

Co-management Approach of Mangroves to Secure Local Livelihoods in Kutch District of Gujarat, India

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1. Background and Objective

Mangrove resources are often strongly linked with people's livelihoods in the adjacent villages such as forestry and fishery. However global pressures combined with population growth caused the remarkable losses of the mangrove habitats in global-scale dimensions. The objective of this study is to develop a mangrove co-management system, in enabling mangrove conservation without compromising the local livelihoods.

2 Study area and Methodology

Kutch District has the largest mangrove stands on Indian west coast. Traditionally camel breeder and fisherman depended on mangrove resources. However, recent industrialization has caused severe mangrove degradation in the region. Therefore, three taluka (sub-district) were selected as study site to identify and develop a mangrove co-management scheme with related stakeholders. Lakhpat region has the richest mangroves whereas, Mundra and Bachau have high concentration of industries. In each taluka, a focus group discussion and household questionnaire survey that targeted camel breeder and fisherman (total sample size: 128) were conducted to reveal issues and solutions in sustaining their livelihoods and its linkages with mangroves.

3. Results and Discussions

Primary data revealed that 1) Camel depends on mangroves as source of fodder during monsoon 2) Other livestock such as buffalo and cow depend on mangroves as source of fodder during drought year 3) In the last decades, mangroves were used as fuel and house construction materials and 4) More than 60% of fisherman engages in traditional fishery (fishing on foot using by net) in intertidal zone where mangroves are located. However, the numbers of camel are reduced by more than 40% during last decade in three taluka. The causes of the reduced numbers of camel were mangrove degradation due to industrialization in Mundra and, mangrove inaccessibility due to protected forest by Forest Department in Lakhpat and Bachau.

In addition, more than 90% of fisherman and camel breeder have the willingness to participate in the mangrove regeneration project,

if there is benefit like wages. Therefore, this study proposed a mangrove co-management scheme (Figure 1). In this scheme, mangrove area is assigned as the reserved zone and buffer zone. Regenerated zone is proposed surrounding the buffer zone. In the reserved zone, mangroves are protected under management of FD, whereas, in the buffer zone and regenerated zone, better management can be done jointly by FD and local communities (camel breeder/fisherman). Hence local communities could obtain the benefit such as the right to harvest mangroves in buffer zone as well as the wage brought by mangrove regeneration activities in the regenerated zone. Through this scheme, mangroves would be conserved without compromising the local livelihoods in Kutch District.

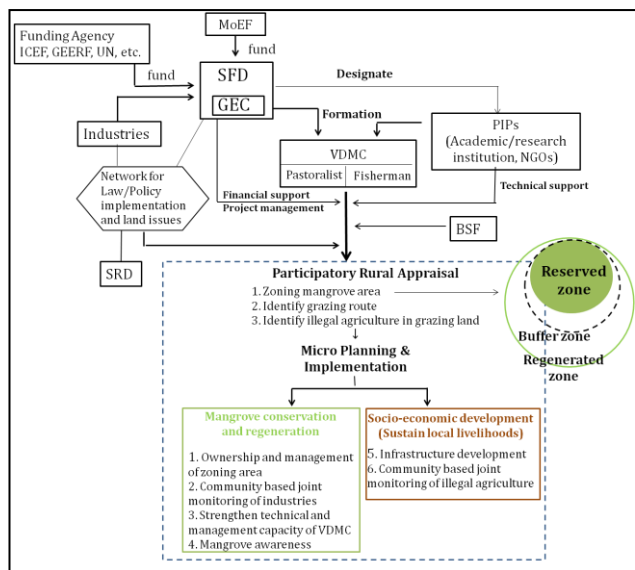


Figure 1 Mangrove co management scheme