Synopsis

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Synopsis of the Ph.D. thesis in Geography titled Geo-Environmental Assessment of the Fishing Settlements in Alibag Tahsil of Raigarh district, Maharashtra.

Settlement is a man-made factor. Settlements are formed mainly to fulfill the basic necessity of a human being i.e. shelter. The settlements are named after such economic activities e.g. the Mining settlement, the Fishing settlement etc.

Every settlement has its own geographical identity. Fishing settlements emerge and grow on the sea shores, on the banks of the rivers and on the margins of the lakes. In this work emphasis has been given on the study of the characteristics of the population of the selected settlements like sex composition of the population, economic composition of the population, educational status of the fisher-folk, health status of the fisher-folk etc.

The present study deals with the different aspects of the selected fishing settlements in the Alibag tahsil of the Raigarh district, Maharashtra. The present work examines the various aspects of the selected fishing settlements like their location, pattern of the distribution of the houses in the settlements, building material of the houses, structure of the houses, other usual and special structures in the settlements, nature and conditions of the roads that run through the settlements etc. in relation to the geography of the region.

This work also deals with the demographic characteristics of the settlements.

Objectives of the study
1. To assess the selected fishing settlements in relation to the natural and cultural environment of the region.
2. To assess the present infrastructure of these settlements.
3. To find out the challenges and problems that these settlements are facing today.
4. To suggest certain measures that can be adopted to make these settlements an ideal shelter for the fisher-folk.

This work examines the conventional methods and also new techniques of the fishermen to build the houses and other structures in the selected fishing settlements. The location and pattern of the distribution of hoses are examined in relation to the geography of the coastal areas. This work also tries to judge whether the infrastructure of these selected fishing settlements is adequate or not. In concluding part some suggestions have been made regarding the location, building material, design of the houses. By adopting these suggestions and by taking measures accordingly the fishermen can make their settlements a real ideal shelter for them.

The fishing settlements are also prone to man-made hazards like marine-pollution. This study shows the direct adverse effect of the water pollution on the fishing activity and its indirect effect on the fishing settlements. The study makes us aware of the industrial waste that is dumped in the creeks and the sea and this study also makes us aware of the marine accidents that may make harm to the fish and other aquatic life.

In this study the effect of the government policies on the location and growth of fishing settlements has also been considered. The study indicates the need to establish a good communication between the government authorities, leaders and the fishing community. This will help in resolving many problems regarding the location of houses, fishing and allied activities etc. in the fishing settlements.

The fishing settlements become vulnerable during the monsoon season. A special care of the settlements is needed during this season. The study throws light on the problems that are experienced especially during monsoon season.
Certain measures are suggested to protect the settlements and the fisher folk during monsoon season.

Before interpreting the correlation between geography of the region and the fishing settlements it is essential to have a detailed account of the geography of the region. Geography of the region has been studied with the help of topographical maps, digital satellite images, bathymetric maps, contour maps, land-use maps etc. Right from the location of the Alibag tahsil and the fishing settlements the other aspects like topography, climate, soil, vegetation, sea conditions of this geographical region have been discussed in detail.

The structure of the three selected fishing settlements means the pattern of the distribution of houses and other important structures like temples, fish-landing areas, fish drying grounds, co-operative society, school, health centre, inner roads etc. in the settlements. These features of the fishing settlements along with their surrounding areas have been discussed thoroughly. Satellite images, plans and other maps have been produced wherever necessary.

The difficulties of transport in this district as in the entire Konkan are well-known. Traffic from Bombay to Konkan is taken up by the state transport and the steamer services. Both are however inadequate to meet the enlarged traffic-demands. The steamer services are totally suspended in the monsoon. Many of the ports have silted up and it is feared that the steamer service might become impossible in the near future if degrading are not undertaken in time.

The accessibility of the settlement Bodni is affected because of adverse climatic conditions especially during the monsoon season. The time-tables of state transport services, private transport services and steamer services have been produced to show the effect of climatic conditions on the accessibility of the settlements during different seasons.

The details of the cyclones that have so far visited these settlements have been collected from the Indian Meteorological Department (IMD), Pune. Importance of the mangrove vegetation, ill-effects of marine pollution on the mangrove vegetation and aquatic life and ultimately on fisher folk and fishing settlements have been interpreted. In the same way the effect of the government
policies on the location and functioning of these fishing settlements is an important part of this chapter.

Population of the settlement is an integral part of the settlement. This work also considers the various demographic characteristics of the settlement dwellers like sex composition of the population, standard of living of the population, occupational structure of the population, educational status of the fisher-folk, health status of the population, awareness of the fisher-folk towards government policies etc.

Some statistical methods like Chi square test have been used to see whether there is significant difference in certain respects like housing structure, sex composition, educational status, health status etc. between the three selected fishing settlements of the Alibag tahsil or not. Demographic characteristics of the settlements have been worked out with the help of statistical methods and have been depicted through the bar graphs, line graphs, pie diagrams etc.

Certain measures have been suggested to meet with the problems that the fisher-folk are facing in their settlements. Some of such findings and suggestions are as follows.

Nearly 70% houses are located within the 200 mts. from the line of high tide. The people residing in this area are at high risk. No constructions shall be permitted on the seaward side within this area. The fishermen should have an adequate knowledge about the Coastal Regulation Zone (CRZ) act.

The approach roads and the inner roads of all the selected fishing settlements become useless during monsoon season. Transport of goods and people are adversely affected. All the existing roads including the internal roads shall be strengthened, as these roads will serve for the purpose of livelihood, communication, relief and evacuation measures. A special programme should be adopted to improve the conditions of all the approach roads towards the settlements and even of the roads that run inside the settlements.

Pollution of the creek–water near the settlement Rewadanda is a serious concern. This is adversely affecting the fishing activity and in future will affect the
very survival of fishermen and fishing settlements. Pollution of the creek–water near the settlement Rewadanda must be controlled.

The infrastructure of the fishing settlements is inadequate. No settlement has special shelter-area to protect the fishermen from storms, flood etc. Special shelters should be erected to protect the fishermen from storms, flood etc. During dry season many suffer from the shortage of potable water. Techniques of rainwater-harvesting should be adopted. There should be sufficient place between the houses. This will help in creating good ventilation inside the houses and between the houses etc.

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