

## Fact Sheet #4: Land Use and Tourism

### Competitive and Sustainable Tourism in Sinaloa Sur



#### Overview: Land use change in coastal areas

The rapid growth of mass-market sun-sand-and sea tourism is a major force behind loss of biodiversity including beach erosion, dredging, destruction of wetlands, mangroves, sea grasses, and corals, as well as displacement of coastal communities and alterations of local livelihoods. Poorly planned mass coastal tourism developments that alter negatively the natural environment are the result of ineffectual coastal and land use planning and regulations.

Destination Scorecard



Over the past 30 years, significant areas of Mexico's natural coastline have been transformed by the development of world-renowned seaside mass tourism destinations such as Acapulco, Ixtapa-Zihuatanejo, Puerto Vallarta, Los Cabos, Cancun and the Riviera Maya. These latter destinations located along Mexico's Caribbean coast are now one of the world's fastest growing coastal resorts and cruise ship tourism destinations. Cancun and the Riviera Maya combined receive over 8.6 million visitors a year. Together they possess a hotel capacity of some 82,000 rooms, while the island of Cozumel is one of the world's top cruise destinations, having received 3.1 million passengers by the end

of 2012.<sup>1</sup> Intensive land development as a result of the rapidly growing tourism industry in the "Cancun-Riviera Maya" region of the Yucatan Peninsula has resulted in contamination of groundwater resources that eventually discharge into Caribbean coastal ecosystems.<sup>2</sup>

To avoid this pitfall, appropriate coastal management planning and land use policies supported by satellite imagery, geographical information systems and scientific environmental, social and cultural data framework is necessary, particularly if new Coastal tourism zones or areas are to be developed in accordance with sustainable development principles. This action will ensure that the physical integrity of the coast and its natural resources are protected, while at the same time safeguarding local livelihoods by enabling them to continue to have direct access and management rights to the resources that are essential for their subsistence.

#### Bad examples: Lack of land use planning damages coastlines and coastal communities

- Turkish Mediterranean:** In the 1960s, Turkey's first integrated coastal tourism development along the southern Antalya coast caused significant negative land alterations. Of the 2,571 hectares that were developed, 816 ha in agricultural lands and 457 ha in natural forest areas were converted into hotels, service buildings and urban settlements for the growing tourism industry. Significant findings consisted in high correlations, whereby: (i) decreases in agricultural land were the result of increases in the number of accommodations (hotel capacity), combined with the construction of golf courses and entertainment centers; (ii) decreases of the natural forest cover were the consequence of converting public land to private ownership, which was first used as agricultural land followed by speculative land use due to high demands and prices for tourism induced land use; (iii) the displacement of agriculture as the main livelihood activity in the region caused by increased land prices due to speculation with the direct adverse effect of forcing citrus growers, who had limited income, to sell their land to tourism developers without taking into consideration the area size or productivity of their land.<sup>3</sup>
- Portugal's southern coast:** Since the 1960s, Portugal's southernmost Algarve region has been transformed into one of the country's most important tourist regions. In the process, offshore sandbars, lagoons, and unique wetland ecosystems have been negatively affected by large resort developments, urban sprawl, and population influx. The ongoing eutrophication (abundant accumulation of nutrients

that support a dense growth of algae, the decay of which depletes oxygen in the shallow waters in summer), increased pollution, decrease in salt marshes, coastal erosion, and loss of agriculture land is leading to permanent reduction in important seashore sites that form part of the European NATURA 2000 Protection Network.<sup>4</sup> These land-use changes have also had profoundly impacted traditional economic activities (fishing, small agricultural and salt production) in the region and contributed to loss of the region's historic cultural identify.

### Good examples

- Port Launay Wetlands, Seychelles:** These wetlands, covering 120.6 hectares on the western coast of the main island, Mahé, are an important high-diversity RAMSAR mangrove area adjacent to the Port Launay Marine Reserve. The Constance Ephelia Resort, a five-star hotel adjacent to the wetlands and a local NGO Sustainability for Seychelles are jointly managing the Port Launay Wetlands under an agreement with the Seychelles National Parks and the Environment Department. By effectively protecting the Reserve, the Ephelia Resort ensures the wetlands are preserved as both a high quality tourism attraction and an important environmental asset for the Seychelles.<sup>5</sup>



*Example of the direct interdependence of maintaining the quality of the natural surroundings and the infrastructure of the Mayakoba tourist complex*

**Mayakoba, Mexico's Riviera Maya coastline:** A successful example of land use planning is the Mayakoba complex, an area of 650 hectares along the Riviera Maya coastline that integrates three world-class resorts, residential areas and a golf course. It has become a model for sustainable coastal tourism development. The management master plan is based on the preservation and maintenance of the coastal ecosystems, including reefs, sea grasslands, dunes, mangrove swamps and jungle. The entire resort complex is set back 500 meters from the coastline (Mexican law requires a setback of 20 meters above the high tide of the sea at any given location within the Federal Maritime Land Zone), and includes 20 hectares of channels and lagoons. These provide the main transport routes within the complex with visitors, staff, and supplies moving mainly in small boats. An 11 ha system of wetlands has also been incorporated into the golf course landscape.<sup>6</sup> The Mesoamerican Reef Tourism Initiative, a nonprofit organization with international support, is working with government and private companies to implement sound natural resources management and sustainable land use planning in tourism developments and operations, such as the Mayakoba. The goal is to preserve the region's natural rich resources and attractions while creating economic growth.<sup>7</sup>

### Moving forward: coastal land use planning in Sinaloa Sur

The tourism development of Sinaloa Sur's coastline can be accomplished by adopting a holistic coastal management scheme based on the concept of sustainability, whereby marine ecosystems, coastal habitats and landscapes are to be protected from harmful environmental changes. The formulation and implementation of a comprehensive Integrated Coastal Zone Management (ICZM) plan integrating the tourism carrying capacity assessment (TCAA) framework can ensure integrated multi-sectoral governance for the protection of all the coastal resources, including land for agricultural, fisheries and shrimp production. Based on principles of equity, good governance, safeguarding of resources, the ICZM approach creates a constructive dialogue between the interests of authorities and multiple user-groups and provides the basis for planning and for developing effective environmental legislation within their jurisdictions.<sup>8</sup> Today, all Mediterranean countries are implementing this approach and Sinaloa Sur would be wise to follow this model. The Protocol on ICZM signed in Madrid in 2008, constitutes the first ever-comprehensive framework for sustainable coastal tourism that can be adopted for different types of coastal tourism developments. These guidelines are available in the United Nations Development Programme's (UNEP's) *Sustainable Coastal Tourism: an Integrated Planning and Management Approach*.<sup>9</sup>

## RESOURCES



<sup>1</sup> Indicadores Turísticos 2012. Dirección de Planeación y Desarrollo. Secretaría de Turismo del Estado de Quintana Roo: <http://sedetur.qroo.gob.mx/index.php/estadisticas/indicadores-turisticos>

<sup>2</sup> Metcalfe, Chris D. et al. *Contaminants in the coastal karst aquifer system along the Caribbean coast of the Yucatan Peninsula, Mexico*. Environmental pollution. Volume 159, Issue 2, April 2011, pp. 991-997.

<sup>3</sup> Atik, Mereyem et al. *Land Use Changes in Relation to Coastal Tourism Developments in Turkish Mediterranean*. Journal of Environmental Studies. Vol. 19. No. 01 (2010). Pp. 21-33

<sup>4</sup> De Noronha Vaz, Eric et al. *Regional Challenges in tourist wetland systems: an integrated approach to the Ria Formosa in the Algarve, Portugal*. Environmental Change. Vol. 33. Pp. 33-42 (2013).

<sup>5</sup> UNWTO and Destination wetlands: supporting sustainable tourism. 2012. Secretariat of the Ramsar Convention on Wetlands, Gland, Switzerland, & World Tourism Organization (UNWTO), Madrid, Spain. Seychelles case study retrieved from [www.ramsar.org/tourism](http://www.ramsar.org/tourism).

<sup>6</sup> OHL Development. *Mayakoba Ecotourism Complex Case Study*. Provided by Fundación Entorno, BCSD Spain, a World Business Council for Sustainable Development (WBCSD) Regional Network Partner (2008).

<sup>7</sup> Retrieved from: <http://en.mesoamericanreef.org>

<sup>8</sup> Trumbic, Ivica. *Tourism Carrying Capacity Assessment in the Mediterranean 1980-2009*. Chapter 25. Pp. 175-180 in Travis, Anthony S. *Planning for Tourism, Leisure and Sustainability: International Case Studies*. CABI. Oxfordshire, UK. (2011).

<sup>9</sup> Idem. Pp.180.

