



Protecting Quintana Roo's coastal infrastructure by insuring nature

Government: Quintana Roo (Mexico)

Region: Latin America

Sector: Resilience

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Summary

For coastal communities, natural systems like coral reefs, beaches and wetlands provide the first line of defense against storms. A healthy coral reef can reduce up to 97% of a wave's energy before it hits the shore. But coral reefs that have already been weakened by pollution, disease, overfishing and bleaching offer reduced protection for coastal communities. For the state of Quintana Roo, the coral reef protects the most important tourist destination in Mexico, visited by nearly 12 million tourists each year generating around [USD 10 billion annually](#).

The Coastal Zone Management Trust was developed by the government of Quintana Roo in partnership with a multi-sectoral group of federal and local governments, hoteliers, research centers and The Nature Conservancy (TNC). This Trust finances the ongoing maintenance of reefs and beaches and purchases insurance to ensure these vital ecosystems are restored after extreme storms.

The Trust will receive taxes, collected by the hotel and tourism industry, that can be used to fund science-based maintenance and restoration efforts for 60 kilometers of reef and beaches in Cancun and Puerto Morelos. In addition to funding ongoing conservation work, the Trust will also be used to pay the premium to buy a parametric insurance policy on this designated stretch.

The insurance is triggered when severe weather hits the reef, which can be damaged when wind speeds exceed 100 knots. The funds can then be used for restoration activities to help the reef recover—and return to its full protective capacity more quickly.

This innovative funding system will protect a USD \$10 billion tourism industry, bolstering the economic resilience of the region, encouraging conservation of a valuable natural asset, and creating a scalable new market for the insurance industry. The Trust was designed and created for over two years with support from the Innovative Finance group of The Rockefeller Foundation and announced at the 2018 World Ocean Summit, while it does not operate fully yet it is expected to be consolidated soon with sufficient and appropriate resources to start its operation.





Results

- The preservation of the reef allows hotel and ecotourism industries to prosper, as well as the services, incomes and jobs of dependent communities.
- Less beach erosion and fewer risks to income and assets benefit hoteliers, protecting the tourism industry.
- The government benefits from lower costs due to the reduced loss of infrastructure and more resilient coastal industries.
- Mechanisms of sustained finance for reef maintenance and restoration programs result in the preservation of a valuable natural system.

Enabling conditions

In accordance with the Commission of Protected Natural Areas of Mexico's Secretariat of Environment and Natural Resources (SEMARNAT), [the territory of Quintana Roo comprises 27 protected natural areas](#), aimed to protect at-risk or endangered species in coastal lagoons, reefs, dunes, middle and lowland rainforest. Another 13 sites are protected under the Ramsar Convention on Wetlands, an intergovernmental treaty for the conservation of wetlands.

The government works closely with the private sector to implement an integral policy of sustainability to strengthen the economic development of the state without putting existing natural resources at risk.

Challenges

The Trust will have to navigate through a complex regulatory landscape that might not entirely fit with its operational model. Its operation will need to guarantee access to major sources of funding, beyond the resources raised by taxing tourism. It will need to develop appropriate mechanisms to maintain and increase its capital to cover restoration costs of coral reefs, beaches, wetlands and other ecological systems.

The Trust must also build a strong transparent operational protocol to assess and meet the needs of the several stakeholders involved, allowing both local communities and business owners to benefit from recovery funds after severe weather impacts. It should be able to contribute meaningfully to the State's Monitoring, Reporting and Verification (MRV) activities for coastal zone management.


Following the recent sargassum crisis – waves of seaweed washing up on Caribbean shores – the state priorities have changed, at least in the short term. Now, resources for coastal management are geared towards solving it. A consistent medium and long-term strategy will need to be developed to deal with the new dynamics of sargassum in the ocean, and included in the operation of the fund, as an additional component to the integral management processes of coastal areas.

Key lessons learned

- Natural infrastructure, such as reefs and wetlands, can become a fundamental factor in how the insurance industry models, manages, transfers and finances risks that arise from climate change. It is likely that innovative 'insurance-for-nature' projects and products acquire greater importance over the next few decades.
- The Quintana Roo model is replicable around the world, providing new tools to conserve coral reefs and other natural systems that protect humans and infrastructure from natural disasters. Many other communities depend on natural phenomena for the protection of coasts and tourist income, including in countries varying in size and population from the Caribbean to Asia.

More information

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1. [Lanzamiento del Fideicomiso para el Manejo de la Zona Costera: Quintana Roo, México](#) (The Nature Conservancy, Mar 2018)
 2. <https://global.nature.org/content/insuring-nature-to-ensure-a-resilient-future>