2. OBJECTIVES OF THE STUDY

2.1 Extent and Distribution of Mangroves at the Study Area.

2.2 Study of Major Macro-Fauna Associated with Mangrove Ecosystem.

2.3 Dependency of Community on Mangrove Ecosystem.

2.4 Identify Potential Areas for Restoration of Mangroves
OBJECTIVES OF THE STUDY

The study was initiated with following objectives:

2.1 Extent and Distribution of Mangroves at the study area

Under this objective the sites were studied to get an idea of the mangrove cover. It is very important to evaluate the key ecological parameters of both structural and functional components while studying mangrove ecosystem. In order to get an idea of the ecological status, the components such as mangrove plant density, sapling/seedling density, pneumatophore density, tree height, tree girth, no. of branches, canopy cover were studied giving better picture of vegetation cover. In addition to have the idea of site conditions the soil and water samples were studied in detail during different period of the year.

2.2 Study of major macro-fauna associated with Mangrove ecosystem

The mangroves are complex and detritus-based ecosystems. Mangrove forests and associated salt flats and salt marsh support a diverse and abundant fauna. The wastes produced by mangroves (leaves, stems, flowers etc.) are rapidly degraded into small particles, known as detritus, which supports many detritus feeding fauna like amphipods, herpacticoids, copepods, molluscs, crustacean larvae, prawn and small fishes (Dam Roy, 1997). This objective was very important as there are very few macro-faunal studies done in the study region which forms a major part of gulf of Kambhat. The faunal components including molluscs, crabs, prawns and shrimps, fishes with special focus on mudskippers, reptiles, birds and mammals were studied.

2.3 Dependency of community on mangrove ecosystem.

This objective was indicative of the relationship and dependency between local communities on mangroves. The faunal catch from mangrove and its nearby area was monitored carefully and based on it a complete picture showing the dependency on mangroves is analysed.
2.4 Identify potential areas for restoration of Mangroves.

This objective was selected keeping in view the present and future need of mangrove restoration required for protection of shoreline. There are certain regions in the Gulf of Kambhat which are experiencing severe erosion. During this study an area of around 200 hectares was identified in between Denva and Gandhar for mangrove restoration in order to stabilize the shore.