The word 'Agriculture' is derived from the Latin word 'Ager' means Land or field and 'Culture' means cultivation. It means the science and Art of producing crops and livestock for economic purpose. Agriculture is an art of raising plant life from the soil for the use of mankind.

Agriculture is the mile stone in the history of human civilization, due to agriculture man settled at particular place. Agriculture is one of the oldest and prime activities of the human being. It has remained an important source of land. In spite of growing industrialization and urbanization in the world, nearly fifty percent working population still engaged in agriculture. In developing Countries agriculture sector has been a major source of employment and it has contributed to the national economy.

The basic aim of agriculture is to raise stronger and more fruitful crops and plants and to help them for their growth by improving the soil and supplying the water.

Agriculture is a backbone of Indian economy. In India about sixty four percent of the total population is dependent on agriculture for their live food.

The agriculture activities in the world are closely controlled by Physical Factors. Indian agriculture is not an exception for this, today India is facing two main problem concerned with agriculture. The first is meeting the increasing demand of food and other is supplying agro products for ever increasing population and the second is uneven development of agriculture and changing pattern of agriculture land use. India tried to be self sufficient in agriculture through the five year plans. After independence by taking systematic efforts due to the unique importance, agriculture gets more and more attention in every five year plans and top priority is given for the development of agriculture in our Country.

The study of land and agriculture from the geographical point of view gained more importance after 1950. At the beginning of 1970 and later on the green Revolution brought of remarkable change in the field of agriculture, due to this India become not only self sufficient in food grains but it could also expert a small quality of it.

The process of agriculture development is not properly channelized because of uneven rainfall, unavailability of basic infrastructure facilities and unbalance allocation of
resources. The green revolution is succeed only in the areas of irrigation. In spite of lot of efforts by Government, the small farmers could not get the benefit of it. This creates a large gap between small and big farmers and imbalanced is created. To reduce this gap. Systematic planning is required for this purpose it is necessary to have the detailed information of the region.

The research in agriculture geography in the region can be useful to solve the problems of the region and helpful in planning for agriculture development. The present exposition has an attempt to study the Sindhudurg District for the better planning and development of agriculture.

Agriculture land use is an important indicator of an appropriate use or misuse of land. The analysis of general land use, agriculture regionalization and cropping pattern helps to denote the intensity and status farming in an area.

The study shall be entitled changing pattern of Agriculture land use in Sindhudurg district: A Geographical analysis. It shall be an empirical micro study which relates to agriculture land use and changing pattern.

The selection of topic and region is influenced by different considerations. Firstly this study relates to region, popularly known as 'Konkan', consists of Thane, Mumbai, Raigad, Ratnagiri and Sindhudurg district. Geographically all the district are synonymous to each other, to insert the accuracy and objectivity in the study, the study will be restricted with Sindhudurg district of Konkan region only.

The region has not been studied in-depth by any researcher from the agricultural point of view secondly, this region remains still untouched of land use planning and development.

The review of literature, on the aspects of land use and changing pattern of agriculture land use and cropping pattern, reveals that there is no empirical study has been done based on secondary data related to Sindhudurg district. Geographically, Sindhudurg district has unique features to study just as the wide range of variable like change in agricultural land use. Sindhudurg district is selected as a base study.

Apart from these, the researcher has an agricultural background and association of the study area since long, as he working in this region will help him to knowing the changing patterns of agriculture Land use in the study region.
Study Region :-

Agriculture is one of the oldest and important activities of the human being. It is carried under the control of natural environment. Agriculture is an important source of food. Inspite of growing industrialization and urbanization in the world. In developing countries agriculture sector has been a major source of employed and income.

Agriculture is a backbone of Indian economy. In India near about 64 % of the total population and 90 % of rural population is engaged in agriculture.

In spite of technological development, environmental factors play key role in the development of agriculture in the region. Socio-economic factors also support for the growth of agriculture. This it is necessary to focus on the physical and Socio-economic factors of the study region to understand the agricultural scenario of the region.

Brief History of the District :-

Sindhudurg district is the southern part of the greater track known as the 'Konkan'. Which is historically famous for its long coastline and safe harbours. Sindhudurg district was a part of the Ratnagiri district, but for administrative convenience and industrial and agricultural development Ratnagiri district was divided into Ratnagiri and Sindhudurg with effect from 1st May 1981. Sindhudurg District now comprises the Tahsil of Devgad, Vaibhavwadi, Kankavli, Malvan, Vengurla, Kudal, and Sawantwadi. After 1991 census new Tahsil 'Dodamarg' was created by transfer of 56 villages from Sawantwadi Tahsil.

The name of the district has been adopted from the famous sea fort of 'Sindhudurg'. This was build by Shivaji Maharaj near Malvan and it Literally means Sea-Fort. It's construction was started on Nov.25, 1664 and after 3 years it was completed in such a fashion that it could not be seen easily by the enemy coming from the Arabian Sea.

There were major changes in the administrative set up of Maharashtra after the 1991 census; resulting in increase of five districts. The number of division unchanged it

Sindhudurg district has 7 Tahsils in 1991 and in 2001 new Tahsil Dodamarg was created by the transfer of 56 villages form Sawantwadi Tahsil. This Sindhudurg presently has 5 towns, 8 Tahasils and 743 Villages spread over Devgad (97), Vaibhavwadi (59), Kankavli (104), Malvan (135), Vengurla (83), Kudal (124), Sawantwadi (85) and Dodamarg (56) Tahasils.

The district is divided in to two sub-divisions and eight Tahasils. Kankavli Sub- Division includes Kankavli, Vaibhavwadi, Devgad and Malvan Tahasils and Sawantwadi sub division includes Sawantwadi, Kudal, Vengurla and Dodamarg Tahsils.

District highlights by according to 2001 cencus Sindhudurg District is famous for cashew and mango crops and processing industries, marine fishery is the most important non agricultural economic activity of the district. Sawantwadi is the famous crafts center for wooden toys. There is no uninhabited village in the district Malvan Tahasil having the highest number of villages (135) in the district. Sindhudurg district has higher sex ratio (1079) than the state (922). The economic of the district is mainly depends on agricultural sector. 66.2 percent person are engaged in agricultural activity.

Sindhudurg district situated in Konkan region of Maharashtra State is located one of the west coast of India. Southern part of Konkan which spreads to borderline of Goa State is called Sindhudurg District. The District has at east Kolhapur District, at South Belgaum and Goa State at north Ratnagiri District and at West Arabian Sea. It is the smallest district in Maharashtra state. Its area is 5207 Sq.Kms. (503950 Hectors). It is just 1.69 % of Maharashtra area. It lies in between 15°37' to 16°40' North Latitudes and 73°19' to 74°18' East longitudes with an altitude of 50-150 meters above mean Sea level (MSL) Sindhudurg district covers 121 kms out of 720 Kms coastal length of Arabian Sea.

Location :-
The headquarters of Sindhudurg district is situated in Oras Budruk village, which as a population of 868825 persons as per year 2010-11. The district population constitutes 0.9% of the total population of the state.

The district is well connected to Mumbai and Kanyakumari by the Konkan Railway, which traverses through the district. It also has a good network of roads connecting it to other parts of the country.

**Physiography:**

Maharashtra falls under two of these macro level divisions 1) The Deccan Plateau. 2) The coastal plains and Islands. The north south running Sahyadri range separates these two divisions. The Deccan plateau lies to the east while the coastal plains and Islands lie to the west up to the Arabian sea.

The coastal plains and Islands is divided into 4 meso regions i.e. Gujarat region, western coastal region, esterns coastal region and the Islands of these, The Western coastal region covers Maharashtra. This region is divided in 4 micro level region i.e. Maharashtra littoral Goa coast, Karnataka coast and North Kerala coast only Maharashtra Littoral falls within the state of Maharashtra.

Maharashtra Littoral includes the districts of Thane, Mumbai, (Suburban), Mumbai. Raigarh. Ratnagiri and Sindhudurg.

A major portion of the district is hilly on the basis of local variation in the relief and other characteristics the district can be grouped in to three parts.

i) The Sahyadri hills the main system of hills which runs along the eastern boundary of the district

ii) Sindhudurg plateau.

iii) The Sindhudurg coast.
**Climate :-**

Sindhudurg district being a coastal district the variation of temperature during the day and through the season is not large. Owing to the proximately of the sea. The percent of humidity is more and the climate is generally moist and humid. Broadly the year may be divided in to three season the summer season from June to October and the winter season from November to February.

**Soil :-**

Soil is the product of parent rocks. Climate, Rainfall, Humidity, and vegetation affect the soil formation in the Konkan region. The soils of the district are generally classified in to three parts i.e. Laterite soil, salty. Soil coastal alluriums soil.

**Laterite Soil**

The predominant soils in the district are laterite soils and extensive spreads of laterites are noticed throughout the district they very in colour from red to brownish red, owing to the preponderance of Hydrated iron oxides. They are fairly well supplied with nitrogen and organic matter and their texture is loamy. They are porous and not retentive of moisture. These soils are fonnd in several grades, The main being rice soil and Varkas soil. Both of there soils are available on the slopes of hills. There are yellowish red in colour and poor in fertility. Paddy, the principal crop of the district grows in this soils and more than 50% of area is under this crop. The balance land is traditionally cultivated for Regi, Vari, Nagli etc but this practice is being abandoned and there is a definite shift towards horticultural crops in the recent years. The cultivation of ground nuts has also picked up in the recent years.

The district is famous for its mango crop specially the world renowned Alphanso. There has been rapid increase in the area under cashew nuts and mangoes with more and more Varkas soil being brought under plantations. Entire land - scape is also dotted with coconut Kokum Arecanut and Jack fruits trees, which thrive well in these soils and climate. Pluses and spices like pepper are also cultivated specially in the coastal areas.
Salty Soil

Due to the inundation of the sea, a part of the coastal soils has become salty. They are locally known as 'Khar' or 'Khajan'. In Devgad, Malvan and Vengurla Tahasils the entire western strips are salty while in other tahasils only salt patches are noticed.

Coastal Alluviums

The coastal strips have deep sandy loams and in these soils cocount and arecanut gardens thrive well.

Land and Land use pattern :-

The Ministry of food and agriculture Government of India has recommended a standard pattern of land use classification for the maintenance of records. columns 19 to 23 i.e. forest, irrigated area, unirrigated area, cultivable waste land, Area not available for cultivation etc of the village directory give land use pattern in each village in the district. The data furnished here are based on the village records and pertain to the year 1999.

Forest :-

This includes all land classified as forest under any legal enactment dealing with forest or administered as forest, whether state owned or private and whether wooded or simply maintained as forest land within the forest are itself there may be occasionally cultivated patches or grazing lands, but such area shown under (column 19) as forest. The process regularization of land grants and effecting relevant changes in the basic records of survey and settlements are some what protracted and time consuming. Therefore the information based on records is in some cases at least likely to be different when compared with the actual field situation.
**Population**

Population plays a key role in the development of the agriculture of the region. The total population of the district as per 2010 was 866825 of which 90.53% in rural and 9.47% in urban population out of this total population 48.10% are male and 51.90% are female population. There are all together the 192666 inhabited places in the district of which 743 are villages and 5 towns.

During the decade 2010-11 the population of the Sindhudurg district is decreased by -2.30% the growth rate is lower than the Indian average of 23.44% urban population is increased by 9.47% which is below than the national average. The growth rate of rural and urban population for the last two decades is compared and it is observed that the decade growth rate of rural population is increased. The growth rate of rural population is Lower than the urban population. The slow rural growth and decline of rural population is a result of migration., The highest decadal population growth of total and rural population is recorded during the decade of 2000-2011 in Sindhudurg District.

The density of population in any region indicates the pressure on land. The density of population in Sindhudurg District was 163 per sq.km. 2011 that is much less than the national average shown in the table. The highest density of population is observed in Vengurla Tahsil was 302 per sq.km. persons and the lowest density is found in Dodamarg Tahsil which is 101 persons per sq. kms.