CHAPTER-I

INTRODUCTION TO THE REGION, DATA BASE AND APPROACH TO THE PRESENT STUDY -

Geographic personality of the study region.

Physical setting.

Drainage pattern. Economy of the region Forests

Mineral wealth

Fishries

Industrial structure of the region

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Geographic personality of the study region :

The study area of south Maharashtra lies between 15°36' North to 18°35' North latitudes and 73°5' east to 76°25' east longitudes. The region covers an area of 55,175. Sq.Kms. and includes 53 urban settlements. According to 1981 census, the area has a population of 1,10,83,338 persons. The region covers 17.93 % of the total area of the state and shares 17.67 % of the total population of the state. Out of the total population of the area 20.3% population is urban. It accounts for 10.11% share of the state's urban population. The region includes Kolhapur, Sangli, Satara, Solapur, Ratnagiri and Sindhudurg districts of Maharashtra State. Administratiwely it covers fifty seven talukas. (Fig 1.1 and Fig 1.2.)

The Western boundry of the study area is well defined by the west coast of Maharashtra. The southern fringe runs along the interstate boundry between Goa, Maharashtra and Karnataka State. In the north the study region is delimited by the course of west flowing Savitri river and east flowing Nira river which joins the river Bhima near Akaluj. The boundry of Solapur district separates the region from Mahathawada area. To the eastern side of the region lies Gulbarga district of Karnataka.

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The study area may be divided in-to five plysiographic divisions. 1) West coast region. 2) Upland hilly region , 3) Upper Krishna valley, 4) Central dry plateau and 5) Upper Bhima basin.

1) West Coast Region :

The western part of the study area is a coastal lowland of less than 300 meters height. This region is delimited by Arabian sea to the west, the Sahyadries on the east, river Savitri on the north and river Terekhol to the south. This area is a distinct strip of lowland intercepted by numerous off-shoots of Sahyadries streaching in east-west direction and reaching right up to the Sea water. The western most strip of this region is a very lowland of about 20 to 30 meters in height and 15 Kms Width, While the eastern strip is very rugged country with lofty hills and elavated plateaus. The western strip is called, localy, as ' Khalati' and the eastern as ' Valati '. The Khalati is composed of alternating headlands and beaches or creeks. On the eastern flank of this region the steep scarp of Sahyadries runs almost continiusly paradlel through wout its length. This area is erroded by many small west flowing rivers whose vally bottoms are very narrow. Over 86 % of this region is hilly. This region covers nearly 22 % area of the study region where the soils are poor and annual rainfall is 2000 to 3000 m.m.

2) Upland hilly region :

To the east of lowland coastal region there lies main sahyadrian scarp with 900 to 1100 meters in h_{ight}^{e} . This hilly

region covers nearly 17 % land of the study region and includes eastern most edge of Konkan districts and western talukas of Satara, Sangli and Kolhapur districts. Here the Sahyadri runs almost continusly in north-south direction with its major peaks and intervaning saddles. Several hill ranges emerge from main Sahyadries and extend on the South Maharashtra plateau in South-east direction in Satara and Sangli districts and in north-east direction in Kolhapur district. These hills rise in series of terraces. The differential erosion has carved out the river valleys leaving the harder meterial as residual hills. The region has hard lateritic soils and recives 2500 to 5000 mm. rainfall.

3) Upper Krishna valley :

In between Sahyadries and Mahadev range lies the upper Krishna basin with an overage hight of 600 meters above M.S.L.and covers nearly 16.5 % area of study region. This valley has extended in parts of Satara, Sangli and Kolhapur districts of the area. The extreme western part of this valley is rugged with mesas and escarpments rising several hundred meters above the valley bottoms. Several small streems erode the eastern **slo**pes of Sahyadries and joins the Krishna river. The valley is considerably wide and plain in its lower course. This region has medium and deep black soils and annual rainfall of 600 to 1000 mm.

4) Central dry plateau :

This pleateau region covers 20 % area of study region and includes northern and eastern parts of Satara and Sangli districts and Sangola taluka of Solapur district. This region is a transitional zone with two important hill ranges namely Mahadevo range and Phaltan range. This plateau separates Bhima basin from Krishna valley. The Mahadeo range starts about 16 Km. north of Mahabaleshwar and runs to east and south-east direction across the whole region. From this main range Khanapur and Jath plateau stretches to south and Phaltan range stretches to north. This region has shallow soild with black and brown patches. Rainfall here, is about 500 m.ms. This plateau region is a part of drought prone area of Maharashtra (See Fig. No. 1.3).

5) Upper Bhima Basin :

This is a flat undulating plain with very few intermitant low hill ranges. This region covers nearly 24.5% land of the study area and includes the entire district of Solapur excluding Sangola taluka. Here in this area the river Bhima drains the region in-to south-east direction. Northern and eastern part of Barsi taluka central parts of Madha and Karamala talukas and southern parts of Malshiras taluka is hilly. Then region has deep black soils and a rainfall of 600 to 800 mm.



Drainage :

The drainage of the study region is controlled by two groups of rivers 1) The Konkan rivers and 2) The plateau rivers. Sahyadri is the main water divide of the region separating Konkan rivers from plateau rivers.

1] Konkan Rivers:

In the western coastal low land many small rivers run in east - west direction and drain the area in to Arabian sea. These rivers, rising on the western sloped of Sahyadri, are short and swift flowing rivers. There are fourteen rivers running nearly paralled to one another. Savitree, Vashisthi, Shastri and Kajavi are important rivers among them. They are flooded in monsoon period and dry in the rest of the year. These rivers have carved deep valleys. Some of them have developed amphitheatpr like basins under ghats. All these rivers have very narrow basins and are separated by spurs of Sahyadris. Most of the Konkan rivers have creeks at their month.

2) <u>Plateau Rivers:</u>

Krishna and Bhima are the two plateau rivers controlling the drainage of south Maharashtra plateau. Both of them have their well developed drainage systems and broad valleys graded to their base level. The river Krishna has its origin on the eastern slope of Sahyadri near Mahabaleshwar and a length of 364 Km. in study area. Krishna and its right bank tributaries rise almost within the sight of Arabian sea but drains in east

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and south-east direction in to Bay of Bengal, Venna, Urmodi, Tarali, Koyana, Warana, Panchaganga, Dudhaganga, Vedganga and Hiranyakeshi are the right bank tributaries of Krishna. River Yerala, rising in Mahadeo range and flowing to southern direction is the only left bank tributory of Krishna. This river plays a very vital role in transforming the life of people in its valley area. The Bhima basin is separated from Krishna valley by Mahadeo range. Bhima river draining whole of Solapur district and parts of Satara and Sangli districts, flows in south-eastern direction. Nira and Man rivers are main right bank tributories of Bhima while Sina is its main left bank feeder in the study area. River Nira rises in the eastern slopes of Sahyadri and flows to east while river Man rises in Mahadeo range and runs in eastern and nort eastern direction. The river has a course of about 289 Kms within the limits of study area. The valley of Bhima river is considerably broad.

Economy of the region :

Agriculture is the main stay of the economy of the region. The diffussion of agricultural innovations has brought significant changes in the agricultural system of the area. In the study region the dominance of food crops is found in western hilly area, central dry plateau, the Bhima valley region and the coastel plains of south Konkan. In these parts nearly seventy percent of the cultivable land is under food crops. Rice is the staple food crop of Konkan area. It is also

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dominant in the western hilly zone where 30 % of land is under rice other crops includes Ragi and Jawar. In the central dry plateau region, Jawar, Bajara Groundnut and Pulses are the important crops. In the Bhima basin Jawar and pulses are the chief food crops. The pattern of landuse in the upper Krishna valley shows contrast combination. In the valley bothms and in the irrigated areas sugercane, tobaco, termeric, ginjer and cotten are the important cash crops, cultivated. Recently Tasgaon, Khanapur, and Miraj talukas have developed grape gardens. In Konkan districts horticulture has developed during the last twenty years. Coconuts, Mangos, Condiments and Spices , Cashunuts and other fruit crops are cultivated. The government of Maharashtra is trying to develope the agriculture of Konkan area. Recently Pineapple and Rubber plantation is introduced in the area. In the Bhima valley area sugarcane cultivation is developed in irrigated areas of Nira valley. The general land-use of the study area indicates that out of the total geographical area forest has a share of 9.24 % . The area not available for cultivation is 10.83%. Fallow land covers 9.62 % and out of the total geographical land 59.83 % land is under cultivation. Of this only 7.2 % land is sown more than once.

The economic organization of the region has a great bearing on the distribution and characteristics of urban settlements (Fig.1.4) Nearly 71.% population of the



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region is engaged in agricultural activities. The region has agricultural, minaral, forest, and marine resources.

Forests:

The forests covers an area of 4,13,277 heactors and most of the forest area lies in western parts of Satara,Sangli, Kolhapur districts and the eastern hilly area of Konkan districts. The annual income from different spaices of forest weith has collected nearly a revenew of 1.4. crores.

Minaral Wealth:

In respect of minaral weith Kolhapur and Konkan districts are very rich. Manganese are occures with the belt of iron are in laterites in Rajari areas of Vengurla tahasil. It is also reported in Phodya, Sasoly, Dingne and Netarde areas of Sawantwadi tahasil. Iron occures in Redi, Tak, Ajoli, Ajagaon, Shirvda, Sateli, Thakurwadi and Tendoli areas of the south Konkan. The another important mineral is bouxite which occures at few places along the coast near Harnai, Vijaydurg and Deogad areas of Konkan. Very rich deposites of bouxite are found in Radhanagari and Chandgad talukas of Kolhapur district. It is also reported in western parts of Satara district. It is reported that there are large depositg of Chromite in Kanakawli taluka. Other minerals includes day. Silica and Salts which are also found in the coastal parts 🦳 of Konkan districts. Some limestone deposits are also present in Miraj tehasil.

Fishries :

Inland water fishry is dominant in the areas of Krishna and Bhima rivers but the maine fishry is an important economic activity of the Konkan districts. Several important varities of fish are available along the west coast region. Though the region is rich in respect of fish resources it has remained an exploited to its fullest extent because of poor finance, transport and stoarage facilities.

Industrial structure of the region :

The Konkan region is a backward industrial zone of the area. At present there are two fish canning factories, one cashin ut proceessing factory and five fruit canning industries and one glass factory is established in the south Konkan. In the Chiplun area recently several new processing, engineering and manufacturing industries are comming up. The government has proposed to establish an alluminium industry at Ratnagiri. There is evry posibility of developing fish canning and other agro-based industries in south Konkan. If the few large scale industries are introduced in this area, it will create new opportunities for the people to work which in term will check the out migration of the people.

In the south Maharashtra plateau region several agro-based industries have developed. Since independence 25 sugar factories have developed on co-operative basis in the area. The development of sugar and other agro-based industries brought an over-all development and prosperity to the area which in

turn affects the **po**pulation density. (Fig. 1.5) The major industrial development is concertrated in the area between Sangli and Kolhapur cities. Recently new industries have been established at Kolhapur, Sangli, Solapur, Satara and Karad urban centres, which includes production of automobiles, Scooters, Light engineering spare parts, machine tools and agricultural implements. The handloom and power loom textile industr**yes** is localised at Solapur, Ichalkaranji, Kolhapur, Sangli, Madhavnagar, Vadagaon Kasaba and Vita. In Bhima valley region several cotton Genning and pressing industries have been developed.

Data sources:

The basic data related to urban centres and other demographic and socio-economic aspects of the region is collected through various census tables of 1951, 1961, 1971 and 1981 census, Socio-economic abstracts, Statistical abstracts, the manicipal year book's and district gazetteers.

Methodology:

In the present study various methods and techniques have been used. The details of the various methods and techniques will be discussed in the text where ever they are used. Here only the mention of the various methods and techniques is made. In the study various indices of distribution and concentration have been used. The technique of 'Shift and Share ' analysis is used to study the trends of urbanization. For the functional classification of towns Nelson's method is adopted. The association of variable has been tested through correlation analysis.



References:---

- Census of India (1970): General Population tables. Maharashtra series II. Part-II. A.Director of Census Operation[§] Maharashtra.
- Census of India (1980): Series 12. Maharashtra.
 Primary Census abstract. Part-II.B.
- Census of India (1961) : General Population tables.
 Primary census abstract. Maharashtra.
- 4. Census of India (19⁵) District census hand books of Ratnagiri, Kolhapur, South Satara, North Satara and Solapur district, based on census of 1951, published by the Director, printing and stationary, Govt. of Bombay.
- 5. Gazetteers of India : Maharashtra State Gazetteere, Gazetteers of Ratnagiri, Kolhapur, Sangli, Satara and Solapur district.Gazetter Department, Govt.of Maharashtra, Bombay.
- 6. Government of India (1960): Bombay physical plate-34. Million sheet (Topographical map) prepared by the National Atlas Organization, Survey of India.
- 7. Government of Maharashtra (1972): (i) Socio-economic reviews and statistical abstracts of Ratnagiri, Kolhapur, Sangli, Satara and Solapur districts(1971 to 1973)
 (ii) Statistical abstract of Maharashtra State for the year 1972-73. Directorate of Economics and Statistics, Bombay.

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8. Census of India, Series 11. Maharashtra Part VI-A.
 Town Directory. Published by Director of Census
 Operations. Maharashtra. (1971).