



INTERNATIONAL  
CORAL REEF INITIATIVE



# Caribbean Factsheet

**Communicating the Economic and Social Importance  
of Coral Reefs for Caribbean countries**

This fact sheet will provide you with information extracted from economic studies

**BASICS**

Coral reefs are among the most productive ecosystems on the planet<sup>o</sup>. they cover less than 1% of the ocean floor but support 25% of ocean life.



Coral reefs provide beautiful seascapes which allow for a range of recreational activities and improve the attractiveness of the country for international tourism markets.

Coral reefs absorb a huge amount of swell energy from waves, protecting lives, coastal properties and beaches from flooding events and hurricanes.



Many fisheries exist only due to the presence of coral reefs, whether as nurseries or adult habitats. This sector provides food and incomes for fishers and associated industries.

**Live coral abundance in the region has declined from >70% in the 1970s to around 14% in 2003.**

**Primary threats are man made - unsustainable fishing, land based sources of marine pollution (including sedimentation) and more recently Global Climate Change.**

**Local solutions exist !!**

Developing networks of Marine Protected Areas, implementing sustainable fishing practices (*especially protecting herbivores*) and improving water quality are local actions that could increase the resilience of coral reefs to global threats.



## REGIONAL DATA

Estimates show the **15,000 km<sup>2</sup>** of reefs in the Caribbean provide tangible benefits of **US\$3.4b** annually to the economies of the countries.

Tourism benefits represent almost **90%** of this value with Fisheries representing the remainder.

**100,000 jobs** and more than **3,000 businesses** depend directly or indirectly on coral reef health.

At least **3 million persons** rely on fisheries for their livelihood.

Annually, almost **7M visitors** enjoy the beauty of coral reefs (and pay for it).

For some countries, these benefits can represent up to **14%** of their GDP.

Coral Reefs protect approximately **21 percent** of the coastline of the Caribbean region.

The economic benefits from coastal protection are not visible in the GDP but obvious during hurricanes.



## COUNTRY DATA

Below is Caribbean economic and social data for the three main ecosystems services provided by coral reefs: Coastal Protection, Fishing, and Tourism.

### How to read the table?

*Example for Jamaica:*

Estimates show the **1,200 km<sup>2</sup>** of reefs provide annually, a tangible contribution of **US\$230M** to the GDP of Jamaica (1.6% of the GDP).

**27,000 jobs** and households and almost **200 businesses** depend directly or indirectly on coral reef health.

At least **350 000 visitors** directly observed the coral reef ecosystems of Jamaica.

**66% of Caribbean reefs** are impacted by high or very high threats levels from human activities.



## COUNTRY DATA

Country	Coral Reef Area (km <sup>2</sup> )	Annual contribution to GDP	Direct contribution to GDP (in %)	Tourism ES	Fishery ES	Coastal Protection ES	Total jobs depending on reefs (incl. tourism and fishery)	Tourism beneficiaries			Beneficiaries of Coastal Protection			% of reefs under high and very high threat from human activities
								Reef visitors	Businesses directly related	% of total spending	Households	Hotels (number and m <sup>2</sup> )	Beaches (number)	
Anguilla	33	\$16 M	5.0%	\$12 M	\$4 M	\$5 M	600	10.000	16	17%				89%
Antigua and Barbuda	220	\$40 M	2.9%	\$40 M			2.000	116.000	46	14%				62%
Aruba	47	\$131 M	4.9%	\$131 M			3.000	208.000	38	15%				100%
Bahamas	2.805	\$379 M	4.3%	\$315 M	\$64 M		19.000	903.000	300	19%				2%
Barbados BMMA (West coast)	92	\$160 M	3.6%	\$158 M	\$2 M		9.000	159.000	200	14%	290	120/120.000 m <sup>2</sup>	55	100%
Bermuda	332	\$139 M	2.5%	\$134 M	\$5 M	\$316 M	1.000	186.000	40	32%	4.000			80%
Bonaire	68	\$55 M	13.6%	\$54 M	\$1 M	\$0.1 M	9.000	189.000	71	69%				
British V.I.	335	\$121 M	13.3%	\$117 M	\$4 M		1.000	258.000	60	31%				35%
Cayman Islands	207	\$178 M	4.8%	\$176 M	\$2 M	\$119 M	2.000	1.045.000	132	58%				26%
Cuba	2.783	\$170 M	0.2%	\$170 M			25.000	152.000	98	7%				36%
Dominica	70							79.000	30					100%
Dominican Republic	567	\$322 M	0.5%	\$307 M	\$15 M		24.000	409.000	369	8%				73%
Grenada	131	\$14 M	1.5%	\$14 M			4.000	81.000	34	19%				81%
Guadeloupe	400	\$110 M	1.1%	\$78 M	\$32 M	\$22 M	11.000	69.000	270	15%	9.000	180 000 m <sup>2</sup>		84%
Haiti	458	\$9 M	0.1%	\$9 M			4.000	30.000		4%				100%
Jamaica	1.206	\$230 M	1.6%	\$200 M	\$30 M	\$36 M	27.000	349.000	191	12%	432			66%
Martinique	56	\$119 M	1.1%	\$84 M	\$35 M	\$83 M	13.000	77.000	200	13%	10.000	240.000m <sup>2</sup>		100%
Montserrat	25							10.000	10					100%
Puerto Rico	2.171	\$390 M	0.4%	\$389 M	\$1 M	\$1.2 M	2.000	489.000	385	10%				84%
St. Barthelemy	22	\$36 M	14.1%	\$33 M	\$3 M	\$4 M	2.000	70.000	40		1.000	13/50.000m <sup>2</sup>		
St. Kitts and Nevis	170	\$10 M	1.1%	\$10 M			700	80.000	33	14%				100%
St. Lucia	98	\$175 M	8.5%	\$127	\$0.6 M	\$47 M	5.000	140.000	88	15%			10 km <sup>2</sup>	100%
St Vincent and the Grenadines	131	\$15 M	2.0%	\$15 M			3.000	48.000	15	22%				62%
St. Martin (Fr.)	8	\$22 M	3.1%	\$18 M	\$0.36 M	\$4 M	2.000	462.000	60		1.000	231 m <sup>2</sup>		
Sint Maarten (Netherlands)	5	\$33 M	4.2%	\$31 M	\$2 M			330.000	74	17%				
Trinidad and Tobago	62	\$125 M	0.3%	\$83 M	\$1 M	\$31 M	9.000	37.000	42	7%			10 km <sup>2</sup>	100%
Turks and Caicos Islands	2.002	\$62 M	7.2%	\$59 M	\$3 M	\$19 M	4.000	264.000	69	30%				4%
US Virgin Islands	748	\$169 M	4.5%	\$166 M	\$3 M	\$7 M	1.000	501.000	300	21%				91%
Caribbean	15.252	\$3.391M	0.4%	\$2.930M	\$208 M	\$694 M	98.133	6.662.000	3.171	20%	21% of the coast			43%

- The values are obtained from peer-reviewed, gray literature, and online sources.
- All references are available on [www.icriforum.org](http://www.icriforum.org)
- Values have been harmonized and dollar values are presented in \$U.S. 2017.

## POINTS TO NOTE

- If global Coral Reefs were a country their GDP would be ranked third behind only China and the United States.
- If coral reefs in the Caribbean were a country their GDP would be ranked 18th just behind Turkey and just before the Netherlands.
- In all scenarios, benefits of Marine Protected Area implementation outweigh the costs ranging between 3:1 and 20:1.
- 50% of international visitors to Bonaire will not return if the reefs are degraded.
- More than 15,000 km of shoreline could experience a 10-20 per cent reduction in protection from waves and storms by 2050 as a result of coral reef degradation.
- Healthy reefs in the Caribbean could support a maximum sustained yield of 4 tons of fish per km<sup>2</sup> per year. Yields from degraded reefs were estimated as low as 0.7 per km<sup>2</sup> per year.

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