



Session 4: Toward Prosperity in AIS SIDS: Innovative actions for sustainable growth and development

25 July 2023, 10:30am - 12:15pm

Background Note

Executive Summary

Small Island developing States (SIDS) continue to face pressing challenges related to their geographical remoteness, small scale of economies, vulnerabilities and impact of climate change, natural disasters, pollution, external economic crisis, and persisting consequences of the COVID-19 pandemic. There is strong need to mainstream sustainable development at all levels, integrating economic, social and environmental aspects that would enable SIDS to achieve sustainable development in all its dimensions.

As highlighted by the SIDS Accelerated Modalities of Action (SAMOA) Pathway 1, science, technology and innovation (STI) are essential enablers and drivers for sustainable development in SIDS. Ensuring access of SIDS to knowledge and technologies grounded in their environment and specific needs is thus essential. Strengthening policies, collaborations, capacities and infrastructures will empower SIDS to leverage science, technology, and innovation as drivers of economic growth, social progress, and environmental sustainability.

This session will discuss barriers in the AIS SIDS to accessing scientific knowledge and technological innovation, while also exploring ways to stimulate the STI sector and to promote sustainable solutions tailored to AIS SIDS in unique contexts.

Introduction: Challenges faced by AIS SIDS

Atlantic, Indian Ocean, and South China Sea (AIS) SIDS are seven island countries (Cabo Verde, São Tomé e Príncipe, Mauritius, Seychelles, Comoros, Maldives and Singapore) and





one coastal country (Guinea-Bissau). They present significant differences in climate and exposure to natural hazards due to their different geographical location. However, they all face challenges and opportunities that require innovative solutions to promote sustainable development, mitigate climate change impacts, and address socio-economic disparities.

Paradigm Shifts Are Necessary: Interlinkages, synergies and trade-offs

Stimulating investments in STI and facilitating technology transfer is essential for catalysing technological advancements that address local needs and strengthen countries' resilience and accelerate the progress towards the achievement of the SDGs. STI has the potential to bring solutions that enhance disaster preparedness and response and mitigate the impacts of climate change. STI not only contributes to finding practical solutions for pressing challenges but can also support productivity in key economic sectors, such as the tourism and agriculture-fishery sectors. However, SIDS remain among the most disadvantaged countries in access to technological innovations. The COVID-19 pandemic accelerated digitalization but also highlighted the digital divide. Increasing connectivity and knowledge sharing through digitalization could be key for sustainable development.

These states leverage and need scientific knowledge to develop sustainable fisheries, and to protect and preserve marine habitats; thus the role of research institutions, international collaborations, and knowledge-sharing to maximize the benefits of STI and facilitate the exchange of scientific expertise in support of blue economy is essential. Regional collaborations can facilitate the exchange of practices, foster partnerships, and build synergies to address common challenges.

For example, the Technology Facilitation Mechanism (TFM) established by the 2030 Agenda for Sustainable Development aims to enhance North-South, South-South and triangular regional and international cooperation for access to STI and enhances knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms. The newly established Coalition on STI for Africa's Development under the TFM¹ (co-led by South Africa, Morocco, Ghana, Ethiopia, and Cameroon) supported by DESA

¹ The Coalition responds to the Technology Facilitation Mechanism. For more details, see: <u>https://sdgs.un.org/events/science-technology-and-innovation-africa-day-2023-50188</u>





and ECA, could connect African SIDS, STI champion countries, and global partners, and set in motion concrete actions that accelerate the development, application, and scaling up of technologies to fast-track progress on the SDGs.

The AIS SIDS, like other SIDS, face significant lack of STI data and indicators which affects implementation of national development strategies and plans, with additional negative impacts on effective STI policy development, implementation, monitoring and evaluation. The limited financial and human resources, inadequate research infrastructure and weak STI systems pose challenges that partnerships, international and regional cooperation, increased investment, and capacity-building initiatives could address.

All of these are also called for in the recent *Secretary-General's Report on Progress Toward the SDGs: Special Edition* as part of a rescue plan for people and planet. The report calls on the international community to build a global enabling environment for developing countries to have better access to the resources needed to achieve the SDGs including by revolutionizing science, technology and innovation capacities and exchanges.²

Additionally, the 2023 Global Sustainable Development Report underscores that Transformation to sustainable pathways should be rooted in science that is multidisciplinary, equitably and inclusively produced, openly shared, widely trusted and embraced, and 'socially robust' – relevant to society. Increasing support for scientific activity in low- and middle- income countries can build capacity for context specific SDG solutions based in science.

Recommendations for Action: What's Needed to accelerate action and progress

- Promote collaborations, partnerships, knowledge sharing and networking for STI-based solutions and sustainable technologies tailored to local contexts and needs.
- Increase investment in STI and support the development of human capabilities, by strengthening research institutions, providing training opportunities for scientists and innovators, fostering entrepreneurship and innovation, with focus on gender and youth
- Adopt inclusive STI policies that address AIS SIDS challenges, and build capacities to design, monitor and implement STI policies and plans.

² See https://hlpf.un.org/sites/default/files/2023-04/SDG%20Progress%20Report%20Special%20Edition.pdf





- Foster Open Science by promoting open science policies and platforms and encouraging information-sharing and collaborations, in line with UNESCO Recommendation on Open Science.
- Ensure multistakeholders' engagement and participation in STI activities, including young researchers, entrepreneurs, associations and networks, civil society and non-governmental actors.
- Support women and local and indigenous knowledge communities and promote gender equality in STI, particularly in STEM education, entrepreneurship, funding research and innovation grants and schemes.

Proposed Guiding Questions for the Discussions

- What are the funding and institutional mechanisms that can mobilize youth and diaspora for promoting mission-oriented research and deployment to solve specific problems for AIS SIDS?
- How can the international community best support the development and use of STI in AIS SIDS to succeed the transformation for accelerated SDG implementation?
- How to leverage regional and international partnerships, knowledge-sharing and open science platforms, technology transfer and investment in STI to bridge the technological gap to foster sustainable development?
- What policies and strategies can AIS SIDS implement to strengthen STI, research capacities, STEM education, collaborations and partnerships?
- How to engage and strengthen the participation of civil society, women, youth and local indigenous communities in science, technology and innovation activities?