# **Commonwealth Marine Economies** Programme



PROUD TO SUPPORT IONWEALTH

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

# Jamaica

Country review



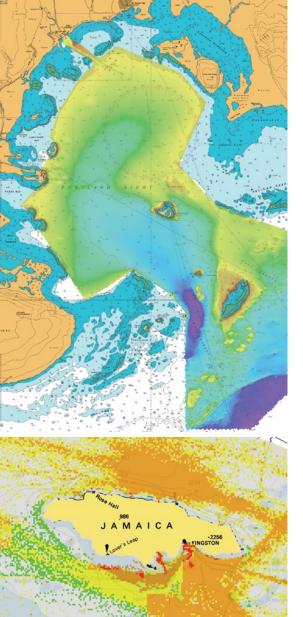


**UK Hydrographic** Office



National **Oceanography Centre** NATURAL ENVIRONMENT RESEARCH COUNCIL





The CME Programme is designed to support sustainable, growing marine economies that create jobs, drive national economic growth, reduce poverty, ensure food security and build resilience against forces of nature. Funded by the UK Government and delivered by a partnership of world-leading marine organisations from the UK, the programme aims to ensure marine resources in Commonwealth SIDS are better understood and managed.

This review highlights opportunities where the UK can apply and leverage its world-leading expertise to make significant, costeffective and lasting positive impacts on each country.

## Relevant strategic plans

**International** – Jamaica is subject to international requirements and obligations as listed under the UN Convention on the Law of the Sea; Safety of Life at Sea; Conservation of Biological Diversity (Aichi Targets); SIDS Accelerated Modalities of Action (SAMOA) Pathway; 2030 Agenda for Sustainable Development (including Sustainable Development Goals; 2 – Zero hunger; 9 – Industry, innovation and infrastructure; 13 – Climate action; 14 – Life below water); Ramsar Convention on Wetlands of International Importance; International Coral Reef Initiative; World Heritage Convention, and the Regional Seas Convention.

**Regional** – Relevant mechanisms and bodies within the Caribbean include the Caribbean Regional Fisheries Mechanism; Caribbean Community Common Fisheries Policy; Caribbean Large Marine Ecosystem project, Caribbean Regional Oceanscape Project, and the Eastern Caribbean Regional Ocean Policy.

**National** – National strategies for enabling the safe and sustainable development of Jamaica's marine environments include; the National Ballast Water Management Strategy; National Action Plan and Strategy on Biological Diversity in Jamaica (2016-2021); Strategic Programme for Climate Resilience; Disaster Vulnerability Reduction Project; Fisheries Policy Framework; Jamaica Coral Reef Action Plan; and the Pedro Bank Management Programme.

# Challenges faced

### Management of coastal and marine environments -

Although detailed coastal zone management strategies are in place, they are made less effective by a lack of up-to-date, modern data. Jamaica has embarked upon an ambitious program of infrastructure development to position it as a global transhipment and logistics hub. To enable, and provide the confidence for much larger ships to access Jamaica, modern surveys and charts will be required. Jamaica has made a commitment to increase the extent of Marine Protected Areas by 2% by 2019 and will benefit from data and evidence to inform decision making.



**Sustainable use of marine resources** – The science and environmental management requirements are varied but include fisheries support, biodiversity mapping, science infrastructure and other institutional support. In particular, data to increase the sustainability of commercial fisheries and gain accreditation for selected fisheries. Improving data management and data security in Jamaica's marine agencies, and also support is required to take existing and new data as part of socio-economic analysis.

**Safety and security** – Very little of Jamaica's seabed has been surveyed to modern standards, and this is having an impact on the wider marine economy by hindering key imports (e.g. LNG) and exports (e.g. bauxite). It is also restricting tourist access by cruise ships. To enable safe navigation for ships in Jamaica's waters, official navigational charts need to be updated.

**Hydrographic coordination and data collecting capabilities** – The Maritime Authority, National Land Agency and Port Authority Jamaica are fully aware of their hydrographic responsibilities under SOLAS and of the many other applications such data may support. Jamaica has a National Hydrographic Committee to improve coordination and planning, but has limited capacity to undertake seabed mapping work or obtain data from other parties. There is also further potential for improving hydrographic governance, so that requirements and data are appropriately shared to derive the maximum value and benefit.

**Protection and preservation of the marine environment** – Maintaining the health and biodiversity of marine ecosystems within Jamaica is fundamental for environmentally sustainable development. In particular, the protection and preservation of the coral reefs and ecosystems within Pedro Bank and Cays is of critical importance from both a fisheries and environmental perspective. Characterisation of the impacts of marine pollution on the health of the marine ecosystems and water quality is needed to help improve wastewater management practices, and to identify regions most at risk.

**Climate change impact assessment** – Marine environments are particularly vulnerable to the impacts of climate change, most notably through factors such as ocean acidification, sea-level rise and invasive species. Understanding, quantifying and monitoring those factors and their effects on local marine ecosystems is essential for developing appropriate risk mitigation and coastal planning strategies.

**Natural and environmental disasters** – Jamaica lies in a region of high hurricane activity, with storm and flooding events between 2001 and 2012 resulting in combined damages and losses in excess of JD \$120 billion. These events demonstrate the need for the better protection of marine infrastructure and environments from the impact of natural hazards, as well as the importance of building resilience into coastal systems as a mechanism for mitigating these risks.

**Training and capacity building** – Improved awareness, skills and knowledge are required across marine sectors to enable Jamaica to implement integrated ocean governance. There is also a need to increase both national and regional cooperation through the sharing of assets and knowledge in order to help reduce costs and improve decision makers' understanding.

## Jamaica – Activities and benefits

By providing data, training, advice and support, the CME Programme is designed to help address economic and environmental needs, leaving a lasting legacy of self-sufficiency in marine management.

Programme activities are split across six core themes, though potential action is not identified in every category in all Small Island Developing States.

Priority projects identified for Jamaica include:

# Marine data collection for environmental resilience, and safe and efficient trade (core output 1)

**Activity** – High quality hydrographic data collection leading to new modern editions of navigational charts, improved compliance with international obligations and data supplied to local states. Areas of highest priority include the key port approaches and the Pedro Bank.

**Benefits** – Improving overall safety of navigation – reducing risk to lives and the environment. Enabling cargo ships to reduce their under keel clearance with confidence, therefore reducing costs and thereby increasing profit. Helping encourage cruise ships to visit.

### Monitoring and risk assessment to increase climate change resilience (core output 2)

Activity – Regional Climate Change Report Card.

**Benefits** – To provide climate change information to support effective climate change adaptation.

# Sustainable fisheries development (core output 4)

**Activity** – Support the development of an extreme weather event insurance product for Jamaica Fisheries sector.

**Benefits** – To enable prompt access to financial support for reconstruction. As part of the process in the development of climate change resilient fisheries practices then a more sustainable fisheries sector is also achieved.

**Activity** – Support the MSC accreditation process of conch fishery in Jamaica.

**Benefits** – To enable access to new markets where accreditation is required and increase the market price of existing products.

### Science infrastructure development, training and knowledge exchange (core output 6)

**Activity** – Provision of modern seabed mapping equipment to the Government of Jamaica.

**Benefits** – In line with those described under Output 1, but will allow for these benefits to be maintained into the future and additional mapping to be undertaken in areas of secondary priority.

**Activity** – Work with key maritime staff to develop local hydrographic governance.

**Benefits** – Key elements of governance in place in line with IHO Phase 1 compliance, reducing potential barriers to international trade.

Activity – Seabed mapping data handover workshop.

**Benefits** – Ability of local staff to understand and utilise acquired seabed mapping data in country.

### Programme outputs

If all of the potential activities were to be delivered, the CME Programme, working with key departments in Jamaica, would result in the following development of marine capacity by the end of the scheduled Programme.

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
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 policy is produced for the marine and maritime sectors that details consideration for the sustainable development of the ocean economy.	Full competency in undertaking the previous phases is developed and sustained across multiple sectors, leading to the safe and sustainable development of marine and maritime economies.

**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, training and knowledge exchange.

# Expected impact

Through delivering these activities, outputs and benefits the CME Programme would help to facilitate:

**Output 1** – Adherence to the UN convention on the Law of the Sea and Safety of Life at Sea; Reduction in the cost of imports and increase in the profitability of exports; Reduction in the risk of maritime accidents and damage to the environment; and evidence to sustainably manage and protect natural resources.

**Output 2** – Identification of communities and environments vulnerable to the impacts of climate change; Integration with regional and global hazard monitoring networks; Informed coastal management and planning decisions.

**Output 4** – Reduced pressure on existing fish stocks and marine environments; Development of new opportunities for aquaculture diversification; Enhanced economic potential of existing products; Access to insurance services following climatic events; and increase resilience within fisheries value chain in response to extreme events.

**Output 5** – Enhanced awareness of the social and economic value of marine ecosystems; Quantification of the cost/benefit ratio of existing policy options, supporting decision making.

**Output 6** – Confidence and ability to make sound independent decisions regarding the development of marine environments; Access to state-of-the-art marine equipment, models and techniques; Development of national and international networks.

### Strategic outcomes

By better understanding and managing the marine resource potential within Jamaica the CME Programme will help create jobs, drive national economic growth and reduce poverty through:

**Prosperity** – Diversifying revenue potential by opening up new economic opportunities.

**Sustainability** – Ensuring all marine and maritime activities are environmentally safe and sustainable.

**Security** – Making infrastructure and human capital resilient to natural disasters and climate change.

Legacy - Building the capacity of national authorities to plan and optimise their marine spaces.

# Commonwealth Marine Economies Programme

The CME Programme is being delivered on behalf of the UK Government by a partnership of world-leading marine expertise.

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