

# COUNTRY SNAPSHOT OF JAMAICA



## Valuing the Benefits of Jamaica's Mangroves and Coral Reefs

The Nature Conservancy in Jamaica commissioned a study<sup>1</sup> to quantify the value provided by ecosystem services. It showed that, every year, natural areas provide USD\$2.1 billion in economic value to Jamaica.

Natural areas in Jamaica provide a wide variety of services that benefit local communities and businesses every day. These services range from world-renowned white, sandy beaches that draw tourism activity to the lifesaving benefits that natural barriers like coral reefs provide during storm surges and hurricanes.

Some of these benefits, known as ecosystem services, are easier to value because of how evident they are in daily life or how impactful they are in stimulating economic activity. But other benefits, like the effect on cultural development of a region or the role in carbon sequestration, may pass unnoticed until they are threatened or, even worse, gone. Climate change poses one of those threats, having an immediate impact on Jamaica's people and natural areas. And, its effects are jeopardizing the health and stability of ecosystems while putting at risk the essential benefits these provide. Identifying the value of ecosystems helps shed light on how important it is to protect them.

### Protecting the Value Found in Nature

Ecosystem services in Jamaica are so valuable that they equal 14% of the 2018 Gross Domestic Product for the country, or USD\$2.1 billion. Jamaica also has one of the natural areas which produce the highest economic value in the Caribbean: Montego Bay. Every year, ecosystems located there generate USD\$1.4 billion in mangrove and coral reef related tourism.

If natural areas like those are degraded or lost, billions of dollars could be lost in critical ecosystem services that support tourism, improve coastal resilience and protect people and property.



Protected wetlands in Jamaica. © Tim Calver

Table 1: Diversity of services provided by coastal ecosystems in Jamaica.

	Mangroves	Coral Reefs	Saltmarshes	Seagrass Beds	Dunes & Barrier Islands
Coastal Protection	●	●	●	●	●
Fisheries	●	●	●	●	
Recreation & Tourism	●	●	●		
Carbon Sequestration	●		●		
Water Quality	●		●	●	

**USD\$2.1 billion**  
Jamaica is one of the  
Caribbean islands which  
receives the most  
economic benefit from its  
natural areas each year.

<sup>1</sup> "Valuing Benefits of Mangroves and Coral Reefs in the Caribbean." The Nature Conservancy

## Natural Coastal Protection

Coastal protection is one of the most important benefits provided by healthy, natural areas in Jamaica. Coral reefs, for example, can reduce up to 97% of wave strength during a storm, while mangroves prevent soil erosion and flooding. Natural barriers have also proven to be more cost-efficient solutions for safeguarding coastal communities and critical infrastructure.

A recent study<sup>2</sup> by The Nature Conservancy showed that, throughout the Caribbean, restoring natural areas like coral reefs and mangroves is 10 to 100 times cheaper than building gray infrastructure for coastal protection.

Across a lineal kilometer of coastline, restoring coral reefs in the Caribbean would cost between USD\$640,000 and USD\$2 million, while restoring mangroves would cost between USD\$14,000 and USD\$32,000. Natural areas like these, when healthy, act as natural barriers for coastal protection and provide secondary benefits, such as promoting fish reproduction and sustaining the fishing industry. Research showed that building artificial structures along the same area would cost approximately USD\$20 million.



Fishing boats in Bluefields Bay, Jamaica © Tim Calver

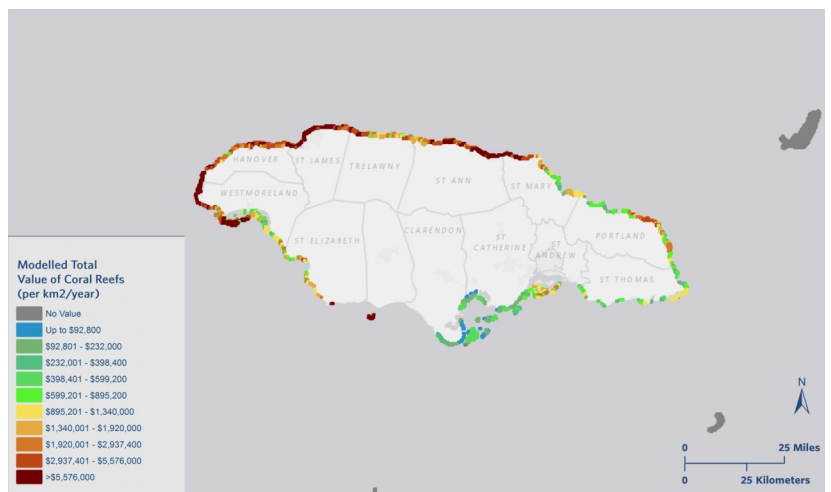
## Resilience and Adaptation in Jamaica

Taking advantage of ecosystem services as part of an adaptation strategy for climate change is known as implementing nature-based solutions.

Since 2017, The Nature Conservancy and the International Federation of Red Cross and Red Crescent Societies have worked in partnership to advance climate adaptation in some of the most vulnerable communities in Jamaica. The initiative, known as Resilient Islands, promotes the use of coastal habitats to reduce risks, while empowering governments, partners and communities to implement sustainable development plans that prioritize community-based adaptations and nature-based solutions.

To learn more about Resilient Islands, visit: [www.coastalresilience.org/resilient-islands](http://www.coastalresilience.org/resilient-islands).

Figure 1: Map of the economic value generated by coral reefs in Jamaica. Source: OceanWealth.org



Elkhorn coral and sea turtle off the coast of Jamaica. © Tim Calver

<sup>2</sup> "Coastal Protection: a Cost Comparison Between Natural and Artificial Structures." The Nature Conservancy

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