Activating the Blue Economy in the Caribbean: Case studies

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Cefas

Commonwealth Marine Economies Programme

Enabling safe and sustainable marine economies across Commonwealth Small Island Developing States

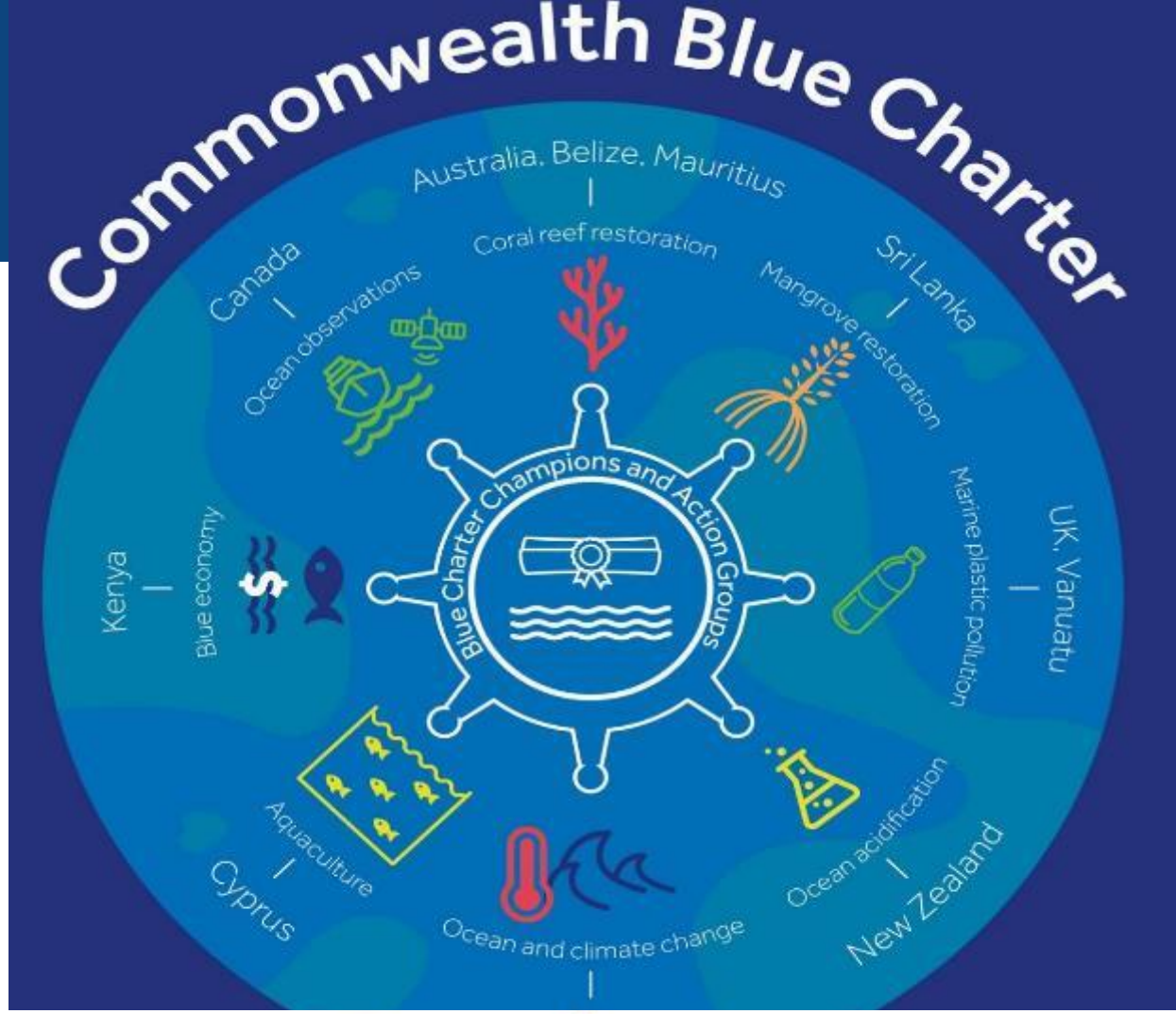
www.gov.uk/guidance/commonwealth-marine-economies-programme | CME.ProgrammeEnquiries@fco.gov.uk

The **UK Government committed**

- to support Commonwealth Small Island Developing States (SIDS)
- to **alleviate poverty**

by **preserving their marine environments** and **harnessing maritime resources** that will support the sustainable **growth**.

Over £23M ($30M) committed so far.



Foreign & Commonwealth Office

Centre for Environment Fisheries & Aquaculture Science

United Kingdo Hydrographic

CLiP Commonwealth Litter Programme

Commonwealth Marine Economies Programme

Enabling safe and sustainable marine economies across Commonwealth Small Island Developing State

Guyana
Country review

Centre for Environment Fisheries & Aquaculture Science

UK Hydrographic Office

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNC

Programme outputs

If all of the potential activities were to be delivered, the CME Programme, wo departments in Guyana, would result in the following development of marine the end of the scheduled Programme.

Phase 1	Phase 2	Phase 3	Phase 4
Limited, or no, characterisation of physical parameters in marine and maritime sectors.	The physical parameters of the key marine and maritime environments and sectors are mapped and quantified.	The physical parameters are analysed in terms of the biological, sociological and economic context, resulting in a more in depth appreciation of their vulnerabilities and opportunities/ limitations for sustainable use.	Defensible p is produced the marine a maritime se that details consideratic the sustaina developmer of the ocear economy.

Output 1 – Marine data collection for environmental resilience and safe and efficient trade.

Output 2 – Monitoring and risk assessment to increase climate change resilience.

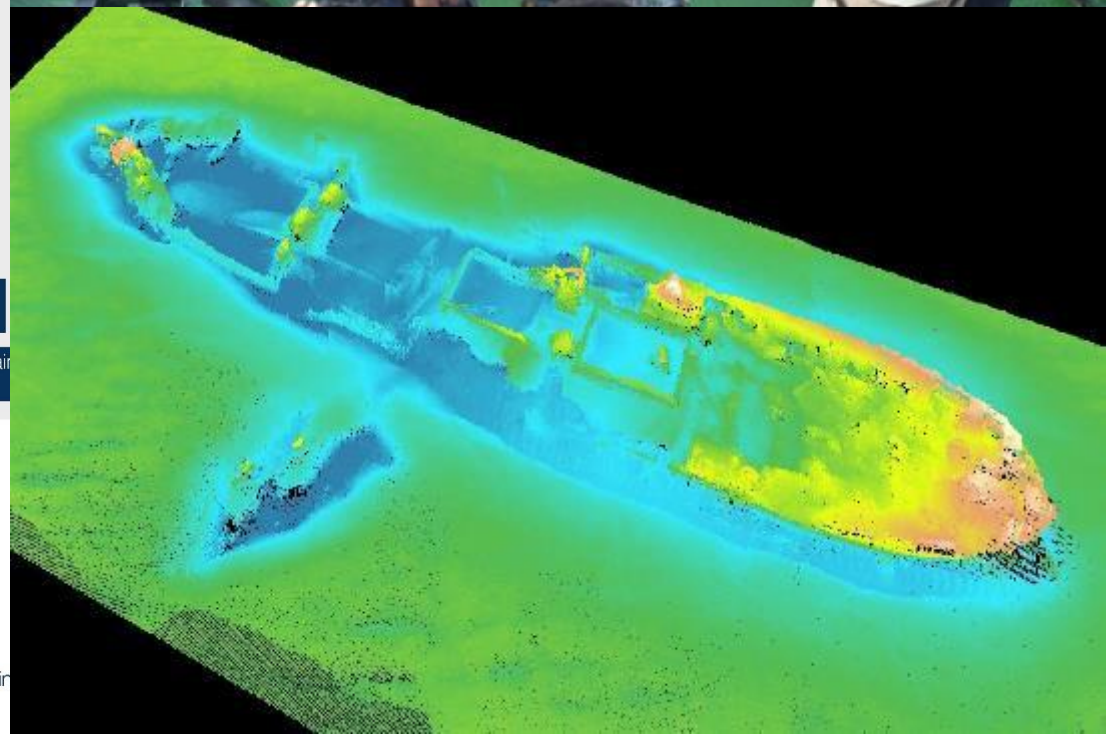
Output 3 – Decreasing pollution and improving human health.

Output 4 – Sustainable fisheries development.

Output 5 – Natural capital assessment.

Output 6 – Infrastructure development, trai knowledge exchange.

www.gov.uk/guidance/commonwealth-marin



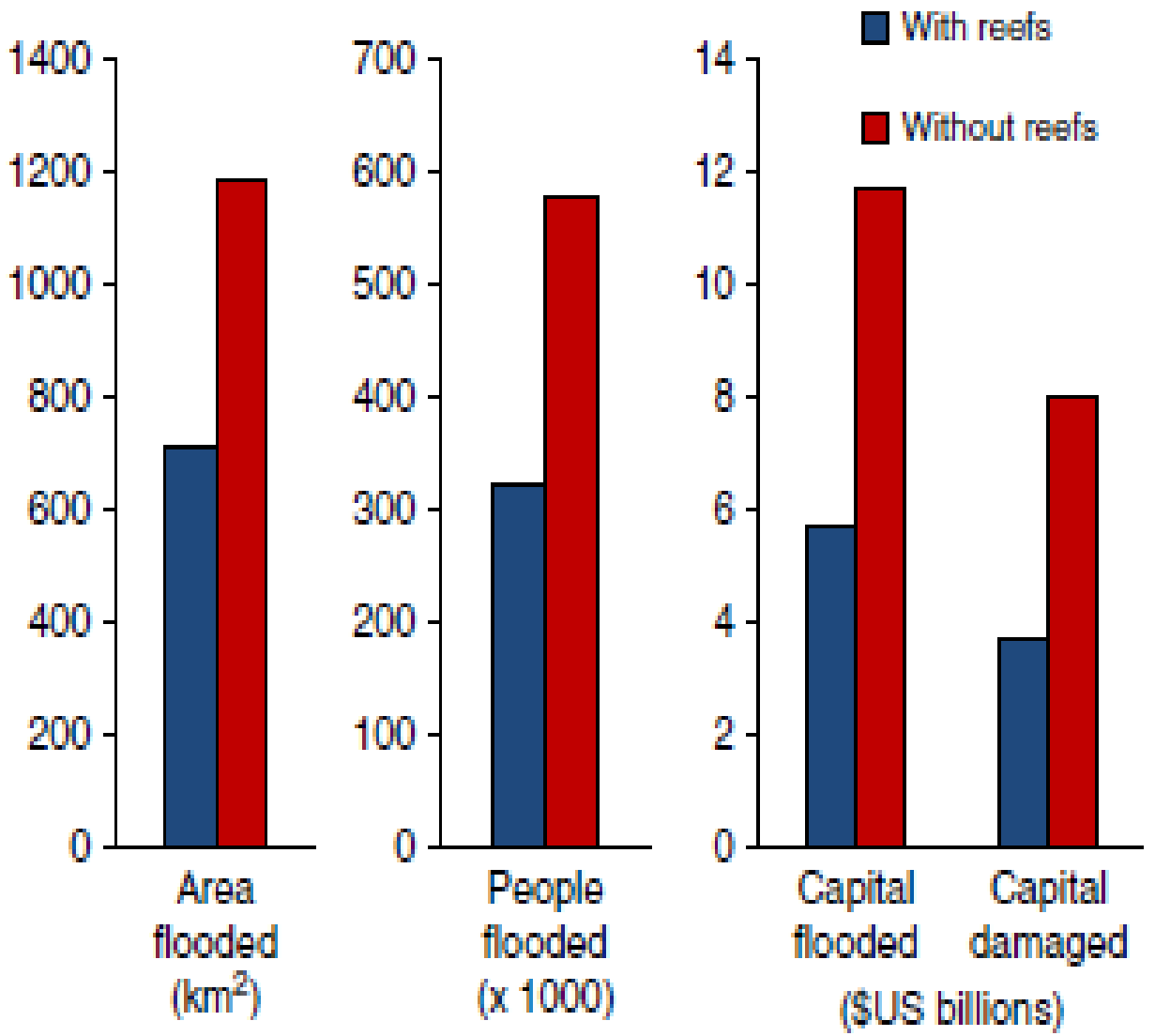
Guyana fisheries sustainability & economic development

- Guyana seabob fishery - $40M – 3,000 jobs
- Marine Stewardship Council certification based on Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries.
- It certifies the fishery as being both sustainable and sustainably managed.
- MSC certified products have higher trade prices and enable access to markets that demand labelling guaranteeing sustainable sourcing.

Pre-assessment → Action plans to address data and evidence gaps → Full-assessment → Review

Coral reefs

- Flood reduction
- Reduce wave energy of up to 97%.
- reefs reduce the annul expected damages from storms by more than **$4 billion**



Cefas

Beck, Michael W., et al. "The global flood protection savings provided by coral reefs." *Nature communications* 9.1 (2018): 2186.

Coastal Ecosystem Recovery Financing for the Future (CERFF)

What is the challenge?

- To **maximise the long-term protection value of coral reefs and seagrass** beds to coastal property and livelihoods in the face of increasing damage from tropical storms.

How we are addressing this challenge?

- By **developing an insurance product** that can compensate people financially, and at the same time encourage climate-responsible management of these ecosystems.


Data led CERFF risk modelling

- Parametric insurance pay-outs are based on intensity of event and pre-agreed loss scenarios
- Data poor risk modelling leads to unaffordability
- New data and investigating relationships allows for improved and location specific risk modelling

- Incentivise sustainable management practices
- Development increasing resilience and conservation

Modelled impacts on broad land use/land cover categories from Ivan-type storm under different sea level scenarios

Scenario	Ivan_005	Ivan_107	Ivan_167
Land use/land cover type	Area affected (km^2)		
Agriculture	772.099	1042.156	1253.441
Airport Ground	27.256	26.798	28.364
Aviation	5.842	5.794	7.574
Commercial & Industrial	25.866	40.905	61.600
Conservation	587.742	763.092	864.314
Environmental	3.969	4.759	7.222
Forest	1125.154	1261.525	1472.099
Hydrology	412.758	460.897	541.817
Islands	59.046	66.007	74.235
Livestock	47.745	70.179	43.274
Marine	1.383	1.583	2.854
Mining	0.108	0.208	0.313
Recreational	43.356	55.551	63.236
Residential	333.538	403.316	475.669
Urban	18.398	26.541	32.836

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Blue Economy
n Economy
2006
2008
2010
2012
Date

Summary

- Activating the Blue Economy – large opportunities, huge pitfalls
- NIMBY – Sustainability isn't optional
- Support finding the right approach, don't impose an approach

- Attracting and de-risking private investment is key
- Insurance and other financial mechanisms to reduce burden on Governments and act as incentive to improve management

- Education key to prepare a generation of "Blue Economy" entrepreneurs