

COUNTRY SNAPSHOT OF GRENADA



Valuing the Benefits of Grenada's Mangroves and Coral Reefs

Natural areas in Grenada provide a wide variety of services that benefit local communities and industries 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.

Some of these benefits, known as ecosystem services, are easy to value because of how evident they are in daily life or how impactful they are in stimulating economic activity. But others, like the contribution to the 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 Grenada'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.

The Nature Conservancy (TNC) in Grenada commissioned a study¹ to quantify the value provided by ecosystem services. It showed that, every year, natural areas provide USD\$63 million in economic value to Grenada.

Protecting the Value Found in Nature

Ecosystem services in Grenada are so valuable that they equal 56% of the annual Gross Domestic Product (GDP) for the country. One of the industries which benefits the most from healthy coastal habitats is the fishing industry. Every year, ecosystems generate USD\$39 million in value for the commercial and recreational fishing sectors.

If natural areas, such as coral reefs or mangroves, are degraded or lost, millions of dollars could be lost in critical ecosystem services that support tourism, fishing, improve coastal resilience and protect people and property.



Beach landscape at Carriacou, Grenada. © Marjo Aho

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

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

USD\$24 million
The economic value generated solely by coral reefs in Grenada makes these ecosystems essential natural assets.

¹ "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 Grenada. 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 study² published by TNC 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.



Reefs, seagrass beds and mangroves protect the coast in Grenada
© Marjo Aho

Resilience and Adaptation in Grenada

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

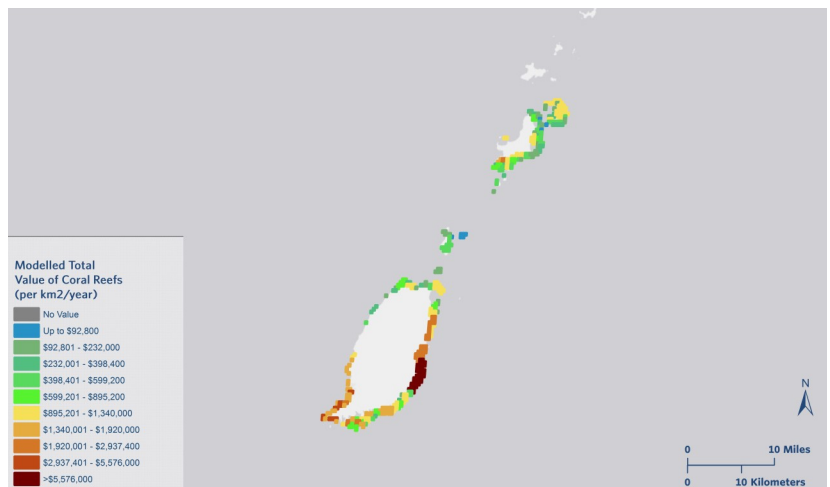
Since 2012, TNC and the Grenada Red Cross have worked together to advance climate adaptation in vulnerable communities in the country. Now, in partnership with the International Federation of Red Cross and Red Crescent Societies, they have expanded their work through an initiative known as Resilient Islands.

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.

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

Figure 1: Map of the economic value generated by coral reefs in Grenada and the Eastern Caribbean. Source: OceanWealth.org



TNC staff member retrieving a piece of staghorn coral ready for replanting in Grand Anse, Grenada. © Tim Calver

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