

Inquiry into The UK Small Island Developing States Strategy

International Development Committee

Written Evidence submitted by the National Oceanography Centre, June 2023

About us

The National Oceanography Centre (NOC) is the UK's leading charity for integrated coastal and deep ocean research. NOC undertakes and facilitates world-class agenda-setting scientific research and technology development to understand the ocean to underpin international and UK public policy, business and societal outcomes.

NOC operates the Royal Research Ships James Cook and Discovery and develops technology for coastal and deep ocean research. Working with its partners, NOC provides long-term marine science capability including: sustained ocean observations, mapping and surveying, data management, scientific research and advice.

Introduction

NOC welcomes the opportunity to provide written evidence to the International Development Committee's Inquiry into the UK Small Island Developing States Strategy (SIDS) 2022-2026 and would be delighted to meet with members of the Sub-Committee to provide oral evidence. As stewards of 30% of the global ocean, SIDS do and will continue to play a pivotal role in delivering a sustainable, healthy ocean on which the future health of our planet depends.

As delivery agency for over 50 scientific research and capacity building activities under the Commonwealth Marine Economies (CME) Programme¹ – a UK Government project led by the Foreign, Commonwealth & Development Office (FCDO) to help SIDS make the most of their natural maritime advantages, to enable sustainable growth and alleviate poverty – NOC has significant insight as a UK agency to advise on the effectiveness of the Government's SIDS strategy. Furthermore, NOC is lead on Official Development Assistance (ODA) projects delivered through the Global Challenges Research Fund and other UK Research and Innovation (UKRI) funding mechanisms, including the Natural Environment Research Council (NERC) Urgency and Seedcorn funds.

Key recommendations

NOC recommends to UK Government that programmes and projects funded to support the UK SIDS Strategy:

- Are either long-term or provide easily identifiable and accessible follow-on funding to enable the development and maintenance of long-term, sustained relationships with delivery partners and local stakeholders;
- Are co-designed with SIDS to ensure the right issues are being addressed;
- Are coordinated within the context of already existing regional, international and global initiatives that deliver lasting in-country capability;
- Are interdisciplinary and inclusive of researchers from both the natural and social sciences.

¹ [Commonwealth Marine Economies Programme - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/programmes/commonwealth-marine-economies)

The most effective support that the UK can provide to enhancing the resilience of SIDS to climate change and natural disasters is to provide the underpinning knowledge and/or capabilities to facilitate the installation and application of appropriate mitigation techniques.

One way to accomplish this is through the provision of infrastructure such as tide gauges to develop long-term sea level rise projections and inform coastal management policy, including on seawater intrusion into fresh groundwater. An effective tide gauge network may also act as an early warning system for detecting tsunamis and other coastal hazards. Through the CME Programme, NOC installed six sea level monitoring stations for early warning purposes in St Lucia, Dominica and Belize and jointly delivered regional training in the maintenance of these and in the processing and use of sea level data for predicting tides.² Given appropriate resources, this work could be extended to address the current gaps in the regional monitoring networks.

Other techniques include the use on modelling that forecast future scenarios of sea temperature, nutrients, and ocean acidification, such that decision makers can have a view of possible future environmental conditions that could significantly hamper SIDS reliance on marine resources. To complement this local monitoring or observing of key ocean conditions identified by SIDS, through key essential ocean variables, such as pH, sea surface temperature, nutrients and seagrass, would provide a focus for delivering the capacity building required to support long-term capabilities within the SIDS themselves.

The UK should be promoting its world class open ocean research capabilities to support the delivery of capacity building priorities identified by SIDS. Through UN frameworks where SIDS are recognised as a specific group where support should be provided, such as the recently agreed treaty for the High Seas (BBNJ or Biodiversity Beyond National Jurisdiction³), opportunities exist to provide UK expertise to support SIDS managing the vast ocean of areas under their jurisdiction.

Issues raised in the terms of reference

- **What are the common features of, and common challenges facing Small Island Developing States? Can those disparate challenges be addressed effectively in a single strategy?**

[1] SIDS face a common set of threats and challenges due to their small size and populations, geographical remoteness, narrow economic bases and high degree of vulnerability to environmental and economic shocks. Although a diverse group geographically and in terms of their levels of human and economic development, many SIDS suffer from low economic growth, persistent high unemployment and high-levels of out-migration of skilled and educated labour. They are highly vulnerable to natural disasters including hurricanes, tsunamis, earthquakes and volcanic activity, and are often slow to recover from economic shocks.

[2] These challenges are compounded by the impacts of climate change and wider environmental degradation. For example, sea level rise poses an existential threat to SIDS, where the majority of settlements and economic activity are concentrated on the coast. Furthermore, many of the SIDS are low lying and therefore vulnerable to flooding, with consequences to critical infrastructure such as

² [Tide gauge installation | Commonwealth Marine Economies Programme \(noc.ac.uk\)](https://www.noc.ac.uk/)

³ [Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction | \(un.org\)](https://www.un.org/)

houses, roads, hospitals and potable water supplies due to salt-water intrusion. Declining fish stocks, both due to over-exploitation and the loss of habitats associated with pollution and ocean acidification, threaten subsistence livelihoods, commercial fishing industries and food supplies for coastal communities.

[3] A key feature shared across SIDS is their exposure to multiple major hazards (defined by the United Nations Office for Disaster Risk Reduction (UNDRR) as “a process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation”⁴) that may occur simultaneously, in a cascading manner or cumulatively over time. Repairing damaged infrastructure in SIDS is more expensive and time consuming than they would be in either larger states or less remote states not dependent on cargo coming in from ships to restore damages.

[4] As noted in the 2021 FCDO Policy paper “Small island developing states (SIDS) and access to finance: statement and call to action”⁵ SIDS are a “special case for sustainable development.” Most SIDS have undiversified economies and often face high debt levels, and so the multi-hazards referenced above may trap SIDS in a loop of debt and disaster, with no reasonable expectation of full economic recovery in between the natural, anthropogenic and socio-natural hazards occurring with ever greater frequency due to climate change.

[5] While it is ambitious to try to address these challenges in a single strategy, the focus of the UK SIDS Strategy (2022-2026) on empowering people and countries to direct their own future is welcome, as is its holistic approach in bringing together issues such as climate change, social inclusion and income diversification.

[6] The consensus of NOC scientists experienced in delivering oceanographic research and projects in collaboration with SIDS⁶ is that co-design is critical to ensuring the right issues are being addressed. Achieving the future envisioned in the UK SIDS Strategy requires prolonged engagement and coherent collaborative support from the UK and international partners. Furthermore, the likelihood of success increases if implementation of a strategy is co-ordinated jointly with existing regional bodies with which the SIDS already engage.⁷

[7] Co-designing solutions to the challenges facing SIDS requires lasting relationships and networks which are challenging to develop and maintain within the constraints of 5-year strategies and short-term funding programmes. Time is required to establish and maintain in-country knowledge, capabilities and infrastructure. Furthermore, when funding opportunities are one-sided it is difficult to operate in a spirit of partnership. Community engagement with a range of diverse local SIDS stakeholders is key to understanding the specific local drivers and knowledge base, both of which should be considered when co-designing projects which address the vulnerability of SIDS to multi-hazards. Stakeholder engagement

⁴ [Hazard | UNDRR](#)

⁵ [Small island developing states \(SIDS\) and access to finance: statement and call to action, 7 October 2021 - GOV.UK \(www.gov.uk\)](#)

⁶ See [Commonwealth Marine Economies Programme \(cmeprogramme.org\)](#) for examples of work NOC has undertaken with SIDS.

⁷ Examples of these regional bodies are CARICOM (<https://caricom.org>), OECS (<https://www.oecs.org/en/>), SPC (<https://www.spc.int>), SPREP (<https://www.sprep.org>) and IGC/CARIBE-EWS ([ICG/CARIBE EWS | IOCARIBE OF IOC UNESCO \(ioc-unesco.org\)](#))

need not, however, be limited to individual countries as a regional approach is often a more effective approach some challenges.

[8] NOC's experience with international collaborations with developing countries⁸ suggests that the most impactful research – which results in the most successful action programmes – is often conducted within the framework of long-term programmes and existing regional organisations. Work with SIDS in the Indian Ocean, for example, could be conducted within the existing framework of the Nairobi Convention⁹ and include the Western Indian Ocean Marine Science Association¹⁰ as a project partner.

[9] Socio-oceanography is an emerging area of research which takes a whole system approach to the marine environment by explicitly factoring in human society.¹¹ Geopolitics, sustainability, planetary health and global-cooperation all drive the interdisciplinary socio-oceanographic research agenda, which is particularly relevant to the delivery of policy solutions that address the common features of and common challenges facing SIDS. Co-design of research projects across the natural and social sciences in partnership with diverse stakeholders who reside in SIDS and whose knowledge and priorities are prioritised will advance sustainable solutions to the disparate challenges addressed in this single strategy more effectively than proposals developed in disciplinary silos removed from the people they are meant to serve.

- **Is the strategy coherent with the UK's wider foreign policy and development goals, as outlined in the recent Integrated Review Refresh?**

[10] The UK Small Island Developing States Strategy 2022-2026 provides specific focus to a number of the general themes articulated in The Integrated Review Refresh 2023 (Responding to a more contested and volatile world)¹², which indicates the UK's ongoing commitment to make progress before 2030 in the priority areas of climate change, environmental damage and biodiversity loss.

[11] The Integrated Review Refresh notes the 2022 International Development Strategy (IDS) and its role in contributing to the delivery of the UN Sustainable Development Goals (SDGs), and highlights the IDS's approach to support "reforming and greening of the global financial system to ensure the International Financial Institutions and capital markets are better equipped to meet the needs of developing countries in dealing with the economic, debt, climate and nature crises." This supports the UK SIDS Strategy's focus on economic diversification and prosperity, which affirms "the position set out in the Glasgow Climate Pact that vulnerability should guide decisions on the allocation of finance."¹³

[12] The 2021 Integrated Review (Global Britain in a competitive age)¹⁴ included a section dedicated to "Supporting a resilient ocean" pledging to protect the marine environment, support international action through the UK-led Global Ocean Alliance, strengthen our marine science capabilities and "use our new Blue Planet Fund to protect and restore marine ecosystems and resources." The Integrated Review Refresh dropped this explicit reference to the ocean's importance to the UK's wider foreign

⁸ [Working with Developing Countries | National Oceanography Centre \(noc.ac.uk\)](#)

⁹ [The Nairobi Convention | Western Indian Ocean](#)

¹⁰ [WIOMSA | The Western Indian Ocean Marine Science Association | Home](#)

¹¹ [Socio-oceanography Workshop | National Oceanography Centre \(noc.ac.uk\)](#)

¹² [11857435_NS_IR_Refresh_2023_Supply_AllPages_Revision_7_WEB_PDF.pdf \(publishing.service.gov.uk\)](#)

¹³ [UK Small Island Developing States Strategy 2022–2026 \(publishing.service.gov.uk\)](#)

¹⁴ [Global Britain in a competitive age \(publishing.service.gov.uk\)](#)

policy and development goals, so it is hoped that the UK SIDS Strategy can contribute to filling in this gap, given the importance role SIDS play in international climate and biodiversity action as stewards of nearly one-third of the global ocean despite their relatively small terrestrial footprint.

[13] Components of the UK SIDS Strategy are consistent with other UK Government initiatives such as the £500m Blue Planet Fund launched at the 2021 G7 Leaders' Summit, which emphasises the need to support developing countries by protecting and enhancing their marine environment through four key themes: (i) marine biodiversity; (ii) climate change; (iii) marine pollution; (iv) sustainable seafood. At the 2022 UN Ocean Conference, the UK Government announced new initiatives to protect the global marine environment¹⁵ such as the Global Ocean Accounts Partnership (GOAP), the Ocean Acidification Alliance and the Global Ocean Decade Programme for Blue Carbon (GO-BC), as well as continued support for programmes under the Blue Planet Fund including the Climate and Ocean Adaptation and Sustainable Transition Programme (COAST), the Ocean-Country Partnership Programme (OCP), and the Sustainable Blue Economies (SBE) Programme, all of which are compatible with many aspects of the UK SIDS Strategy.

- **Do the six priorities outlined in the UK Government's SIDS strategy address the key issues facing SIDS? What resources will the UK Government need to commit to implement its SIDS Strategy?**

[14] Yes, thematically the priorities outlined in the UK Government's SIDS strategy are amongst the most relevant issues facing SIDS. Underpinning all six interlinked areas of mutual interest where the UK can support SIDS to grow and develop their resilience is the need for prolonged capacity building. There will always be immediate issues that require urgent attention and external support, but addressing those challenges must be complemented by an integrated and internationally cooperative approach towards ensuring lasting in-country capability to resolve those issues in the manner that the SIDS themselves deem to be appropriate.

[15] With regards to implementation, a co-ordinated multi-national and regional approach to capacity building is encouraged. Better engagement with relevant intergovernmental stakeholders should be a key driver advancing the Strategy's aims. Interdisciplinary research— such as the socio-oceanographic approach noted above – addressing aspects common to all SIDS or regional groups of SIDS (e.g. Pacific or Western Indian Ocean SIDS) or research for action within the context of regional cooperation (e.g. MPA networks) should be prioritised. Natural hazards are unavoidable, but improved regional co-operation to mitigate impacts is an effective use of limited resources.

[16] As large ocean States, which is how SIDS often prefer to be referred to, SIDS have responsibility for vast areas of open ocean, as reflected in the priority area on Ocean and biodiversity. The recently agreed treaty for the High Seas (BBNJ), whilst focussed on areas beyond national jurisdiction, will have dedicated funding related to assessed contributions to support capacity building and the transfer of marine technology that SIDS, as a priority group, can access. The capabilities required to contribute to managing areas beyond national jurisdiction are equivalent to those required to manage the vast areas under SIDS' jurisdictions. The UK should be promoting its world class open ocean research capabilities to support the delivery of capacity building priorities identified by the SIDS through an intergovernmental framework of a Conference of the Parties (BBNJ COP), that will have a secondary benefit of enabling management of areas under SIDS' jurisdiction. Such an approach further supports a second of the

¹⁵ [UK escalates support for global marine environment at UN Ocean Conference - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-escalates-support-for-global-marine-environment-at-un-ocean-conference)

priority areas, Multilateral modernisation, where the UK can show leadership in supporting multilateralism through contributing to intergovernmental frameworks such as the BBNJ and other marine environment related institutions, such as the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) or the International Seabed Authority, whose mandate to manage mineral resources is of particular interest and value through enabling access to environmental data and capacity building opportunities to many Pacific SIDS in particular who have vast resource potential within their national jurisdictions.

[17] In addition to the value of sea level monitoring, as articulated earlier, additional concerns relating to sea level rise are those of climate change migration, where the loss of land areas forces peoples to leave their ancestral homes. Where the loss of land isn't complete, it can still create geopolitical uncertainty over which part of the ocean SIDS govern through a recognition of their maritime jurisdiction (maritime zones) established by way of delimiting maritime boundaries. Given maritime boundaries rely on identifying parts of the coastline from which measurements are made, if or when these coastlines recede so does the area of marine estate. The geopolitical uncertainty caused by the potential effects of climate change on being able to identify which areas an island has jurisdiction over can lead to disputes, sometime ending up in international courts (ICJ or ITLOS) or by arbitration. This led the Pacific Island Forum to agree a Declaration¹⁶ that preserves their maritime zones in the face of climate change related sea level rise. However, this is not universally accepted and was an issue that was reflected in the 2022 House of Lords International Relations and Defence Committee report on *UNCLOS: the law of the sea in the 21st century*¹⁷. This issue alone straddles all six priority areas in the UK Government's SIDS strategy, highlighting the important role the ocean plays in the everyday lives of the peoples of the SIDS.

- **How can the UK best assist SIDS in the work of building resilience to the impacts of climate change and natural disasters? How effective are existing UK ODA-funded projects in SIDS?**

[18] The most effective support that the UK can provide to enhancing resilience is to provide the underpinning knowledge and/or capabilities to facilitate the installation and application of appropriate mitigation techniques. This can be through the provision of infrastructure (e.g. tide gauges, marine monitoring equipment), scientific knowledge (e.g. habitat maps to inform marine spatial planning, or awareness of sites at risk from geohazards that may affect telecommunication cables), and training (e.g. training fellowships/placements, funding peer-to-peer support networks and delivery of knowledge exchange workshops). It is essential that any and all support is at the request of, and with full engagement of, relevant in-country partners, and consulted openly in communication with other international partners and funding agencies in order to avoid duplication of efforts.

[19] UK ODA funded projects in SIDS have been most effective when delivered in partnership over multi-year timescales following in initial period of stakeholder engagement. The establishment of trust and support is critical but extremely difficult to achieve over short timescales, particularly in countries a long way from the UK. The most effective projects also work closely with established regional bodies and independent organizations who have a long-history of working in these regions (e.g. The Ocean Foundation¹⁸) in order to ensure on-going support and implementation of the outputs.

¹⁶ <https://www.forumsec.org/2021/08/11/declaration-on-preserving-maritime-zones-in-the-face-of-climate-change-related-sea-level-rise/>

¹⁷ <https://committees.parliament.uk/publications/9005/documents/159002/default/>

¹⁸ [The Ocean Foundation - Serving Global Ocean Environments \(oceanfdn.org\)](https://oceanfdn.org/)

[20] The Commonwealth Marine Economies (CME) Programme¹⁹ is an example of a UK ODA-funded project in SIDS that delivered a significant number of effective outputs. NOC led over 50 activities as part of the CME Programme²⁰, most of which contributed to the work of building resilience to the impacts of climate change and natural disasters in SIDS. These included helping to develop long-term sea level rise projections through the installation of tide gauges²¹, deliver of a geohazard assessment report to address the vulnerability of SIDS to disruption of seafloor networks of fibre optic cables²² and provision of autonomous seawater monitoring equipment to measure ocean acidification.²³

[21] Funding mechanisms to support longer-term projects – and therefore engagement – would augment the effectiveness of these initiatives, which are often short-term in nature. Equitable, co-designed partnerships take a long time to establish. There are examples of success stories, such as low-cost technology solutions to make marine environmental monitoring affordable, that could be extended across SIDS not included in the scope of the initial CME project and help plug the gaps in regional monitoring networks if funding extensions were granted. Longer-term funding would also ensure that ongoing training and support to maintain equipment such as tide gauges is available so that they do not fall into disrepair.

[22] Natural Environment Research Council (NERC) Urgency and Global Seedcorn funding has provided valuable opportunities to provide insights and develop solutions into natural hazards in areas such as Indonesia, Fiji and Tonga, particularly in relation to tsunami and volcanic hazards. Recent examples include pumice-forming eruptions that created hazards for fishing and shipping, and the 2022 Hunga volcano eruption that cut off Tonga from global digital communications among other wide-reaching impacts. These are valuable but relatively short-term, small-scale projects. Follow-on funding for these kinds of projects that includes a socio-oceanographic or adaptation component is not always available for straightforward to identify or secure. Ensuring these projects have a true legacy that is extended by further funding would be beneficial.

- **What development activities are the UK's partner states, such as the USA, Australia, New Zealand, Japan, the Republic of Korea, and Canada, undertaking in support of SIDS? How can the UK Government best use its resources to complement those activities and to avoid duplication?**

[23] NOC scientists already have extensive experience undertaking research and delivering collaborative projects in support of SIDS, and are aware of the work happening both by our partner states, intergovernmental bodies and regional organisations. Appropriately engaging with these networks is essential to ensure effective projects. NOC has experience conducting SIDS-relevant research in coordination with international partners via the Belmont Forum²⁴ and ESPA (Ecosystem Services for Poverty Alleviation)²⁵.

¹⁹ [Commonwealth Marine Economies Programme - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

²⁰ [Commonwealth Marine Economies Programme \(cmeprogramme.org\)](https://cmeprogramme.org)

²¹ [Tide gauge installation | Commonwealth Marine Economies Programme \(cmeprogramme.org\)](https://cmeprogramme.org)

²² [Telecommunication resilience and geohazard characterisation | Commonwealth Marine Economies Programme \(cmeprogramme.org\)](https://cmeprogramme.org)

²³ [Autonomous seawater monitoring equipment | Commonwealth Marine Economies Programme \(cmeprogramme.org\)](https://cmeprogramme.org)

²⁴ [Belmont Forum](https://www.belmontforum.org)

²⁵ <https://www.espa.ac.uk/>

[24] Closer alignment and coordination with ongoing international programmes conducted by our partner states, particularly with those located in closer proximity to SIDS than the UK such as the USA, Australia, New Zealand, Japan and the Republic of Korea, is important to any UK effort as they tend to have longer lasting collaborative networks and relationships that remain active even in the absence of directed funding. Many of the UK's implementing agencies do not currently have those relationships due to the lack of long-term, continued funding. Appropriate coordination with partner states as well as relevant intergovernmental bodies and regional organisations when undertaking research and projects in support of SIDS is essential to ensure that SIDS have confidence that the UK is not only seeking self-promotion or short-lived engagement.

- **Whether multilateral bodies such as the World Bank require reform to meet SIDS's development needs. If multilateral bodies do require reform, what might such reform entail and how might the UK Government facilitate it?**

[25] NOC scientists with experience working on and applying for World Bank projects are concerned that engagement with the academic research community, particularly in the preliminary and scoping stages of planned investments, is adequate. As a consequence, such projects may not take advantage of the most up-to-date research expertise. We recommend that the UK Government encourage the World Bank to facilitate academic peer-review of their findings and recommendations and improve their engagement with academic researchers more generally.

[26] NOC also recognises that funding opportunities provided by the World Bank, including by way of dedicated environment funding via the Global Environment Facility (GEF) and other agencies such as the Green Climate Fund are often complex and require a great investment of time and human resources to pursue. As such SIDS are often reliant on external agencies to deliver the funding activities on their behalf, potentially with minimal in-country engagement and hence no lasting knowledge or skill training. Making it easier for SIDS to directly access and utilize funding made available from multilateral bodies would be an important reform, which in the short-term could be supported by the provision of appropriate in-country grant/project writing support.