



---

# Community Strategy for the Management of Xcalak, Quintana Roo, Mexico. English Summary

---

Santos, Carlos Lopez, Jennifer McCann, Concepcion Molina Islas, and Pam Rubinoff

1998

**Citation:**

*Quintana Roo, Mexico: Amigos de Sian Ka'an*

For more information contact: Pamela Rubinoff, Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 220 South Ferry Road, Narragansett, RI 02882  
Telephone: 401.874.6224 Fax: 401.789.4670 Email: rubi@gso.uri.edu

This five year project aims to conserve critical coastal resources in Mexico by building capacity of NGOs, Universities, communities and other key public and private stakeholders to promote an integrated approach to participatory coastal management and enhanced decision-making. This publication was made possible through support provided by the U.S. Agency for International Development's Office of Environment and Natural Resources Bureau for Economic Growth, Agriculture and Trade under the terms of Cooperative Agreement No. PCE-A-00-95-0030-05.



*Translations & Excerpts of 1997 document "Estrategia Comunitaria para el Manejo de la Zona de Xcalak, Quintana Roo, México"*

## **Community Strategy for the Management of Xcalak, Quintana Roo, Mexico**



*Diciembre de 1997*

# **Outline of Xcalak Community Strategy**

Editorial  
Recognition

## **1. Introduction**

## **2. Socioeconomic Situation**

- 2.1 The history of Xcalak and relationship with the environment
- 2.2 The Xcalak Community
- 2.3 Infrastructure and services in Xcalak
- 2.4 Social organization of Xcalak
- 2.5 Principal economic activities and key issues of Xcalak
  - 2.5.1 Commercial Fishing
    - 2.5.1.1 Key Issues
  - 2.5.2 Tourism
    - 2.5.2.1 Key Issues

## **3. Importance of the Ecosystem**

- 3.1 Terrestrial Ecosystems
  - 3.1.1 Community Use of the Natural Resources
- 3.2 Marine Ecosystems

## **4. Community Participation for the management of the Xcalak area**

- 4.1 Background of the Process
- 4.2 Community Participation

## **5. Strategies for the Management of the Xcalak area**

- 5.1 Conservation and Use
  - 5.1.1 Proposal for the establishment of the National Park “Xcalak Coral Reefs”
  - 5.1.2 Secondary Zoning
- 5.2 Fisheries and Tourism Management
  - 5.2.1 Fisheries management
  - 5.2.2 Tourism Management
- 5.3 Coordination of the Community Committee with other sectors
  - 5.3.1 Regional Coordination

## **6. Short term actions to achieve the Xcalak Zone**

- 6.1 Capacity Building for the Community
- 6.2 Community Improvement
- 6.3 Management of the Park
- 6.4 Regional Coordination.

## **7. Conclusions**

**This document includes certain excerpts that have been translated from the original 1997 spanish document. For full document, please see *"Estrategia Comunitaria para el Manejo de la Zona de Xcalak, Quintana Roo, México"***

## **5. Strategies for Managing the Coastal Zone of Xcalak**

This section describes the community strategies for managing the coastal zone of Xcalak, including development and conservation. It discusses the mechanisms for establishing the Xcalak marine park and its use zoning. Also presented is a proposal for fisheries management through a community agreement, which controls fishing activity. Finally, a strategy for how the community will manage and participate in tourism development is set forth.

These strategies will need to be reviewed, expanded and revised on a regular basis as the social and economic situation in the area is constantly changing. The community hopes to improve its quality of life by implementing these strategies and actions by working in a united manner to identify and resolve its social, economic and environmental problems.

These strategies must also become integrated into other management actions which are underway in the region, such as the environmental land use plan for the Costa Maya Corridor, the Manatee Sanctuary in nearby Chetumal bay, the urban plan for Xcalak and the Marine Reserve of Bacalar Chico in Belize. Our hope is that when combined together these conservation and development plans will enable the community to receive its share of the benefits of regional economic development.

### **5.1 Conservación and Development**

The Community of Xcalak, represented by the Community Committee, identified the need to create a marine protected area to preserve its natural resources and promote their sustainable use. Conserving biodiversity will assure that economic benefits will be provided to the community over the long term.

#### **5.1.1 Proposal to Create a National Coral Reef Park in Xcalak**

The proposed protected area "Xcalak National Coral Reef Park" is located in the southern coast of Quintana Roo state, within the municipality of Othón P. Blanco on the Peninsula de Xcalak.

The limits are defined by the parallel of 18° 30' 00" latitude N, to the limit between Mexico and Belize, and on the east by the Caribbean Sea and the west by the coast lineup to the Federal Maritime Zone, and to the north by the Lagoon of Rio Huache to the area set by the inland coastal road of Majahual-Xcalak. The park will cover an area of 17,377 Ha. of which 13,340 Ha. are marine ecosystems and 4,037 Ha. of mangrove wetlands and lagoons, including permanent and intermittent lagoon areas.

The choice of National Park as the management category coincides with the planned use for tourism and fisheries within this representative ecosystem. Its values include scenic beauty, scientific value, recreation value, the presence of flora and fauna and the potential for tourism development.

## 5.1.2 Secondary Zoning of the Park

During the Community Committee meetings with resource users in the area, the following uses are proposed for the park, considering six management categories:

### 1.- Fishing Zones

These zones are open for fishing for the members of the cooperative S.C.P.P. "Andrés Quintana Roo" and other free fishers who are authorized to carry out fishing in this region.

### 2.-Tourism Zone.

This zone is found within the general polygon of the fishing zone. There are various sites considered of special importance by the community for their scenic beauty. This includes part of the *La posa*, "the well", where the unique coral feature "world cup" is located, as well as the "chimney". In these areas fishing is prohibited so that the large fish in this area become used to human presence so they can be more readily observed.

### 3.-Sport fishing and ecological tourism zones.

These zones are set aside for the purpose of sport fishing, experimental aquaculture and tourism, primarily in the permanent lagoons located within the proposed National Park and in a section of the Manatee Sanctuary.

### 4.- Zone for repopulating fish species

In this zone fishing is prohibited in order to allow for fish reproduction, acting as a natural nursery where fish and other marine organisms are allowed to grow until they reach their mature size. This will assure that a larger number of offspring are available to repopulate areas around the reserve where fishing and tourism is permitted.

### 5.-Zone for attracting Nassau Grouper (*Epinephelus striatus*).

In this zone fishing is prohibited during the winter months when thousands of the fish return to reproduce.

### 6.- Zone for conserving wetlands

This zone is set aside to conserve the natural conditions of the Rio Huache lagoon as an important habitat for flora and fauna, as well as a tourism resource.

## **Proposed Management for Fisheries and Tourism**

In the following, the term “Area” is used to refer to the proposal for the National Coral Reef Park in Xcalak, and “users” means all persons such as members of fisheries cooperatives, free fishers and all those authorized for commercial and sport fishing.

- 1.- Commercial and sport fishing activities which take place inside the “Area” are subject to the existing laws, regulations and agreements, and can only be carried out under the permit, authorization or concession issued by the National Environment Agency (SEMARNAP) and that which is established in this agreement.
- 2.- Fishing of lobster in the "Area" is subject to minimum catch sizes and closed seasons set by SEMARNAP. It remains prohibited fishing along the reef inside the “Area”.
- 3.- Sport fishing in the "Area" requires permits from SEMARNAP following its rules and regulations. Fishing for personal consumption by those living outside the “Area” will be treated as sport fishing and controlled by the same rules.
- 4.- Those who have sport fishing licenses within the “Area” must list the species caught, following the same rules as those fishing for personal consumption. The data will be provided to the authorities within the specified time period.
- 5.- Buoys will be located to identify the boundaries of the secondary zoning, so that the “users” can identify the zones and thus comply with the fishing rules.
- 6.- In coordination with PROFEPA, SEMARNAP and the Armed Forces, the “users” will establish the enforcement mechanisms for the “Area”, so that closed seasons are respected as well as zoning and rules related to commercial species.
- 7.- The use of different fishing gear by the “users”: of the “Area” will be restricted as follows:
  - a) Harpoon. This is prohibited near the area of the Xcalak Pier, which is designated as a site for fishing for personal consumption.
  - b) Cast nets. These are restricted to areas designed specifically for Fishing Use in the “Area”.
  - c) Shark nets. These are permitted in their traditional way, located perpendicular to the reef under the condition that there is constant monitoring to free turtles and other non-commercial organisms which are caught incidentally. In the period of migratory runs of fish, (September to January) these gear are prohibited to avoid obstructing migratory routes. The gear is also prohibited from use in the lagoons.
  - d) Fish Traps. No new traps will be permitted in the “area” until required studies are conducted that demonstrate its sustainability.
  - e) Fishing with diving gear. This is prohibited in the “Area”, as well as any technique that can physically damage the reef.

The current agreement will be implemented in an environment of equality and mutual respect for the different groups of “users” in the “area” to avoid future conflicts.

## **5.2 Managing fishing and tourism activities**

### **5.2.1 Fisheries management**

Given the interest which exists by fishers in the cooperatives, free fishers as well as those providing services to tourists to create a sustainable use program for the proposed National Park, it is proposed to create a new mechanism, a community agreement, which will set forth the guidelines for use of certain fishing gear and control of fishing in specific areas.

Other strategies which need to accompany the community agreement include the following:

- 1.-Design and establishment of a monitoring and vigilance program by the community, with the support of authorities.
- 2.-A fisheries diagnostic study for the zone to evaluate the fishing gear presently being used.
- 3.- Studies on the reproduction of Nassau Grouper where they congregate, and propose sustainable harvest rules.
- 4.- Feasibility studies on the initiative of experimental culture of species of commercial interest in the coastal lagoons.

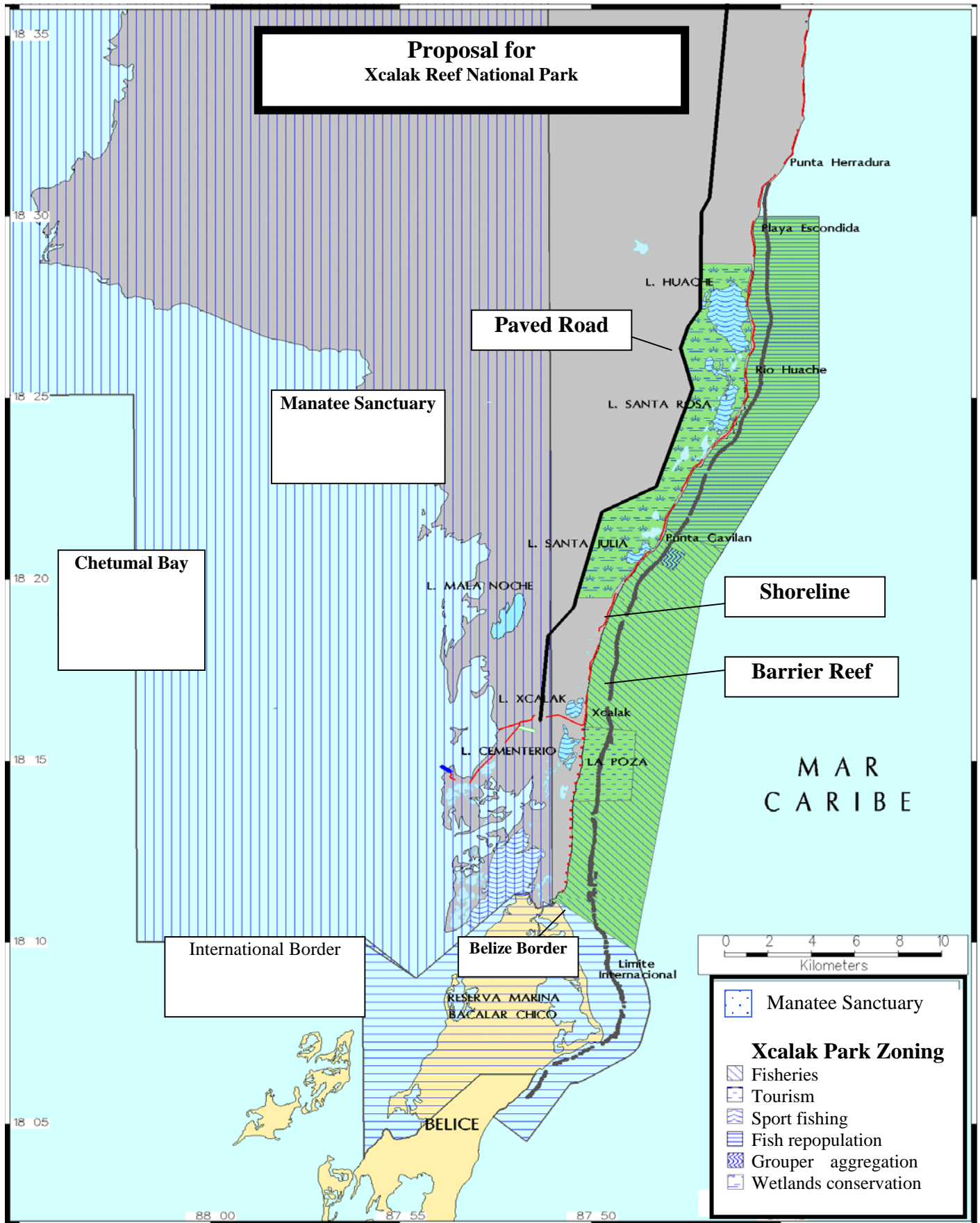
### **5.2.2 Managing Tourism**

Fishing and tourism are fundamental to the economy of Xcalak. Never the less, in a short period of time tourism is likely to become the most important activity, given the plans which authorities have prepared to develop the Costa Maya tourism corridor. Given the natural beauty of this region, it is highly suitable for low impact forms of tourism.

Presently, tourists that visit this region are primarily interested in underwater activities such as diving with tanks, snorkeling, sport fishing and bird watching. These are most likely to occur in the proposed park areas and the Manatee Sanctuary in Chetumal Bay.

Giving the concerns of the community, and in consideration of the tourism activities already taking place in the region, the committee has initiated a series of meetings with the tourism service providers and other sectors of the community to set out the following strategy for managing tourism, including training community members to be better able to meet the demand for this economic sector.

- 1.- Look for the best ways to insure that in the short term the National Park is designated.
- 2.- Create and strengthen different forms of organization in the community that would get involved in providing tourism services to insure that benefits are gained by the residents of Xcalak.
- 3.- Design and create ecotourism trip routes, both on land and in the water, and promote the natural attractions of the Xcalak Peninsula.
- 4.-Set out the rules needed to control tourism guides to insure that the environment is protected.
- 5.- Involve the hotel sector that is already established as potential developers of some of these economic proposals.
- 6.-Seek out support from authorities and civic associations for training courses in tourism business development, to insure that visitors are properly treated by the community, and so they receive benefits from the activity.





## 5.3 Coordination of the Community Committee

### 5.3.1 Regional Coordination

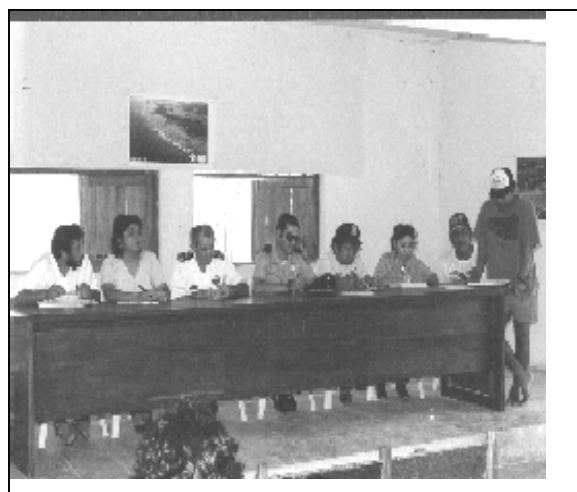
*It is proposed that an Integrated Coastal Management subcommittee be formed in Xcalak.* This subcommittee would be a forum for communication between Xcalak and different levels of government, as well as investors, residents, scientists, civic associations and all those with an interest in the area. This would be for the purpose of promoting interagency coordination, public participation and strengthening the ability of the social groups in the community to actively engage in the orderly use, distribution, management and protection of the natural resources of the state. This is to achieve sustainable development and improve the quality of life of the citizens of Xcalak.

The scope of this new committee includes the southernmost extent of the Environmental Land Plan (OET), the entire proposed National Park, the southeastern portion of the Manatee Sanctuary, the urban portion of Xcalak and the Bacalar Chico reserve in Belize. In the future this subcommittee could be expanded to include all of the Costa Maya.

***The purpose of the subcommittee is to promote actions that will lead to integrated coastal management, including planning and public participation, leading toward sustainable development.*** This region has the important opportunity to set out a management plan for a biogeographic region, not restricted to political and administrative boundaries.

#### **Among the proposed actions of the Community Committee are:**

1. The Xcalak Community directly participates in preparing the management plan for the Xcalak Coral Reef National Park as well as Banco Chinchorro and the Manatee Sanctuary
2. Create coordinating mechanisms with the marine reserve in Bacalar Chico Belize and the National Park in Xcalak to conserve resources.
3. Short term actions that can start the process of managing the “Area” of the park.



## **Community Action Plan**

The Community considers that the success of the National Park depends on citizen involvement. Therefore, the following measures are also needed:

### **6.1 Community training program**

- Train local residents in English and ecotourism.
- Train fishers to become certified divers.
- Involve the public in the design of the ecotourism tours.

### **6.2 Village improvement projects**

- Maintain the environmental quality of the region by installing appropriate wastewater treatment and solid waste management systems.
- Improve the quality of life of residents by improving communications, electricity supply and potable water.
- Organize clean up and reforestation projects in the village.
- Design interpretative signs that promote good behavior and practices

### **6.3 Park Management Plan**

- Designate the park officially.
- Implement a law enforcement program in conjunction with appropriate authorities..
- Install mooring buoys to delimit the water area use boundaries.
- Implement a monitoring program for fish stocks in the tourism use zones.
- Identify other management actions for natural resources in the region

### **6.4 Regional Coordination Actions**

- Strengthen the self-help ability of the community through the Community Committee.
- Assure that the community in all of its levels and groups is actively participating in planning and managing the park. .
- Assure that the community is fully involved in the creation of the technical advisory committee for the National Park and other consultative committees at the state and federal levels. bienestar comunitario.

