Coastal Resilience in the Caribbean

Communities which are heavily dependent on coastal ecosystems will suffer catastrophic effects from climate change.

>50% population lives within 1.5 km of the coast

T 1m sea level rise

right now, 75% of all reefs are threatened

...to increase to 90% in 2030, and up to 100% by 2050.



COASTAL ECOSYSTEMS

PROVIDE

US\$720 million annually in protection benefits

+US\$49 billion in tourism to GDP in 2014, and 11% of jobs **DECREASE**













20% of the coastline is protected by its ecosystems

The poorest and most vulnerable populations will be seriously affected by

CLIMATE CHANGE





THREATENING





frastructures economies







ecosystems



Engineers, environmental scientist and economist are protecting coastlines by incorporating nature into design of innovative resilient structures yielding positive results.

Coastal risk reduction always involves good ocean science (oceanographic surveys), combined with natural engineering (oyster and coral reef balls, mangrove restoration) and land-use planning including coastal setbacks and integrated coastal zone management.



www.iadb.org/biodiversity

Source

World Resources Institute Washington, DC.
CH2M, and TNC. 2015. Marine ConservationPractices
UNEP. 2008. Climate Change in the Caribbean and the Challenge of
Adaptation. United Nations Environment Programme Regional Office
for Latin America and the Caribbean. Panama City, Panama.



Copyright © 2016 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed. Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license. Note that link provided above includes additional terms and conditions of the license. The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.

Authors: Michele Lemay, Jamie Cotta, Carmen del Rio.