



4TH INTERNATIONAL  
CONFERENCE ON  
**Small Island  
Developing States**  
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ST. JOHN'S, ANTIGUA AND BARBUDA

## **SIDS4 Conference Side Event**

# **Unlocking Multifunctional Solutions: Building Climate Resilience and Sustainable Blue Economies**

**28 May 2024, 2.00-3.30 pm American University Room 6**

**Organized by: Stockholm Environment Institute,  
in partnership with Dominican Institute of Integral Development (IDDI)  
International Science Council (ISC)  
Ministry of Economic Development, Planning, Agriculture and Lands, Forestry, Marine  
Resources and Cooperatives of Grenada,  
Pacific Islands Development Forum  
Pacific Islands Forum Secretariat  
UN Habitat  
Swedish Ministry of Foreign Affairs**

### **Background on the event**

Multifunctionality, the practice of utilizing the same space or infrastructure for various purposes, is increasingly seen as an important tool for climate adaptation and resilience. This side event explored how multifunctional solutions can help island states safeguard critical infrastructure and foster a sustainable blue economy. Experts from island nations shared their experiences and discussed future possibilities.

### **Key Issues discussed**

- Modern technology is increasingly multifunctional, as seen for example in the many uses of a smart phone beyond just making phone calls. The same concept should be applied more strategically to societal planning. It is possible to solve problems and generate benefits by clustering two or more services using the same structure, resource or location.

- Research from the Stockholm Environment Institute shows that multifunctionality is increasingly used to combine different forms of energy production, but also to combine energy production with other services like aquaculture and climate adaptation. Beyond technical solutions, multifunctionality is an important characteristic when establishing Nature-based Solutions.
- Low-lying island states facing increasing weather extremes and sea-level rise may consider marine multiuse platforms to enhance the resilience of critical infrastructure for energy production, water provision and wastewater treatment. Furthermore, this makes it possible to expand activities on smaller islands where space is an issue.
- Multifunctional solutions can also help island states diversify their economies. The panelists discussed how many islands are heavily dependent on tourism and fishing, two sectors that often have competing interests. Finding new forms of co-use, co-existence or co-location of different services may help diffuse tensions.
- In addition, it will be easier to diversify economies with lower energy prices, since that would make local production more economically viable. Currently, many remotely located islands are highly dependent on expensive imported fossil fuels. Multifunctional applications and decentralized production of renewables can break that trend.
- Several actors and islands can collaborate and co-use the same facilities, which can bring costs down. But it will require a new way of thinking beyond current silos.

## **Key recommendations for action**

- Several actions are needed to fast-track the use of multifunctional solutions. First of all, more institutions must be aware of these possibilities.
- Marine spatial planning should be used as a tool to promote or demand multifunctionality.
- Both local governments and international institutions could devise incentives so that all future marine infrastructure is multifunctional.
- Governance and collaboration are critical, with different sectors and actors working together. This will challenge many governance structures and require new forms of cross-sector dialogues and coordination.
- Current legislation, permission procedures and safety regulations must be reviewed to ensure that they are compatible with multiuse activities.
- We need a better understanding of potential economic gains from multifunctionality. This will enable business models for co-use, co-existence and co-location.
- More research is needed on which combinations of activities can reduce negative environmental impact and how to ensure regenerative infrastructure.