SIDS Capacity Building Workshop on Leveraging Big Data to Evaluate SDG Progress
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Overview of UNDESA

▶ **Mandate:**
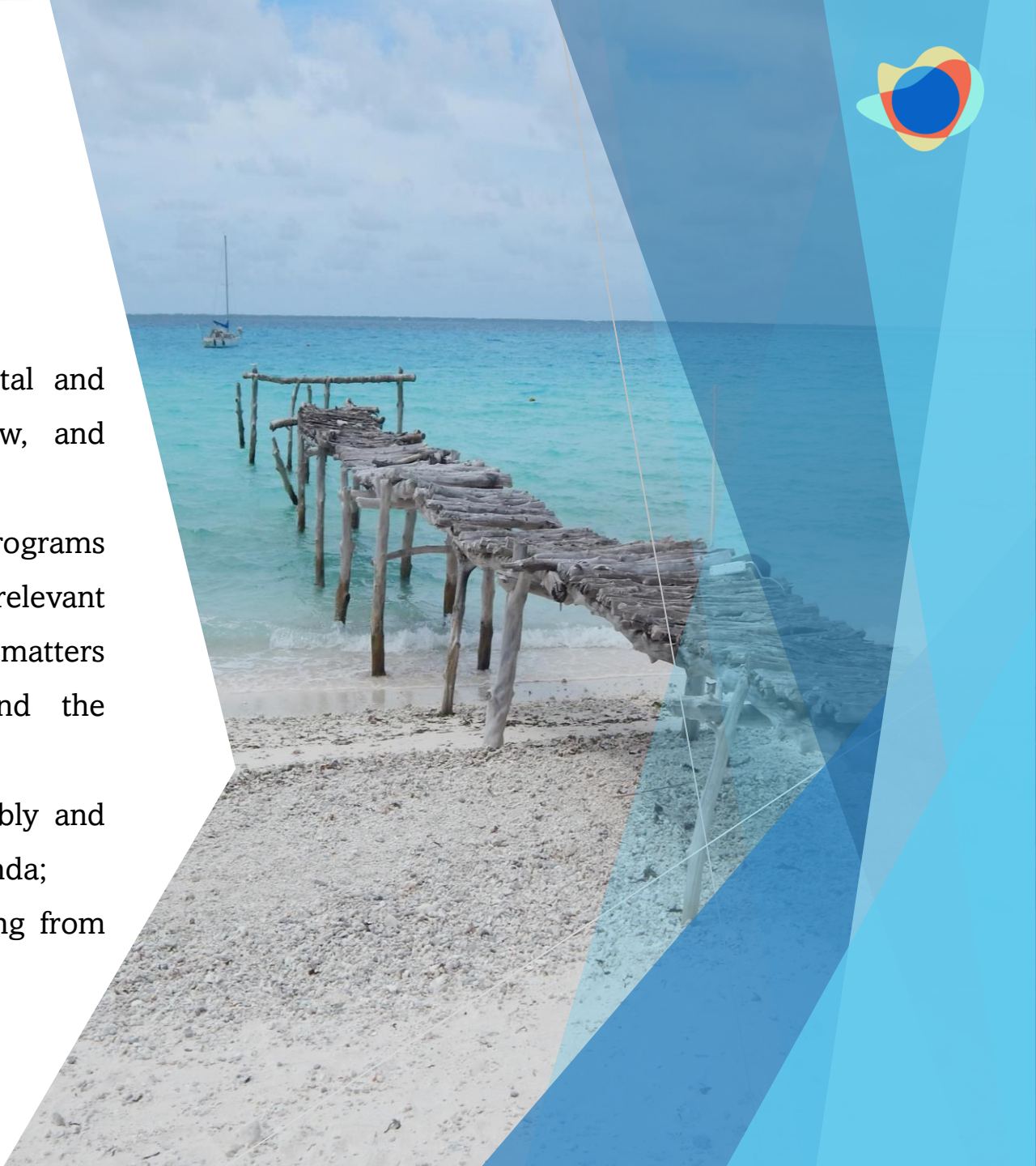
(i)   Promoting Sustainable Development

(ii)   Policy Analysis and Advice

(iii) Capacity Building

(iv)   Facilitating Intergovernmental Processes

(v)   Supporting Global Partnerships

(vi)   Advancing Knowledge Sharing and Capacity Development

(vii) Monitoring and Reporting on Global Trends

Overview of the UNDESA SIDS Unit

1) Provide substantive secretariat support to intergovernmental and inter-agency processes related to the monitoring, review, and coordination of the implementation of the SIDS Agenda;

2) Act as a liaison and focal point for Governments, organs, programs and agencies of the United Nations system, as well as other relevant intergovernmental and non-governmental organizations, on matters related to the follow-up to the SIDS Conference and the implementation of their sustainable development priorities;

3) Prepare reports to be submitted to the UN General Assembly and other relevant bodies, on the implementation of the SIDS Agenda;

4) Provide support, as appropriate, to other activities emanating from the Programme of Action.

SIDS Unit and ABAS

▶ The SIDS Unit is instrumental in advancing the thematic priorities outlined in ABAS, focusing on economic resilience, sustainable financing, climate action, biodiversity conservation, disaster risk reduction, and enhancing data collection and use.

▶ The Unit's role is aligned with UN DESA's broader mandate to support and facilitate sustainable development in SIDS, leveraging partnerships and policy frameworks to drive progress.

SIDS

▶ **Despite decades of progress, SIDS remains a special case for sustainable development**

▶ **For the next decade, SIDS aspires to a resilient form of prosperity characterized by sustainable development for all.**

Antigua and Barbuda Agenda for SIDS (ABAS)

ABAS outlines ten thematic priorities for SIDS in the coming decade. These are:

(i) Building Economic Resilience:

(ii) Increasing Effectiveness of Development Finance:

(iii) Supporting Sustainable Debt Management:

(iv) Boosting Investments in SIDS:

(v) Scaling Up Climate Action and Support:

(vi) Scaling Up Biodiversity Action:

Antigua and Barbuda Agenda for SIDS (ABAS)

(vii) Conserving and Using Ocean Resources:

(viii) Mainstreaming Disaster Risk Reduction:

(ix) Promoting Safe and Healthy Societies:

(x) Enhancing Data Collection and Use:

(xi) Advancing Science, Technology, and Innovation:

(xii) Strengthening Partnerships:

► **The strategic implementation of ABAS requires a robust monitoring and evaluation framework to track progress and ensure accountability. UN DESA supports these efforts by facilitating capacity building and enhancing data management capabilities across SIDS.**

ABAS M&E Framework

Srl.	Proposed Targets	Proposed Indicators
5. SIDS' policy making leverages robust data, science, innovation and technology		
5.1	Enhance capacity-building support for SIDS, significantly increasing the availability of high-quality, timely, disaggregated, and reliable data	5.1.1 Statistical capacity indicators
5.2	Increase financing to support the upgrade and strengthening of national data infrastructure and systems, enabling better integration of data into development planning and enhancing the capacity of statistical offices in SIDS, based on their national contexts	5.2.1 Number of SIDS with a national statistical plan that is fully funded and under implementation, by source of funding
		5.2.2. Dollar value of all resources made available to strengthen statistical capacity in SIDS
5.3	All SIDS can use science-based and innovative approaches, including the responsible use of AI and geospatial technologies	5.3.1 Number of SIDS adopting a national strategy, policy or initiative related to artificial intelligence
5.4	Integrate data into development planning, harnessing the potential of demographic, risk management, and marine data in all SIDS	5.4.1 Proportion of SIDS that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration
5.5	Expand scientific research and innovation while increasing R&D investment	5.5.1 Research and development expenditure as a proportion of GDP
5.6	Assist SIDS in developing policies and legislation to create an enabling environment for digital transformation at national and regional levels, including through the development of Science, Technology, and Innovation Roadmaps, tailored to national circumstances, priorities, and legislation	5.6.1 Unified Framework for the readiness of national policy, legal and governance frameworks for digital transformation
5.7	Enhance digital development in SIDS, strengthen institutional capacity, e-governance, and inclusive digital societies, and ensure their populations have access to reliable digital infrastructure	5.7.1 Proportion of population covered by a mobile network, by technology
		5.7.2 Proportion of individuals using the internet
		5.7.3 UN E-Government Development Index (EGDI)

Role of Big Data in Supporting SIDS

▶ **Data Limitations:**

SIDS face significant data challenges, including limited data availability, quality issues, and capacity constraints, which impede their ability to make informed decisions and track progress toward the SDGs effectively.

▶ **Leveraging Big Data for Sustainable Development:**

Big Data technologies offer SIDS a solution to these challenges by providing high-resolution data and advanced analytical tools. UN DESA, through partnerships and initiatives, aims to enhance data collection and management capabilities.

▶ **Collaborative Efforts with CBAS:**

The collaboration with the International Research Center of Big Data for Sustainable Development Goals (CBAS) highlights efforts to use geospatial science and Big Data to support the 2030 Agenda for Sustainable Development. This collaboration is a critical component of ABAS's emphasis on enhancing data collection and as well as advancing science, technology, and innovation to drive sustainable development outcomes.

Areas of Cooperation between CBAS and UN DESA

▶ **Joint Initiatives:**

There is a **Memorandum of Understanding** between UN DESA and CBAS that outlines several areas of cooperation to promote the implementation of the SDGs:

➢ **Key areas of Cooperation**

1. *Exchange of Experts*: Secondment of data science and engineering experts between CBAS and UN DESA to advance SDG-related work.

2. *Collaborative Research*: Joint development of scientific reports to strengthen the science-policy interface at global and national levels.

3. *Joint Labs and Projects*: Establishing a joint science policy and Big Data lab to integrate data from various sources, promoting interdisciplinary integration to enhance SDG decision-making.

4. *Collaboration on STI4SDGs:* Working together to develop Science, Technology, and Innovation roadmaps for the SDGs, focusing on Africa's development.

5. *Collaboration on Big Earth Data and Statistics:* Enhancing agricultural statistics through remote sensing and Big Data, in partnership with the Global Statistical Center in Hangzhou.

6. *Collaboration on Big Earth Data and Geospatial Information:* Integrating geospatial data with Big Earth Data in partnership with the UN Geospatial Knowledge Centre in Deqing to support sustainable development planning.

7. *Capacity Building*: Developing joint programs focusing on statistics and geospatial information, especially in developing countries and SIDS.

1st SIDS Big-Data Workshop 2024

The participating SIDS countries request targeted capacity-building support from CBAS and UN-DESA, under the framework of their MOU, utilizing Big Earth Data, in the following priority areas: (Para 22)

▶ **Climate Change** – monitor CO_2 emission, Particulate Mean PM2/10, and Sea level rise (SDG 11 & 13)

▶ **Disaster** –promote disaster risk reduction program through proper land use data identifying the affected areas (heavy rainfall, flash floods, landslides, etc. (SDG Goals 1, 11, & 13)

▶ **Land use data** - estimate crop production, assess water efficiency (in-land water bodies), and forest and biodiversity management. (SDG Goals 2, 6, & 15)

▶ **Ocean** (Coastal and Sea) – water quality (eutrophication, and environmental damage like oil spills, etc.), ocean acidification, and coral bleaching (SDG 14).

▶ Assessment of relevant SDG indicators utilizing Big Earth Data for SIDS.

1st SIDS Big-Data Workshop 2024 (cont'd)

Request UN-DESA to develop, as appropriate, an **STI4SDGs Roadmap for SIDS leveraging CBAS's expertise in SDGSAT-1 data, big data platforms, and methodologies, to address the unique challenges of SIDS and to advance sustainable development and build resilience**. (Para 23)

1st SIDS Big-Data Workshop 2024 (cont'd)

Request **CBAS and UN-DESA** to develop joint capacity-building programs on statistics and geospatial information, particularly focusing on data sharing, processing, and application, **explore ways to collaborate with the SIDS Center of Excellence and the SIDS data hub** and to organize meetings and workshops in SIDS countries or regions, on the utilization of Big Earth Data to implement the SDGs and ABAS. (Para 24)

Capacity Building Workshop on Big Earth Data

▶ **Part of the Broader Cooperation:**

This workshop is part of the broader cooperation between UN DESA and CBAS. It aims to enhance the capacity of SIDS to utilize Big Earth Data for sustainable development, aligning with global efforts to leverage science, technology, and innovation to accelerate SDG progress.

▶ **Objectives of the workshop are:**

a) Enhance technical skills in Big Earth Data applications for SDG monitoring among SIDS representatives.

b) Institutionalize frameworks for integrating geospatial technologies into national policies.

c) Strengthen partnerships between SIDS, UN DESA, and CBAS through South-South knowledge exchange.

d) Promote practical tools for climate resilience planning, leveraging satellite imagery (e.g., SDGSAT-1) and AI-powered data analysis.

e) Support national implementation and monitoring of ABAS and Pact for the Future through digital innovation and Earth observation tools.

Conclusion

▶ **Summary:**

UN DESA, through its collaboration with CBAS, is committed to empowering SIDS by leveraging Big Data technologies, building capacities, and fostering international partnerships. These efforts are essential to overcoming the unique challenges faced by SIDS and advancing the global sustainable development agenda.

▶ **Call to Action:**

As we continue to work towards the SDGs, leveraging technology and fostering international cooperation will be crucial. Participants are encouraged to engage with these opportunities to drive the transformative actions needed to achieve sustainable development by 2030.

THANK YOU

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