
Coastal forests threatened by tourism

The tropical and subtropical coasts of Latin America, in Mexico, Brazil and most Central American and Caribbean countries, have been subjected to waves of tourist development over the last forty years. This has brought about reduction and degradation of what are known as 'saltwater forests.' Coastal forests include mangroves, *beach forests*, periodic swamps (tidal and flood plain forests) and freshwater swamps. One of the ecosystems most affected by the expansion of tourist and residential developments is mangrove forests.

Construction of hotels and homes right on the shoreline along the coasts has led in many places to reorganization of coastal territories to facilitate their use for tourism. Areas previously occupied by coastal forests have been destroyed by real estate or infrastructure projects to allow access from built-up areas to the sea. Sometimes they have been substituted with other natural sceneries according to standardized aesthetic ideas of what 'tourist landscapes' ought to look like.

In the last decade, for example, the Pacific coast of Costa Rica has become a Central American tourist epicentre. Rapid development of beach hotels and holiday houses is closely linked to the United States market. Together with cruise ships, residential tourism has transformed the physical landscape, displacing many fishing, agricultural and pastoral communities away from coastal areas (1).

Coastal territories

Mangroves, or mangrove forests, are made up of trees and woody shrubs that "grow and develop in intertidal zones and flood plains of coastal deltas and estuaries, in saline, sandy, muddy or clay soils that are deprived of oxygen and sometimes acidic," according to Red Manglar International, an alliance of organizations that support communities living in and depending on mangroves (2). Mangrove branches hang down and take root in the ground, interlocking with each other. This creates dense woodland structures above the water that provide refuge for a large number of species and plants, especially fish, snails, shellfish and crabs, as well as birds. Mangroves are a food source for coastal populations. Gathering activities are frequently carried out by women and provide the basis of the diet of many families.

Mangrove forests also protect coral formations in the Atlantic, where they act as a barrier to the silt carried down by rivers. The coral reefs are essential for local food supply and for the reproduction of many species. Mangroves also serve as a shock-absorbing barrier against natural phenomena like storms, tsunamis and hurricanes that are increasing in frequency and intensity due to climate change.

Beach forests are usually found above the high water mark in sandy soils. They may merge with farmland or high altitude forests. These coastal forest systems are highly sensitive to change. Beach vegetation and sand dunes play an important role in stabilizing soil and preventing silting in coastal lagoons and rivers. At the same time, they protect the population from invasion by sand dunes. The

predominant animal species are crabs and shellfish. Beaches are also important sites for sea turtle reproduction.

Forests on swampy terrain subjected to periodic flooding are influenced by tides, and may be flooded by fresh water or brackish water twice a day. The height of the tides varies from one place to another. These woodlands are the natural vegetation cover of river floodplains. These floodplains are recognized as one of the most productive ecosystems in existence, with a wildlife rich in biodiversity.

Finally, forests in permanent fresh water swamps have constantly humid soils and are characterized by their plant species, rich in plant nutrients (3).

Effects of coastal forest destruction

The progressive encroachment of coastal tourist and residential development, along with the expansion of the shrimp industry in other coastal areas, poses a clear threat to coastal forests, especially mangroves. Coastal forest destruction brings about immense ecological damage with far-reaching effects. It increases the vulnerability of the ecosystems as well as local populations to natural phenomena, in a context where these are expected to intensify because of climate change.

Massive uncontrolled urbanization of the shoreline and the proliferation of the hotel and port industries have led to coastal erosion. This has seriously affected the Gulf of Mexico and the Caribbean Sea. The most visible consequence is the alarming disappearance of beaches on the Mayan Riviera, denounced by Greenpeace Mexico (4). But beaches are also disappearing in other regions, like the province of Guanacaste in Costa Rica, as environmental organizations like the *Confraternidad Guanacasteca* and even the Social Pastorate of the Catholic Church have repeatedly warned (5). The loss of coastal forests also causes serious pollution problems in rivers, streams, beaches and the ocean, as well as soil erosion, destruction of springs of water and deterioration of habitats that support biodiversity. Ecosystem degradation has a negative impact on the livelihood of coastal populations, impoverishing them and making it difficult for them to stay in their traditional territories. The destruction of the material basis of the life and reproduction of coastal communities encourages 'depeasantization.' Finally, in some places degradation and deforestation of coastal forests has led to increased social and environmental conflicts.

Tourism, far from being the 'chimneyless industry' praised by big corporations and their institutional representatives, has major environmental and social impacts. Nowadays, coastal forests are severely threatened by tourist and residential projects, together with the expansion of the shrimp industry.

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(1) [Femke van Noorloos](#), *¿Un lugar en el sol para quién? El turismo residencial y sus consecuencias para el desarrollo equitativo y sostenible en Guanacaste, Costa Rica* (A place in the sun for who? Residential tourism and its consequences for equitable and sustainable development in Guanacaste, Costa Rica), Alba Sud, Opiniones en Desarrollo, N. 15, May 2013. www.albasud.org/publ/docs/58.pdf

(2) Red Manglar International is an alliance of community-based organizations from 10 Latin American countries (Brazil, Colombia, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Peru and Venezuela). Its goal is to "defend the mangroves and coastal ecosystems, guaranteeing their vitality and that of the traditional user communities that live in harmony with them, against the

threats and impacts of activities that degrade the environment, alter the natural ecological balance and/or violate the human rights of local communities.” <http://redmanglar.org>

(3) FAO: Integrated coastal area management and forestry. <http://www.fao.org/forestry/icam/4360/en/>

(4) Greenpeace México, *Campañas: Turismo depredador* (Campaigns: Predatory tourism). www.greenpeace.org/mexico/es/Campanas/Oceanos-y-costas/Que-amenaza-a-nuestros-oceanos/Turismo-depredador/

(5) Ronal Vargas, *Una mirada socio-económica a Guanacaste y su gente* (A socio-economic overview of Guanacaste and its people), Alba Sud, Jan. 22, 2013. www.albasud.org/noticia/en/378/una-mirada-socio-econ-mica-de-guanacaste-y-su-gente