



# Identifying Climate-compatible tourism development in Belize

## Purpose

Climate change is affecting coastal ecosystems with severe implications for developing countries heavily reliant on their natural resources for economic growth. In Belize, coral reefs, mangroves and beaches are the cornerstone of the tourism industry and coastal communities rely on mangrove and reef-based fisheries for food security and income. Growth of the tourism industry is viewed as inherent to economic development in Belize but is often accompanied by habitat degradation that directly threatens the resources upon which the industry depends. The challenge faced by decision-makers is how best to move forward with tourism development whilst maintaining healthy, functional ecosystems that support the tourism industry, sustain livelihoods and provide resilience to climate change .



This project is helping to inform this process by assessing the vulnerability of Belize's tourism system to climate change, including the coastal ecosystems on which it depends, and assessing how current policies facilitate or hinder climate-compatible tourism development based on healthy coastal ecosystems. We are also exploring the policy reforms and adaptation strategies required to enhance ecosystem resilience to climate change and foster tourism development, at a local and national scale.

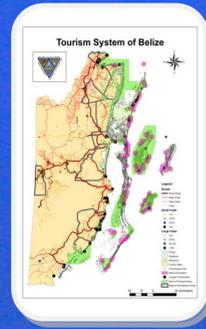
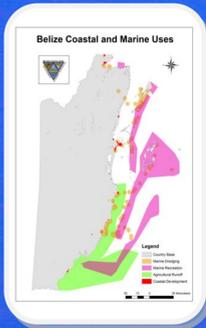
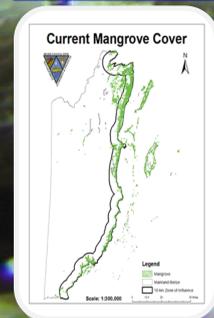
## Research Approach

The overarching research question being addressed by this project is 'how can we achieve sustainable growth of Belize's coastal tourism market while maintaining healthy resilient coastal-marine ecosystems?' More specifically we are aiming to address the following:

I) Which tourism areas are most and least vulnerable to the impacts of climate change?

This phase of the project focuses on identifying coastal tourism areas in Belize vulnerable to climate change that should be prioritized for adaptation actions. Existing research studies and assessments of ecosystem health, sustainable development interventions, and socio-ecological vulnerability linked to tourism is being used to create a vulnerability map of Belize's tourism system, which will then be used to target adaptation action. The outer cayes (i.e. islands) and a 10km buffer along Belize's coastline are the focus areas for the study.

Some data layers being used in the study are depicted in the following maps.



II) What are the key policy instruments that are supporting or hindering Belize's ability to make progress in achieving climate-compatible coastal tourism development, and where are the gaps in existing policy?

This project stage is focusing on analysing the current policy environment to determine whether pertinent national public policies support or undermine sustainable tourism development, ecosystem health/function, and climate adaptation. It is identifying current policies or gaps that can allow for maladaptive decisions and opportunities for win-wins for climate adaptation and sustainable tourism development

So far, a total of 39 documents have been reviewed that includes national policies, strategies, plans, and relevant laws. Of these very few have been found to address climate change threats and impacts.

**Inventory of Belize's policies that are of relevance to the project "Identifying opportunities for climate-compatible tourism development in Belize"**

Belize's natural capital demonstrates real potential in driving the country's development agenda. However, there is a clear need to mainstream adequate environmental protection and sustainable development policies and strategies, including climate change, into the various sector national plans and programmes to protect the integrity of the resource base. Belize's current path towards a macroeconomic situation generates important concerns for the future of the environment in Belize. It is feared that the need for the country to recover from recent economic downturns will force an intensive and unsustainable use of its natural resources. At the same time, Belize is considered a country that is vulnerable to the adverse impacts of climate change. With that said, national and sector planning bodies need to include considerations of climate change/ climate variability, adaptation and mitigation in planning deliberations and processes.

This project analyzes key relevant policy instruments to determine whether they support or undermine climate-compatible tourism development based on the integration of sustainable tourism measures, maintenance of ecosystem health and function, and climate adaptation/resilience building.

\* = considers CC    +- = potential to support climate-compatible tourism    -- = potential to undermine climate compatible tourism

No.	Policy document	GoB ministry/ department	Year developed	Policy Vision	Policy goals/objectives	Relevance to this project (categorization +, -, --)	Specifically address climate change?
1	Belize national landuse policy and planning framework for land resource development (52pages)	Ministry of Natural Resources (Lands Department)	2011	A national landuse policy that guides Belize towards an environmentally and socially responsible use of land resources that enables national development.	1.) To provide guidance and direction in institutional, economic and legal reforms that will lead to improved land governance at national, local and community levels while ensuring that land is put to its most suitable use; 2) To provide a participatory platform for the people of Belize to partake in decision making regarding the use of, and equitable access to, land resources through an accountable and transparent process; 3) To establish a firm and consensual basis on which development can take place and provide maximum local and national benefit; 4) To facilitate economic growth and social progress by ensuring the development of land is founded upon feasible and sustainable grounds.	Includes special discussion areas on: natural resource and conservation strategies, climate change strategies, national infrastructure network strategies, landuse planning strategies in relation to flood risks, agriculture landuse strategies, aquaculture landuse strategies, and tourism landuse strategies. ++	Yes on page 33. *
2	Government of Belize policy on adaptation to climate change (12pages)	Ministry of Natural Resources (Meteorology Office)	2000	All sectors in Belize both public and private, academia, civil society and the media playing important roles in climate change advocacy and public awareness campaigns, and a much greater role to play in developing and participating in programmes and projects that are becoming available through the climate change negotiation process.	1.) Explore and access the opportunities being developed through the climate change negotiation process to meet the development objectives of the nation; 2) Prepare all sectors of Belize to meet the challenges of global climate change; 3) Promote the development of economic incentives, which encourage investment in public and private sector adaptation measures; 4) Develop Belize's negotiating position on climate change at the regional and international levels to promote its economic and environmental interests; 5) Foster the development of appropriate institutional systems for planning and responding to global climate change.	The Belize Climate Change Adaptation Policy mandates the relevant government agencies to prepare adaptation policy options for their sectors. These include but are not limited to agriculture, coastal zone, energy, environment, fisheries, forestry, health, housing, local government, tourism, transportation, and water resources. ++	Yes throughout the document. **
3	Horizon 2030 development (2009-2013) strategy and framework (120pages)	Ministry of Economic Development, Commerce and Industry and Consumer Protection	2010	The Horizon 2030 Strategy provides a new sustainable development context for the country, with a clear strategic focus on social and economic development.	The objective of the Horizon 2030 Framework is to clearly establish a set of long-term development goals, targets, and indicators that will guide concerted action by all stakeholders involved in the development, implementation, and monitoring and evaluation of both long term and intermediate sector programs and Government's long- and medium-term plans.	It identifies those sectors critical for long term policy actions and investments and in varying degrees serve to focus sector specific strategies and plans. Some relevant targets highlighted in the Horizon 2030 include: <ul style="list-style-type: none"> <li>• Proper management, allocation and utilization of the country's natural resources guided by the principles of sustainable development.</li> <li>• Integrated planning with a focus on the symbiotic relationship between natural resource management and social and economic development.</li> <li>• Adequate and sustained protection of marine and coastal areas as part of a larger strategy to mitigate the effects of climate change.</li> <li>• "Green" technology utilization by households, the private sector and across society. The document flagged the key economic goals for 2030 as being: building economic resilience, promoting productivity and competitiveness and ensuring the environmental sustainability of economic activity. Such includes: <ul style="list-style-type: none"> <li>• Increase agricultural production in a sustainable way and increase local values added through the development of agro-processing.</li> <li>• Ensure a sustainable and profitable tourism sector.</li> <li>• Develop a strong small business sector, a strong work force and a strong corps of entrepreneurs.</li> <li>• Ensure that government is able to make timely investments in key economic infrastructure.</li> </ul> </li> </ul> Small recognition given to ecosystem protection and no mention of actions to address climate change action. --(undermine)	No but it has a section on Economic Resilience (page 74) that stipulates Belize's economy as being highly vulnerable to external shocks (natural disasters or international economic crises). It went on to mention that planning can mitigate the effects of these shocks and that the effectiveness of mitigation measures and the quickness within which an economy can return to normal are indications of how resilient the economy is. Can undermine climate adaptability since it does not include measures to concretely address climate change.

III) What are the key strategies necessary for enhancing Belize's potential for climate-compatible tourism development based on healthy coastal ecosystems?

This project stage builds on policy gaps identified in stage 2. Adaptation strategies are being identified from case studies and other literature that have relevance for Belize's coastal zone. Adaptation strategies are then reviewed through a screening process using expert opinion to consider the logistical, technological, cultural and societal practicalities of different adaptation options to produce a shortlist for possible integration into planning.

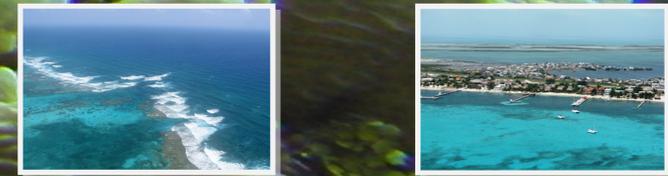


Some potential options under review include the following:

Adaptation measures	Relevance to tourism	Barriers to implementation	Measures to remove barriers
'Soft' coastal protection	Many valuable tourism assets at growing risk from coastal erosion	Lack of credible options that have been demonstrated and accepted	Demonstration of protection for tourism assets and communities
Enhanced design, siting standards and planning guidelines	Many valuable tourism assets at growing risk from climate extremes	Lack of information needed to strengthen design and siting standards	Provide and ensure utilization of targeted information
Improved insurance cover	Growing likelihood that tourists and operators will make insurance claims	Lack of access to affordable insurance and lack of finance	Ensure insurance sector is aware of actual risk levels and adjusts premiums
Shade provision and crop diversification	Additional shade increases tourist comfort	Lack of awareness of growing heat stress for people and crops	Identify, evaluate and implement measures to reduce heat stress
Reduce tourism pressures on coral	Reefs are a major tourist attraction	Reducing pressures without degrading tourist experience	Improve off-island tourism waste management
Desalination, rainwater storage	Tourist resorts are major consumers of fresh water	Lack of information on future security of freshwater supplies	Provide and ensure utilization of targeted information
Tourism activity/Product diversification	Need to reduce dependency of tourism on 'sun, sea and sand'	Lack of credible alternatives that have been demonstrated and accepted	Identify and evaluate alternative activities and demonstrate their feasibility
Education/awareness raising	Need to motivate tourism staff and also tourists	Lack of education and resources that support behavioral change	Undertake education/awareness programs

## Discussions

The overall aim of this project is to support coastal planners and policy makers in selecting appropriate policies and adaptation strategies for Belize's coastal zone that meet climate adaptation, developmental and environmental goals. Project outputs will include an interactive vulnerability map, journal articles, policy briefings, a database of potential adaptation strategies for the tourism sector, and a project website to disseminate the findings of this work to a range of audiences.



For more information contact:

Nadia Bood

World Wildlife Fund

Tel: +5012237680

Email: nbood@wwfca.org