chapter II: Physiographic Profile of the Study Area

This chapter deals with the physical characteristics of study area. It gives the information regarding geographical location and situation of study area. Geographical personality of the study area includes physical setting, climate, soil, vegetation, water resources, topography, drainage. The distribution and nature of physical and cultural factors over the surface of the earth forms the core of this subject. On the surface of earth, man being the most important factor, the studies related to distribution of people and their characteristics become very important of study area. Geographical factors also play important role in molding the characteristics of human groups.

In this subject not only the natural distribution of physical and cultural factors is studied, but also why in a particular region, particular type of physical and cultural environment prevails is given stress on. The total population of the Shrigonda tahsil is 315975 as per the census of 2011. Shrigonda tahsil is located in the southern drought prone zone of Ahmednagar district. The tahsil partly situated Bhima, Ghod and Kuakdi River and canal basin. The tahsil has length of 60 Km. from East to West and 51 Km. from North to South. The height of tahsil is recorded 600 Mtr. Above the mean sea level. Generally slope of tahsil is North to South.

The latitudinal extend is 18° 27’ 18” to 18° 51’ 54” North and longitudinal extend is 74° 23’ 24” to 74° 52’ East. It is surrounded by Parner and Nagar tahsil to the northern part, Pune district to the west and south - east Karjat tahsil. Shrigonda is the third largest tahsil in the Ahmednagar district with geographical area about 1629.94 sq.km. and occupies 9.56 percent of the total area of the district. It is historical and religious which is situated on the bank of river Saraswati.

Shrigonda tahsil comes under rain shadow zone characterized by hot summer and general dryness. Rainfall records 522 mm. annually. Temperature increases more than 44°C in summer and comes up to 11.7°C in December. Shrigonda tahsil shows physical variation with platues and Bhima-Ghod plain. Bhima and Ghod are important rivers in tahsil. Soil is characterized with shallow, deep and medium class, Bhima and Ghod basin lies in tashil, which is potential for agricultural development. The natural vegetation in the Shrigonda tahsil represents the “Southern Tropical Dry Deciduous” type and they are scattered. Ghod and Kukadi irrigation project is the the
major source of water resources which is development of irrigation facilities in agriculture sector.

**Chapter III: Human Resource Development in Demographic Perspective**

The III chapter gives better understanding of human resource development in demographic perspective. The spatial distribution of human resource is a factor of a prime importance in the economic development of a region. Developed regions are not necessarily the richly endowed by nature nor are they poorly lacking in minerals or soils. The measurement of human resource development is difficult, mainly because it is not traded in the market like the physical or capital goods (*Misra and Puri, 2002*). The socio-economic development needs proper use of human resources. The measurement of human resource development is difficult, mainly because it is not traded in the market like the physical or capital goods (*Misra and Puri, 1998*). Human resources mean population as a capital asset which yields a stream of economic benefits (*Chatterjee, 1974*). The aim is of achieving socio-economic development and reducing disparity in the region.

It is found that the planning for development is generally done at the macro level; actually, this should be done at the micro level, taking tahsil as a basic unit of development. In the present study, it is aimed to consider a tahsil as a unit for human resource development. Population growth, Literacy, Density, Sex ratio, Work participation and Occupational structure is taken into consideration for human resource assessment and further analysis. It indicates quantity and present utilization of human resource, while literacy shows quality of human resources. The human resources play the active role in the development of the natural resources. Therefore both numerical strength and quality of people have gained importance. *Gosal, 1995*, has supported the idea that the quality of man is the key factor in the totality of regional development. The development of the region is concerned with the quality and quantity of the population. Man is the consumer as well as the producer and hence human resources are the central stage in an economy. Such resources are evolved through socio-cultural development in the past (*Saptarshi, 1996*). It has described that the potential of human population as a resource is determined by its social, cultural and economic characteristics as well as by the level of technological development. According to *Dutta and Sundaram (1996)* the quality of population can be judged
from life expectancy, the level of literacy and the level of technical training attained by the people of a county.

Regional method is applied for the analysis of human resources. For the assessment of human resource potential, five variables of demography have been taken into consideration. Secondary data of demographic variable are used for present study collected from the Census of India, 1951 to 2011 and Socio-economic abstract of Ahmednagar district. Ranking co-efficient method and correlation coefficient method is used for the study of levels of human resource development. Natural Breaks method will be adopted for the representation of maps.

Chapter IV: Analysis of human resource and socio-economic development in rural sector at micro level.

The information on the role of human resource and socio-economic development in rural area is given in the chapter IV. In this chapter there is brief discussion at the micro level study of villages in the study area, population size of villages, group-wise study of the villages, population according to size of villages, rural villages analysed with the help of growth, density, literacy, sex ratio, work participation rate, distribution of social amenities with the level of development in these villages, occupation structure, identification of co-efficient index of human resource development with the help of score method which is potential of the village group. Distribution of human resources has been based on density of population, economic density, nutritional density, caloric density and marginal resource density at micro level.

Human resource development is the process of increasing knowledge, skill and capacities of all the people in a given society. The study of population forms the base to have broad idea regarding quality of human life. The human resources play the active role in the development of the natural resources. Therefore both numerical strength and quality of people have gained importance. The development of the region is concerned with the quality and quantity of the population. Man is the producer and hence human resources are the central stage in the economy. Such resources are evolved through socio-cultural development in the past. In the present study, it is aimed to consider a tahsil as a unit for human resource development. Socio-economic development is intimately connected with the quality and quantity of population
composition. An assessment of socio-economic development is not therefore complete without an analysis of the available work force and its utilization. The socio-economic development needs proper use of human resources. The measurement of human resource development is difficult, mainly because it is not traded in the market like the physical or capital goods (Misra and Puri, 1998).

We are studying on micro-level, which means the study area is divided in six village groups and they have included sub-group of villages. The socio-economic study included in this topic is main important parameter of development in various villages as compared to another villages, as well as tahsil. The vital role of social amenities of rural development. Therefore the important part of micro-level study in rural area for development of the study area. It is divided in six groups i.e. Limpangaon, Belwandi Bk., Yelpane, Kolgaon, Mandavgan and Adhalgaon. In this village group are considered impact of geographical situation of the development for human resource and socio-economic aspect. Human resource development is a precondition for modern economic growth. Only where the working force is sufficiently literate, trained and mobile to take advantage of new advances in the technique of organizing production that the creation of a built-in industry for progress becomes possible.

**Chapter V: Agricultural Land-use.**

This chapter discusses proper utilization of our land resources. This needs a proper appraisal of the existing patterns of land utilization at the study region. It is particularly important because planning of agriculture can succeed only if we have a correct perception of these problems at the village levels. The study area of Shrigonda tahsil is hard and land which may be said to be unculturable and almost all the land which can be cultivated has been brought under the Jowar and Wheat. Because of the increasing pressure of population, people have taken to more and more methods of cultivation and have developed methods of irrigation.

Agriculture is backbone of rural economy particularly like Shrigonda tahsil. About 80 per cent land comes under the agriculture purpose in tahsil, 71.29 percent land is irrigated and 28.71 percent land is seasonal recorded according to 2011 census in tahsil, shows agricultural importance. According to different village groups maximum area is recorded under agricultural purpose. Limpangaon, Belwandi Bk.,
and Yelpane group of villages recorded maximum irrigated land where Mandavgan and Adhalgaon group shows minimum irrigation and increase the intensity and scarcity of water.

Water Resources have the vital role in Agriculture. Irrigation has become an important aspect of agriculture. Recently irrigation becomes most essential and without it most crops cannot be grown. It becomes essential part due to variation of monsoon and uneven distribution of rainfall throughout the year. Even those crops, which are grown during rainy season, also depend upon irrigation because farmers try to irrigate the crops in time so that crops might be ready in time and give higher yield. In case of failure of rainfall the use of the irrigation facilities becomes much more essential. Areas growing multiple crops need intensive irrigation facilities. In present study Shrigonda tahsil was selected as a study area which came under rain shadow and semi arid region. The irrigation water resource availability and management practices were considered from study area in relation with a cropping pattern during 1961 to 2011. Mostly the irrigation practices increase chronologically with change in land use and cropping pattern i.e. semi arid crop to cash crop which significantly increased up to 23% and increase in surface water irrigation facilities by 28%. The monsoon pattern mostly influences the land use and cropping pattern. The scarcity and availability of water resources influenced the ground water utilization rate.

The present scenario of irrigation practices in Shrigonda tahsil study area is compared with the district irrigation status. The main irrigation practices in the study area of well water and surface water were observed since 1961-2011. In 1961 the gross area available for agricultural practices was 174209 hectors where as 147030 hectors were actually under irrigation. The surface irrigation practices 29.30 percent whrer as well irrigation 70.70 percent. In 1980-81 the surface water irrigation practices decline (28.50 percent) and increased the burden on ground water. (71.50 percent). But in 1990-91 enhance the 5 percent in irrigation by surface water amiability and reduces the dependency on ground water. Again in 2001 rain water availability decline showing the impact on surface water availability for irrigation and parasite on ground water for agriculture practices. (21.73 percent and 78.25 percent respectively). According to 2011 data it remains declining the surface irrigation (20.52 percent) and increasing the well irrigation 79.48 percent respectively. In the
study area (Shrigonda tahsil) surface water irrigation contributed between 25.72 percent to 48.19 percent. Mainly the irrigation practices were on tube well and dug well i.e. up to 74.28 percent. This indicates the meteorological condition that monsoon availability and the pattern can influence the surface water and ground water recharging. As the study area is rain shadow area mostly depends on retreating monsoon. With mostly having uneven pattern. (Ref. Gazetteers).

In Ahmednagar district, the northern area having surface irrigation where as southern areas of district mostly depend on ground water irrigation practices. The irrigation water availability reflects the land use and cropping pattern in the district. In study area the short term cropping patterns like Wheat, Jowar Bajara were dominating compared to district scenario. The land under the Wheat cultivation were increased by 14.75 percent to the 25.12 percent where as in study area i.e. Shrigonda tahsil it was 10.66 percent to 23.48 percent , in Jowar and Bajara at district level land under cultivation declines from 33.79 percent to 22.69 percent and 6.74 percent to 6.20 percent, where as the cash crop like sugarcane, cultivation was dominating in the district. Where as in comparison with the study area in shrigonda tahsil the Jowar and Bajara cultivation declined from 55.67 percent to 42.22 percent and 8.60 percent to 3.42 percent respectively. Surprisingly cash crop like sugarcane cultivation increased from 11.82 percent to 15.23 percent. The cash crop cultivation practices were increased due to irrigation project (Kukadi canal project) available in study area attracting the farmers from indigenous crop to cash crops. This indicates the surface water availability impacting land use pattern and agricultural economy. As per same condition to total fruits and vegetable is also increasing from 5.23 percent to 13.42 percent at district lelvel and 5.22 percent to 11.82 percent at tahsil level. It is indicator of change in the attitude of farmers from traditional to modern techniques used in agriculture.

The present study area is not having any major irrigation project. It partially depends on Kukadi and Ghod canal irrigation. The agriculture pattern reflects mostly the tube well and dug well irrigation. The cropping pattern mostly reflects the short term crops like Jawar, Bajara, Wheat, Groundnuts and Gram. But in 1961 to 2011 data reflects the cash crop existence in agriculture pattern i.e. the availability of irrigation facilities increased the farmer’s interests towards such type of crop.
Chapter VI : Case Study of Sample Villages.

This chapter discusses the analytical study of sample villages, which is selected from Shrigonda tahsil in Ahmednagar district. India is a developing country. In India a place of agriculture is important because near about 67 percent people depend directly and indirectly on this occupation. These people live in village and their occupations are agriculture, cattle grazing, forestry and likewise primary activities. Village is an important unit of country. Village includes many characteristics that are spatial distribution of social, cultural, human agglomeration i.e. group of houses, streets and buildings etc. Village is the first developing stage in history of human civilization and the real fact of the village life represent the country. Knowing the rural life style is the main aim of the present work.

On the basis of random sampling method 15 villages of the study area are selectd. Total number of households in 15 villages recorded 14863. Considering the total number of household selection of village is based on random sampling method considering size of households, total population, relief and distance form tahsil place. On the basis of 10 percent random sample households it is recorded 1479 for analytical study of various aspects to human development and socio-economic approach. Shrigonda tahsil recorded 114 villages according to 2011 census. In these villages the 10 percent sample villages are selected. It is to study six groups of all aspects which is selected each group of 02 villages for the village survey. Village Belwandi Bk. is largest village recorded 2320 household and 11599 population according to 2011 census. Second largest village is Limpangaon in first group of tahsil recorded 2225 household and population 9707. The smaller village in Vadali in Kolgaon group where total number of household recorded 447 and population is 2178. Another smaller village was recorded as Kautha in Limpangaon group with 494 household and 2643 population according to 2011 census.

There are various social amenities influencing human development in rural life. The study focused on whether the role of social amenities influence and is required for progress, the proper distribution is necessary. The study of nature requires primary data. The primary data are collected with the help of questionnaires. This study is broadly based on sample survey, the area of which has been from Shrigonda tahsil. The information is collected with the help of a schedule of
questionnaires. There are fifteen sample villages in six groups namely Limpangaon, Ajnuj, Kautha, Belwand Bk., Chimhale, Vangdari, Visapur, Pimpari Kolandar, Chikhali, Pargaon sudrik, Vadali, Mandavgan, Bhangaon, Adhalgaon and Pedgaon in Srigonda tahsil.

From above selected 15 sample villages 1479 household are selected based on 10 percent random sampling methods. Total numbers of villages are taken 15. Population growth, sex ratio, literacy, occupation structure, social amenities, age composition, Age Sex Structure, general land use, agricultural land use, source of irrigation in agriculture, drinking water facility, use of electricity, fuel used in kitchen, use of agricultural equipments and vehicle, recreation and communication units, settlement structure, wall, roof and flooring material used by households, bathroom and latrine facilities are taken in to account and the data is analysed with various statistical methods, bar graphs, line graphs, pie diagrams and other suitable cartographic techniques.

Chapter VII : Summary and Conclusion.

This chapter summarizes the present work including brief abstract and important findings. The present chapter gives important observations, conclusion, problems and suggestions of the region under study. According to observation and general study of sample villages following conclusions are observed. The physiography of villages is suitable for agricultural production but traditional methods are practiced. The tools for agriculture are traditional. Modern means of irrigation are not adopted. There is no proper attention to the use of available water. Climate is suitable for agricultural product like flowering and cash crops but decreasing man-land ratios effect adversely the commercial application of agriculture. Soil in the villages is also suitable for agriculture product but using chemical fertilizers and water availability are problems of villagers.

The population characteristics in the villages observed have been better about literacy, sex-ratio, occupation structure but improvement is suggested for decreasing female population and maximum dependency on agricultural occupation percentage. The literacy is more but there is the problem of quality education and less percentage of female literacy.
Land use of village is observed (71.29 percent land is irrigated and 28.71 percent land is seasonal) and the conclusions areas following: forest area is minimized, traditional crops share maximum area (averagely more than 41.00 percent), people adopt traditional means of agricultural method etc.

Social amenities are available in the villages but poor road situation, less frequency of S.T. buses, load shading of electricity, quality of education, lack of drainage system, and drinking water problems are observed in the villages.

Finally the conclusion of the study is that, in these villages, there is increase in development day-by-day. The irrigation facilities are available (Kukadi and Ghod). So there is an increase in per capita income, improvement in life style. These are the positive changes. Some of the people have employment available in the sugar factories. One of the problems in agriculture sector is excessive water supply. There is also pollution caused by sugar factories. These factors have indirect effects on the soil. Therefore the soil is becoming infertile day-by-day.

Different villages due to their distinct locations have different types of facilities available to them. These facilities are in the form of education, medical, social organization, irrigation, fertilizers, seed, etc. The irrigation facilities and other infrastructure are more prominently available in the villages located near Limpangaon, Vangadari, and Pedgaon. The irrigational facilities are available to these villages farthest extent. Due to this more than 65 per cent of the cultivated area of these villages irrigated. The percentage of irrigated land to the total cultivated land is increasing in Ghod and Kukadi irrigation project.

Main source of income of sample villages are agriculture and other subsidiary occupations. Following are the suggestions for the sample villages.

**Utility of the Research:**

Human resource and socio economic study is the applied for different way in the society of the study area. It is the result of interaction between various social and economic factors. Village planning is use for integrated development of rural area. We are study to various aspects associated with socio-economic conditions of the study area and find the level of development of different village groups. It is help to planning and uplift such region which is comparatively underdeveloped of the study.
area. With the help of following conclusion and suggestions, Mandavgan, Adhalgaon and some of Kolgaon group of villages implemented irrigation project. It is important for development of these village groups. The planner and policy makers take in to consideration, the ideal plan on priority basis to eliminate the imbalance to make the study region. In this group of villages to start the small scale industries, for overall development of the study area.

Limitations of the Study:

Any study has suffers by some of inadequacies and limitations. These are as follows: There is unavailability of village wise data of age-sex, age at marriage, life expectancy, adult literacy, combined gross enrollment, infant mortality, GDP, total number of birth and death in year etc. These data not obtained from the secondary source of data. Data in respect of few variables has been obtained from primary source like interviews, questionnaires and direct observations. The data of Social amenities in 2011 census is not available. So this is obtained by projecting 2001 census, district socio-economic survey abstract and Tahsil Panchyat Samity office (B.D.O.), Shrigonda.

Conclusion:

The detailed analysis of study area has enabled the following conclusions:

1. Population density is higher in irrigated and service centre area.
2. Area under forest was decreased in the study area it was explained by the marginal resource density.
3. Sex ratio has continuous decline in the study area.
4. As per village survey data population of the young age group was higher in the study area.
5. Literacy in the study area is continuously increasing due to need of society and standard of living.
6. Male literacy is comparatively higher than the female literacy.
7. Maximum population is engaged in the primary occupation in the study area.
8. The birth rate is the negative indicator of the economic development of a particular area. Generally, the birth rate is found less in the city area and more in the rural areas.

9. Death rate provides one of the basis for computing the rate of natural increase in population. Death rate is the indicator of the economic development of particular region. The high death rate shows lower level of the human development. In the hilly and rural area of the tahsil the death rate is observed more because deficiency in the availability of medical facilities.

10. The information in Infant Mortality Rate has declined from 1971 to 2011. It is increase in age at marriage, improvement in medical facilities and female literacy.

11. The life expectancy for the year 1991, 2001 and 2011 has been given increasing trend; it is because of progress in economic development improvement medical facilities etc.

12. The proportion of no. of families BPL has also been reduced. This scenario shows that the BPL families are decreasing. This is good indicator for the human resource development

13. To provide the medical facilities in rural areas. Strict restrictions from hospitals performing abortions and sex determination tests.

14. Physical features, rainfall and soils conditions are treated as basis for irrigation development.

15. Groundwater is more dependable than surface water in the region; therefore, its potentiality has to be increased by different measures like contour bunding, percolation tanks and afforestation. This may bring additional land under irrigation.

16. Electric motor pumps are significant water lifting devices; therefore, cheap and assured power supply should be made available to the farmers. Its proper supply is difficult and electric charges have increased.

17. The efforts are to be taken to popularize the use of mechanical and biochemical inputs among the farmers in the region.

18. Growth of population has affected the productive land surrounding the settlement area.
19. Almost all villages have experienced considerable growth of population due to decrease in death rate and also decrease in infant mortality. Birth rate has not decreased to a considerable extent. Medical facilities have enabled the longevity of life, reduced infant mortality, and eradication of epidemics.

20. Occupational structure has also considerably changed due to the impact of urbanization, education and modernization. Now people are diverting towards secondary and tertiary occupations.

21. Land use has considerably changed. People have tried to make use of land in different kind of use.

22. Cultivators are using chemical fertilizers, developing irrigation facilities by maximize and multiple cropping.

23. Impact of scientific methods production. Farmers have not adopted scientific methods of cultivation, modern agricultural equipments but they have paid much attention towards new varieties of crops, because of high yielding and less time consuming consideration. As a result almost all old verities of crops have been replaced by newly developed varieties of crops.

24. The study of sugarcane cultivation has the increasing in study area. Because most of the area is irrigated and four sugar factories are present in study area. But the other hand over irrigation and use of chemical fertilizers land is sailiend and unfertile.

Suggestions:

1. The economy of the study region is agriculture base. 70 percent population of study region engaged in primary activities especially in agriculture. But development of agriculture is not uniform in all parts of the study area.

2. Most of population depending on agriculture. But the agricultural development is not satisfied. Therefore to minimize the disparity in the development of the agriculture there is need to reduce the pressure of population depending on agriculture,

3. The study area needs develop in road transportation, particularly in Mandavgan, Kolgaon and Adhalgaon group of villages.
4. The distribution of social amenities is uneven like as education, drinking water, medical, transportation etc. It is necessary to these amenities to provide or develop in Mandavgan and Adhalgaon group of villages.

5. The provide the modern medical facilities by taking the percentage of villages and population, served by medical facilities.

6. To arrange villagewise plan for family welfare centre.

7. To establish the technical institute, various degree courses for the development of higher education.

8. A study of spatial distribution of facilities is less in north east and east part of the tahsil. This is due to uneven distribution of natural and cultural resources. Therefore, different action programmes should be implemented in study area to develop the backward areas particularly in north-east and eastern parts of the study region.

9. The study area is an industrially backward as compared to northern part of the district. The region is poorly developed due to lack of planning. The existing agro base resources should be develop of dairy sector and agro based industries.

10. The planners, administrators, politicians of the study region should work together as an integrated structure to plan and implement the developing programmes and policies.

11. Shrigonda tahsil belongs to drought prone area; hence there is scarcity of water. North east and eastern part of the tahsil (Mandavgan, Adhalgaon and Kolgaon group of villages) is more scarcity of water as compare to other study region.

12. The less canal irrigation in Mandavgan, Kolgaon and Adhalgaon group of villages. Therefore watershed development programme or canal irrigation programme is essential for these dry villages for agriculture and economic development.

13. Development programme of agriculture should carryout effectively to increase per hector agriculture production. Therefore to increase agriculture income and work in rural area. This is possible; there will be equality of area against population.
14. If the agriculture based industries is increased there are many opportunities are available in employment.

15. If the fallow land develop through government agencies and NGOs in study area to increase marginal resources density.

16. The survey of government policies and village survey sample data say the growth of population is rapidly increased. To control the growth of population and participation in women in higher education to motivate the people awareness.

17. There is need to increase the rate of literacy and quality of education in the rural areas and to minimize dropout rate of girls from the secondary education. Different schemes need to be implemented to motivate the proportion of female in higher education in rural area.

18. The need of sustainable agriculture development is essential to adopt the modern technology, capital investment on large scale, research and development to face globalization and global competition.

19. Different kinds of programme of agriculture development should carryout effectively to increase the production and the income.

20. Different sources of employment should be generated in rural area to stop migration flow of rural population.
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