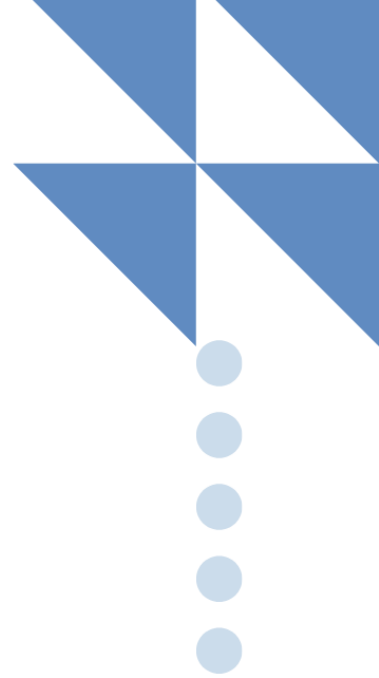
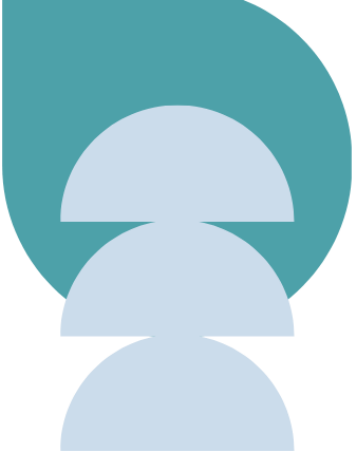




FINAL STUDY REPORT

CHALLENGES AND OBSTACLES OF SDG 6 IMPLEMENTATION IN SMALL ISLAND DEVELOPING STATES

Prepared By

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**United
Nations**

Department of
Economic and
Social Affairs

Final Study Report

Challenges and Obstacles of SDG 6 Implementation in Small Island Developing States

By Marisha Wojciechowska
December 13th, 2024

Introduction to the Study on SDG 6 Challenges and Opportunities in SIDS

This report delves into the critical challenges and opportunities faced by Small Island Developing States (SIDS) in achieving Sustainable Development Goal (SDG) 6 on water and sanitation. It begins by contextualizing the discussion within the pressing vulnerabilities of SIDS, including limited freshwater resources, fragmented governance structures, and the severe impacts of climate change. The second section delves into insights gathered directly from SIDS stakeholders, reflecting their experiences, challenges, and priorities in managing water resources and adapting to climate change. The third section of the report is structured around an analysis of responses to key questions posed to UN agencies and stakeholders, focusing on four critical areas: data trends and challenges, the impact of climate change, success stories and opportunities, and policy and investment gaps. Drawing on these insights, the report emphasizes the importance of tailored strategies, climate finance mobilization, and strengthened institutional capacity to accelerate sustainable water management across SIDS. From climate change impacts to governance and financing gaps, the findings emphasize the urgency of addressing these issues to ensure water security and resilience for SIDS.

I. Summary of progress on SDG 6 in SIDS

The following presents a series of graphs and data compiled by UN-Water's data portal team. The entire UN-Water data summary of SDG6 indicators, specifically for SIDS, is available in Annex 1. Below is a summary of this analysis.

Summary progress on SDG 6 global indicators (SDG baseline compared to latest status)

Data as of 23/05/2024, in some cases the 2023 data drive information is not yet included

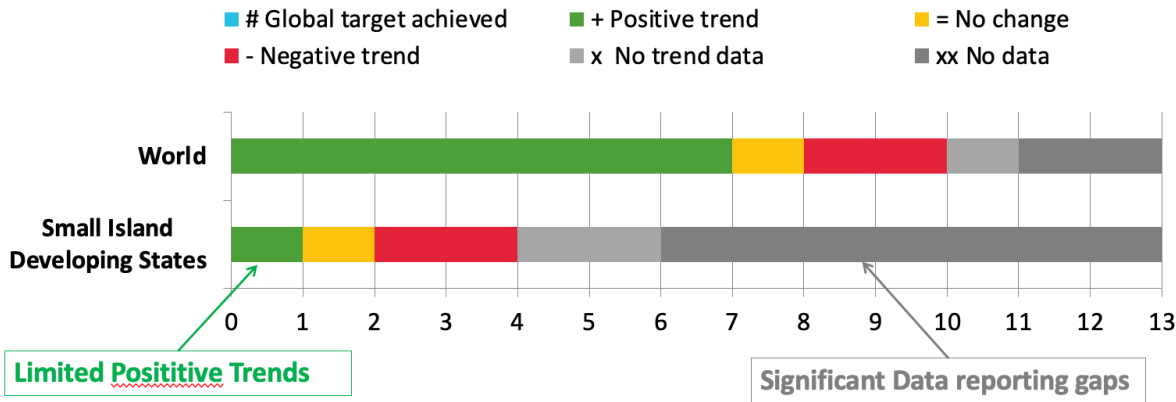


Figure 1: Summary progress on SDG 6 global indicators

Source: UN-Water Data Portal, as provided by the UN-Water Statistics team.

Figure 1 compares the status of various SDG 6 indicators between SIDS and the global average from the baseline period (2015-2017) to the latest data reported (2019-2022).

- Green bars represent a positive trend, indicating progress in the right direction on specific indicators.
- Red bars indicate a negative trend, showing regression.
- Yellow bars signify little to no change.
- Grey bars denote insufficient data to assess trends due to limited data points.
- Blue bars indicate that the global target has been achieved for a specific indicator.

For SIDS, the graph highlights limited positive trends (green) and significant data reporting gaps (grey), with notable instances of negative trends (red). This underscores the urgent need for improved data collection and monitoring, as well as targeted interventions to address water and sanitation challenges in these vulnerable regions. In comparison, the global averages show more positive trends and fewer data gaps, suggesting better overall progress and data availability worldwide.

Summary key challenges in the SIDS

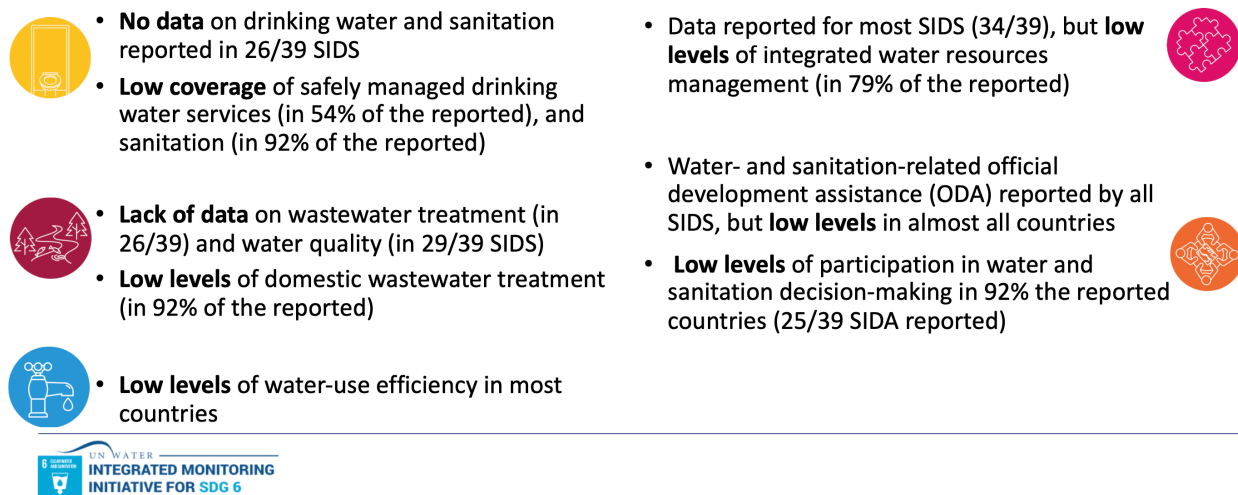


Figure 2: SDG 6 Challenges in SIDS.

Source: UN-Water Data Portal, as provided by the UN-Water Statistics team.

UN-Water's SDG 6 data portal provides a comprehensive examination of the multifaceted challenges in water and sanitation management across SIDS, such as data gaps, wastewater treatment and water quality, IWRM, ODA. Figure 2 provides a snapshot of the SDG 6 landscape across SIDS and identifies several critical challenges.

Data Gaps

A significant gap in basic data reporting is evident, with 26 out of 39 SIDS lacking any information on drinking water and sanitation. This significant data deficiency hampers the ability to assess needs accurately and track progress toward achieving the SDGs. Furthermore, the coverage of safely managed drinking water services is alarmingly low at 46%, with sanitation coverage even more concerning at 92% inadequacy among the reporting SIDS. A further discussion on data reporting gaps is offered in the next section.

Wastewater Treatment and Water Quality

The scarcity of data extends to wastewater treatment and water quality, with 26 and 29 SIDS respectively lacking crucial statistics. This results in low levels of domestic wastewater treatment reported in 92% of the SIDS. These challenges are compounded by low water-use efficiency across most SIDS, reflecting broader resource management inefficiencies.

Integrated Water Resources Management (IWRM)

Though 34 out of 39 SIDS are reporting IWRM data, 79% fall short of achieving this SDG 6 target. This indicates systemic issues in holistic water resources management essential for sustainable development and resilience building.

Official Development Assistance and Stakeholder Engagement

All SIDS report receiving some form of water- and sanitation-related official development assistance (ODA), yet the levels are inadequately low, highlighting a critical gap between the support provided and the extensive needs. Additionally, there is a notable deficiency in stakeholder engagement, with low participation levels in water and sanitation decision-making reported in 92% of the SIDS. This lack of local and regional stakeholder involvement exacerbates the challenges in managing water resources effectively.

The data underscores profound disparities in global and regional progress towards achieving sustainable development goals, particularly highlighting the challenges faced by SIDS. These disparities are evident across three critical dimensions: the lack of data for essential indicators and the extremely low proportion of indicators meeting global targets or showing positive trends.

Summary statistics: status in the SIDS

Percent (%) of indicators with no data reported		Percent (%) countries where more than 50% of the reported indicators have achieved the global target or have positive trends 		Percent (%) countries where more than 50% of the reported indicators have high level status 	
World	15%	World	36%	World	52%
SIDS	49%	SIDS	33%	SIDS	18%
Caribbean SIDS	53%	Caribbean SIDS	31%	Caribbean SIDS	8%
Pacific SIDS	52%	Pacific SIDS	40%	Pacific SIDS	27%
AIS SIDS	53%	AIS SIDS	43%	AIS SIDS	29%
Continental SIDS	25%	Continental SIDS	0%	Continental SIDS	0%

Figure 3: Summary statistics for SDG6: status in the SIDS

Source: UN-Water Data Portal, as provided by the UN-Water Statistics team.

Data Reporting Gaps

As Figure 3 reveals, globally, only 15% of essential development indicators lack reported data. However, this figure starkly contrasts with the situation in SIDS, where 49% of

indicators are unreported. This data reporting challenge is even more acute in specific regions such as the Caribbean SIDS, Pacific SIDS, and AIS SIDS, where the lack of reported data climbs to 53%, 52%, and 53% respectively. In contrast, Continental SIDS report a somewhat lower figure of 25%, yet these numbers across all regions still highlight significant challenges in logistical and technical capacities and underscore the vulnerability of these regions to being overlooked in global assessments.

Progress Toward Global Targets

Disparities are also notable with regards to SDG 6 targets. Globally, 36% of countries have more than 50% of reported indicators achieving global targets or showing positive trends. This compares with 33% for all SIDS combined, indicating a slight lag behind the global average. In the breakdown by region, 40% of Pacific SIDS and 43% of AIS SIDS countries show more than half of their reported indicators meeting or trending positively towards global targets, suggesting relatively better performance. However, only 31% of Caribbean SIDS and notably, none of the Continental SIDS, achieve this level of performance, highlighting significant gaps and the urgent need for targeted interventions.

High-Level Status Indicators

The discrepancies are further accentuated when considering the proportion of countries where more than 50% of the reported indicators have reached a high-level status. Worldwide, this is the case for 52% of countries. In stark contrast, only 18% of SIDS manage this achievement, with the Caribbean SIDS at a particularly low 8%, Pacific SIDS at 27%, AIS SIDS at 29%, and Continental SIDS reporting none of their indicators at high-level status. This significant variance not only points to the additional challenges faced by SIDS but also to the pressing need for enhanced support and resources to help these regions improve their sustainable development metrics to meet global standards.

The statistics presented through the UN-Water Data Portal highlight critical gaps in data availability, performance, and progress toward SDG 6 in SIDS. Nearly half of the SDG 6 indicators in SIDS lack sufficient data, a stark contrast to the global average, significantly impeding the ability to assess needs and implement effective interventions. The limited positive trends and widespread performance deficits across regions underscore the vulnerability of SIDS to falling further behind in achieving sustainable development goals.

These findings point to an urgent need for targeted international cooperation, significant investment in robust data infrastructure, and tailored policy interventions. Strengthening data collection and monitoring systems is essential to provide a comprehensive understanding of challenges and to inform actionable strategies. Furthermore, integrating these efforts with regional collaboration and enhanced financial and technical support can help bridge the gaps, ensuring that SIDS are not left behind in the global pursuit of SDG 6. By addressing these systemic barriers, the international community can empower SIDS to meet their water and sanitation challenges and secure sustainable progress for their communities.

II. Capturing Voices from SIDS

On 27th May 2024, UN-DESA hosted a side event within the programme of the UN SIDS4 Conference at the American University of Antigua. The event was co-organized by Germany's Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), UN DESA, and UN-Water (see Annex 3 and 4 for the summary of the Side-Event). It gathered government representatives, civil society groups, and major stakeholders from SIDS to discuss SDG 6 implementation challenges and support needs, presenting preliminary findings from a UN DESA study and aiming to enhance water resilience in the context of climate change while translating these needs into actionable UN policies (see Annex 4 for a summary of presentations).

In addition, a first round of stakeholder consultations was conducted on May 28th and 28th to address water and sanitation challenges faced by SIDS. Discussions highlighted the severe impacts of climate change on SIDS, noting that over 70% face water shortages that threaten human rights, food security, energy production, and economic development. The need for increased international support and a coordinated UN system-wide strategy, including the appointment of a UN Special Envoy for Water, was emphasized. Innovative water management strategies were discussed, stressing the importance of water conservation, advanced technologies such as desalination and reclaimed water, and substantial investments in research and development.

The preliminary findings of this study, along with the UN System-wide Strategy for Water and Sanitation, were presented with aims to enhance coordination and delivery of water and sanitation priorities, particularly for developing countries, including SIDS, to help them progress on national plans, international goals, and human rights. The discussions underscored the critical need for clean water and sanitation, especially given the economic dependence on tourism and the challenges posed by the COVID-19 pandemic. Maintaining water security in SIDS requires significant investment in infrastructure like desalination and sewage treatment to address climate change and water scarcity. The importance of data-driven, integrated water resources management and regional cooperation was stressed to achieve SDG 6, along with the need for comprehensive data collection and public engagement in water management.

Significant issues related to data collection reliability were discussed, including the absence of accredited labs for water testing in the Caribbean. Broader topics included the need for ground-level solutions, improved institutional communication, and increased public awareness about water management. The importance of identifying champion countries to drive regional initiatives, like Barbados and St. Lucia, was evoked. The impact of tourism on water resources, namely the allocation ratios of treated water supplies to tourism facilities versus domestic needs, is another concern. Capacity building at the local level with tailored content is deemed essential for strategic development. The consultations emphasized the necessity of linking water resources management with disaster response policies, particularly for managing hazardous waste post-disasters. Potential stakeholders for further consultation were also identified, including the Caribbean Natural Resources Institute (CANARI) and the South Pacific Environmental Program (SPEP). The Escazú Agreement was mentioned as a potential support mechanism for water security.

Additionally, the consultations addressed institutional and infrastructural challenges, such as insufficient wastewater treatment plants, distribution problems despite adequate reservoir levels, and the need for improved chlorination. Funding limitations due to embargoes and the necessity for more project support were highlighted. The need for greater international collaboration and learning opportunities was underscored, particularly given their first-time participation in an international conference. Disaster management discussions noted that disaster alerts are issued by civil corps and dams are used for flood control, with hurricanes significantly impacting agriculture and industry. Despite strong technical capacity, collaboration with international stakeholders remains limited, emphasizing the need for continued international engagement and improved access to SDG6 resources.

III. Pressing Challenges and Needs

For this report, UN-DESA collaborated with the UN-Water Data team to deepen the analysis of challenges and opportunities related to water and sanitation in SIDS under SDG 6. To achieve this, a set of targeted guiding questions was developed and shared with data analysts from the relevant UN custodian agencies. These questions aimed to extract deeper insights from existing datasets, uncover regional and island-specific patterns, and highlight success stories and gaps in policy and investment. The resulting analysis provides a more robust evidence base for developing actionable recommendations tailored to the unique needs of SIDS.

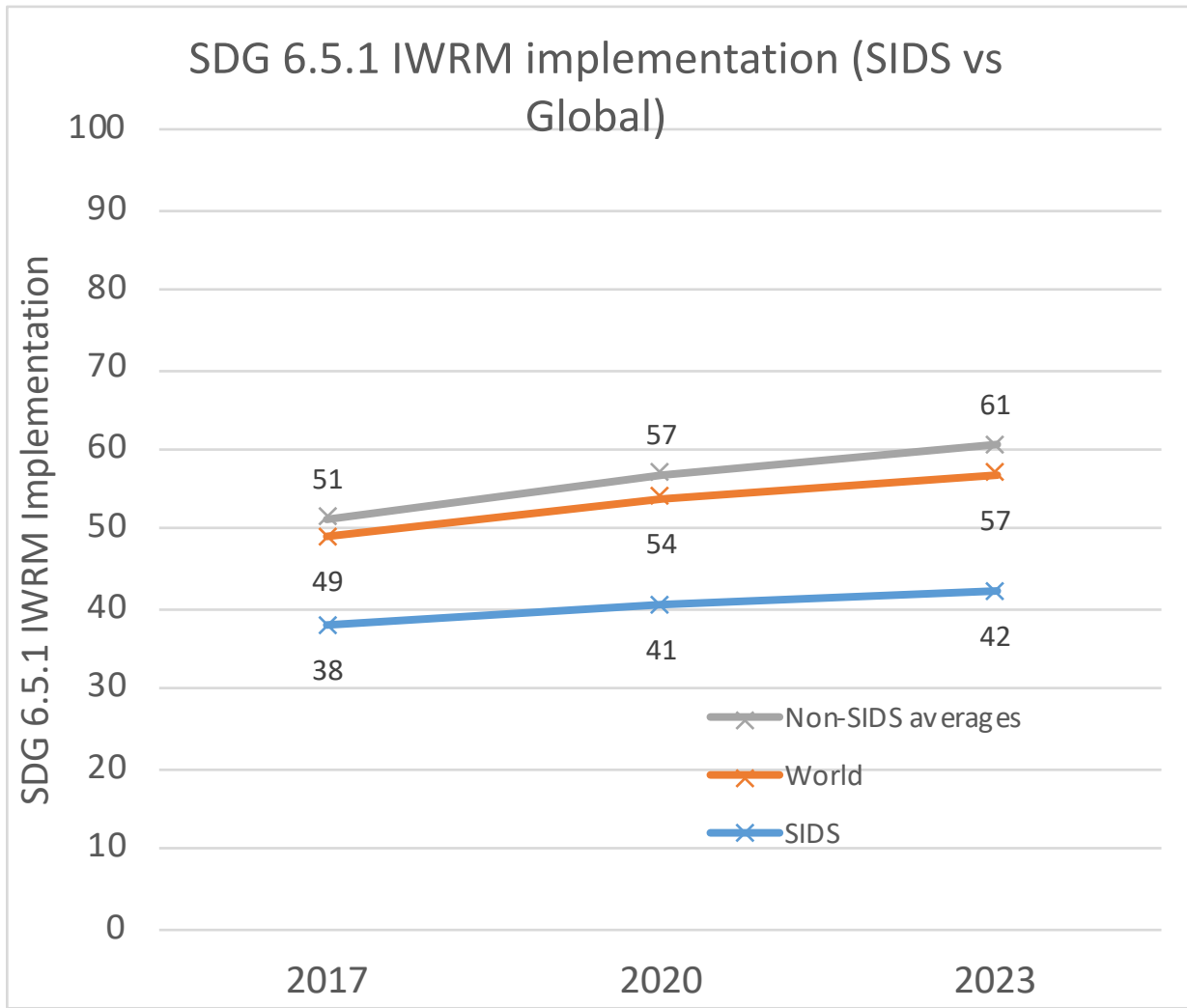
Below is an analysis of the responses received from the agencies. Unfortunately, only data for indicators 6.3.2, 6.5.1, and 6.5.2 were provided, with 6.5.1 offering the most detailed insights. The global database for SDG Indicator 6.5.1, which measures the degree of implementation of Integrated Water Resources Management (IWRM), compiles data collected through responses to the SDG 6.5.1 survey. These responses are submitted by

United Nations Member States to the United Nations Environment Programme (UNEP), the designated custodian agency for this indicator. Data for each country are gathered through a stakeholder consultation process and officially submitted by national focal points.

The following analysis draws on data from 2017, 2020, and 2023, encompassing all data and free-text responses to the 33 questions in the 6.5.1 IWRM survey. Key elements include a worksheet on "climate change considerations" and Annex B, which highlights key challenges, priorities, and targets reported by participating countries. For the purpose of this report, all worksheets have been filtered to focus exclusively on data from Small Island Developing States (SIDS), offering a tailored examination of IWRM implementation within these unique contexts.

1. Data Trends and Challenges: Limited Progress on IWRM Implementation

SIDS have reported limited progress on SDG 6.5.1 (IWRM implementation) across 2017, 2020, 2023 (see figure below).



The above SIDS averages include Singapore, which reported scores of 100 in all 3 rounds. This of course skews regional averages, masking the stagnation or minimal improvements observed in many other islands. For instance, countries such as the Bahamas and Antigua and Barbuda consistently report lower scores. Compared to other global regions, SIDS' progress on IWRM aligns with Latin America and the Caribbean (LAC) and Oceania (excluding Australia and New Zealand), but the pace of advancement remains insufficient to meet SDG 6 targets.

Examples of key challenges include: groundwater management, salinisation, weak or inadequate legislative mechanisms, fragmented policy and institutional coordination, low institutional capacity, lack of budget for IWRM and general financing to implement activities.

While all SIDS apart from Nauru and Kiribati have reported in at least one of the data collection rounds (2017, 2020, 2023), responses are generally much lower compared to other countries. This may partly be due to the limited institutional capacity and resources available to consult colleagues and stakeholders in order to complete the 6.5.1 survey. For example, out of 13 Pacific SIDS, only two (Solomon Islands and Palau) submitted new data for the 2023 reporting round. Nine re-submitted 2020 survey results (Fiji, Marshall Islands, Micronesia, Papua New-Guinea, Samoa, Timor-Leste, Tonga, Tuvalu, Vanuatu) and two are yet to submit any data for any of the data collection rounds (Kiribati, Nauru).

The lower level of responses may also be related to the fact that, in general, the geophysical and political landscape in most SIDS means that the IWRM survey, measuring progress on 6.5.1, is perhaps not best suited to their context. For example, in many SIDS, there are no significant river basins and very little surface water management in general. Therefore, questions in the SDG 6.5.1 survey might not be adequately tailored towards SIDS to capture their WRM challenges.

Summary of specific country responses:

- Bahamas: Due to the absence of major surface water bodies, water resource management in the Bahamas focuses primarily on groundwater aquifers used for supply across individual islands. There is currently no approved groundwater management plan, though significant groundwater reserves are indirectly protected under the Forestry Act. No substantial changes in management have been reported since the 2020 survey, and the country's score for SDG 6.5.1 remains at 30.
- Antigua and Barbuda: The country lacks a formal basin or aquifer management plan. Water resource governance is guided by the Antigua Public Utilities Authority's Water Resources Management Plan (WRMP), which is limited to monitoring well water and reservoir levels. These monitoring practices have been long-term and integrated into standard operating procedures over the past two decades, with no significant updates reported.

- Marshall Islands: Water resource management is centered on Majuro Atoll, where surface water basins and reservoirs exist due to the urban population density. The Majuro Water and Sewer Company operates three water treatment plants and manages nine reservoirs, primarily reliant on rainfall. Distribution is adjusted based on rainfall levels, with increased access during rainy seasons and water rationing during droughts. Disaster-related water safety frameworks are in place to manage risks.
- Papua New Guinea: There are no specific laws, regulations, or policies addressing water basin management at either the national or subnational level. However, water resource activities fall under the purview of the Environment Act 2000, which provides a general framework for managing basin-related concerns.

These responses illustrate a diverse set of challenges, ranging from institutional and legislative gaps to reliance on specific natural conditions such as rainfall. They underscore the need for tailored interventions and capacity-building efforts to strengthen integrated water resources management in these countries.

2. Impact of Climate Change

Climate change is affecting weather patterns in SIDS around the world. Some countries report changes in rainy and dry season and more frequent extreme events. Across all regions, increased rainfall and flooding seem to be the most pronounced impacts according to free text answers on climate change considerations.

The lack of coordination mechanisms between public institutions, private sector, and within government entities for early warning systems on flooding and climate change adaptation planning represents a barrier to IWRM implementation in SIDS. Refer to free-text answers for more detailed examples, in particular the “Climate Change Considerations” worksheet.

Summary of specific country responses:

- In Tonga, the maintenance of specialized equipment, particularly rainfall forecasting systems managed by the Meteorological Services, presents a significant challenge. These systems are critical for supporting flood hazard forecasting and planning but require sustained resources and technical capacity to remain functional.
- Jamaica highlights the importance of integrating climate data and private sector engagement into flood management efforts. Collaboration with universities, such as the University of the West Indies (UWI), enhances floodplain mapping, vulnerability assessments, and risk analyses. Improved flood control infrastructure and cost-recovery mechanisms are identified as essential tools for mitigating

climate impacts and ensuring service providers have the necessary resources to maintain systems.

- In Cabo Verde, the relationship between water and climate change is multifaceted, manifesting in severe droughts and torrential rains. With only three wet months and nine dry months, extreme rainfall events can deliver a year's worth of rain in a matter of days, leading to landslides and housing collapses in vulnerable areas without proper land use planning. Drought, however, remains the more frequent challenge, exacerbated by a lack of vegetation to protect the soil. Raising awareness, improving land-use planning, and fostering partnerships for data sharing are critical to addressing these issues.
- Sao Tome and Principe experiences direct and visible impacts of climate change on water resources, including altered rainfall patterns, extended dry seasons, and an increase in extreme hydrological events like floods. The country is working to integrate water and climate strategies through its National Adaptation Plan for Climate Change and Nationally Determined Contributions (NDCs). However, more integrated water-climate projects are needed to strengthen the sustainable management of these resources.
- In Palau, a lack of coordination and collaboration mechanisms undermines the implementation of climate change adaptation strategies and socio-ecological resilience. Effective partnerships and coordination are needed to ensure the success of adaptation initiatives.
- Solomon Islands relies on weakly enforced regulatory instruments, including the River Waters Act, Environment Act, Code of Logging Practices, and the National Disaster Risk Management Plan. Climate change-related funding for water projects is largely limited to donor-driven initiatives, and the country lacks a comprehensive water disaster management plan to address flooding and other water-related disasters.

These country-level insights underline the urgent need for improved data sharing, capacity-building, and integrated climate-water strategies. Each response highlights the necessity of tailored solutions, whether through enhanced forecasting capabilities, stronger governance mechanisms, or infrastructure improvements, to address the complex challenges posed by climate change across SIDS.

3. Success Stories and Opportunities

This third question aimed to identify successful strategies and initiatives within SIDS that have led to measurable improvements in water and sanitation management.

Summary of specific country responses:

- In Tonga, the maintenance of specialized equipment, particularly rainfall forecasting systems managed by the Meteorological Services, presents a significant challenge. These systems are critical for supporting flood hazard forecasting and planning but require sustained resources and technical capacity to remain functional.
- Saint Lucia has developed the *Water Sectoral Adaptation Strategy and Action Plan (Water SASAP) 2018-2028*, a cross-sectoral national policy document aimed at safeguarding water resources and services in the face of climate change. By integrating adaptation actions across all sectors and levels of society, this plan provides a comprehensive framework for sustainable water management under changing climatic conditions. Its emphasis on cross-sector collaboration ensures that water resource management is aligned with national climate resilience goals.
- Mauritius demonstrates the critical role of sustained government commitment and diversified financing in addressing water resource challenges. With the water sector remaining high on the national agenda, Mauritius has implemented several projects supported by a mix of funding sources, including the national budget, loans, and grants. This strategic prioritization highlights the importance of financial planning and investment to sustain progress in water resource development and management.
- Belize has made significant strides in technical and scientific advancements, particularly in groundwater management and flood forecasting. Groundwater investigations in prioritized watersheds have either been completed or are ongoing, with transboundary aquifer studies generating validated baseline data across country borders. Additionally, Belize has established a water quality monitoring program in a key watershed and proposed a groundwater monitoring network for multiple basins. Improvements in flood forecasting through automation and the integration of climatological and hydrological platforms have enhanced disaster preparedness. The development of technical guidelines for water regulations, though still underway, represents progress toward comprehensive regulatory frameworks.
- The Maldives incorporates cost-effective *Integrated Water Resource Management (IWRM)* systems into its *Nationally Determined Contributions (NDCs)* to address the water needs of its population while reducing the risks of water shortages during dry seasons. The Maldives also prioritizes understanding the impacts of climate change on natural water resources through the latest scientific approaches. Its policies, standards, and regulations aim to protect natural water resources proactively from future climate impacts, ensuring long-term water security and resilience.

The particular success stories from Saint Lucia, Mauritius, and Belize illustrate how aligning funding, policy integration, and technology can lead to significant improvements

in water resources management and climate adaptation. These examples show that when funding, policy integration, and technology are aligned:

1. Funding ensures resources for infrastructure, monitoring systems, and capacity-building.
2. Policy integration creates cohesive strategies that connect water management with climate goals.
3. Technology enables data-driven decision-making, enhancing water security and resilience.

These success stories emphasize the importance of comprehensive planning, cross-sector collaboration, technological advancements, and sustained investment in addressing water and sanitation challenges. They also demonstrate the value of integrating water resource management with broader climate resilience and disaster preparedness strategies. By scaling these successful models, other SIDS can build capacity and resilience, driving progress toward achieving SDG 6.

4. Policy and Investment Gaps

The fourth question focuses on identifying the critical policy and investment gaps that impede progress toward achieving SDG 6 in SIDS, highlighting key insights to inform targeted policy recommendations and international support strategies.

The most significant policy gap submitted to this questionnaire, is the lack of national IWRM plans. Most IWRM initiatives and programmes are operated on an ad-hoc basis and progress on establishing long-term planning on WRM is slow.

Regarding investments, many SIDS countries report not having any national budget line dedicated to IWRM. Budgets for hydrological operations exist but are usually too small to cover recurrent costs for IWRM. Funding is operated mostly through project-based grants.

Some key messages derived from this data are:

- Make the case for, and advocate, the value of implementing IWRM at the highest national level to achieve multiple development objectives.
- Coordinated planning and management is needed, in partnerships, at all levels.
- Develop and implement revenue raising and cost recovery arrangements for IWRM at a national level is necessary to accelerate progress.
- Using climate financing for implementing coordinated water management and cross-sector climate resilience projects can be used as a way forward.

Summary of specific country responses:

Policy Gaps

Many SIDS face fragmented or inadequate policy frameworks for IWRM, hindering cohesive water resources governance:

- Trinidad and Tobago has a water management strategy from 2000 that aligns with IWRM principles, but national-level implementation remains stalled. Existing efforts are project-specific and lack stakeholder collaboration, leading to duplication of efforts.
- Palau lacks an overarching IWRM plan. Disaggregated sectoral actions achieve partial outcomes, but no formalized coordination mechanisms exist to enable inter-agency collaboration.
- Saint Lucia highlights the need for improved communication and data sharing among stakeholders. Frequent updates on policy changes and major developments could enhance private and public sector engagement.

Financing Gaps

The financial constraints reported across SIDS severely limit the implementation and maintenance of water resources management systems. Funding shortfalls often hinder national efforts and force reliance on external sources:

- Antigua and Barbuda relies on statutory revenue streams but faces significant gaps in operational funding, requiring supplemental government resources.
- Bahamas experiences high production costs due to reliance on reverse osmosis (RO) water supply. While national budgets subsidize the Water and Sewerage Corporation, investment in infrastructure is constrained. Future solutions include securing loans and grants from entities like the Green Climate Fund and exploring soft infrastructure projects.
- Belize suffers from an underfunded National Hydrological Service, with a mere \$150,000 USD allocated annually for operations. Project-based financing through international institutions, such as the Green Climate Fund, provides some relief but remains inadequate for comprehensive water management.
- Marshall Islands, Saint Vincent and the Grenadines, and Sao Tome and Principe report partial or inconsistent budgets for IWRM initiatives. External funding dominates but is insufficient to meet recurring costs.
- Fiji and Seychelles receive financial assistance for specific initiatives, though continued grant aid and donor support remain critical for IWRM advancement.

Recurring Themes and Opportunities

- Dependence on External Funding: Many SIDS, including Solomon Islands, Sao Tome and Principe, and Suriname, rely heavily on donor projects to finance water management and climate change adaptation. This reliance leads to instability and fragmented progress.

- **Insufficient Recurrent Budgets:** Countries such as Saint Kitts and Nevis lack adequate recurrent budgets to cover IWRM elements, often pooling collected revenues into general government funds, limiting their earmarked use.
- **Focus on Soft Infrastructure:** Countries like the Bahamas emphasize the importance of investing in soft infrastructure and environmental measures to protect freshwater reserves and enhance sustainability.

Key Actions for Bridging Gaps

To address policy and financing deficiencies, SIDS must:

- Strengthen stakeholder collaboration and develop national IWRM plans that align with overarching policy goals.
- Secure consistent national budget allocations for IWRM elements to reduce reliance on external funding.
- Prioritize soft infrastructure investments to enhance water and energy efficiency, reducing long-term operational costs.
- Increase international collaboration to leverage funding from regional and global financial institutions, such as the Caribbean Development Bank and the Inter-American Development Bank.

This holistic approach is critical to overcoming the significant policy and financial barriers that hinder progress in achieving SDG 6 across SIDS.

Implications for Policy and Action: Securing Sustainable Water Resources for SIDS

This report emphasizes the critical challenges faced by SIDS in achieving SDG 6. Despite some progress, systemic barriers—ranging from data deficiencies and weak governance frameworks to the severe impacts of climate change—continue to hinder sustainable water management across these vulnerable regions. These challenges are amplified by limited financial resources, fragmented policies, and insufficient stakeholder engagement.

Persistent Challenges

The report identifies several critical hurdles:

- **Data Gaps:** Nearly half of all SDG 6 indicators in SIDS lack sufficient reporting, severely limiting the ability to track progress and prioritize interventions effectively.
- **Infrastructure Deficiencies:** Access to safely managed drinking water and sanitation services remains critically low in many SIDS, with wastewater treatment almost entirely absent in most reporting countries.

- *Governance and Policy Gaps*: IWRM implementation is slow, with 79% of reporting SIDS falling short of achieving related targets.
- *Climate Change Impacts*: Rising sea levels, salinization, and extreme weather events are worsening water insecurity and straining limited resources.
- *Inadequate Financing*: Over-reliance on external, project-based funding creates instability and hinders long-term water resources planning and management.

Key Opportunities

Despite these challenges, success stories from countries like Singapore, Saint Lucia, and Belize highlight the potential for transformative progress when funding, governance, and technology align. These examples demonstrate that:

- *Innovative Infrastructure*: Investments in rainwater harvesting, desalination, and renewable energy-powered systems can bolster water security.
- *Integrated Planning*: Cross-sector collaboration and policy coherence drive better water management and climate resilience.
- *Data and Technology*: Advanced forecasting, monitoring systems, and knowledge sharing enhance decision-making and resource efficiency.

Recommendations

To address the systemic barriers identified in this report, SIDS must prioritize:

1. *Improving Data Systems*: Establish robust national and regional monitoring systems to close data gaps and guide evidence-based policy decisions.
2. *Strengthening Infrastructure*: Expand access to clean water, sanitation, and wastewater treatment facilities tailored to the unique geographic and climatic contexts of SIDS.
3. *Enhancing Governance*: Develop and implement cohesive IWRM plans that integrate water resource management with climate adaptation strategies.
4. *Scaling International Support*: Mobilize additional financial resources through climate funds and development assistance while fostering international partnerships to share knowledge and technical expertise.
5. *Fostering Stakeholder Engagement*: Increase participation at all levels, from local communities to regional organizations, to ensure inclusive and effective water governance.

Call to Action

Achieving SDG 6 in SIDS is not just an environmental or developmental imperative—it is a matter of equity and survival. Strengthened international collaboration, sustained investment in capacity building, and tailored policy interventions are essential to bridging the gaps and ensuring sustainable water resources management. By learning from successes, fostering innovation, and working together, the global community can support SIDS in overcoming these challenges, safeguarding their water security, and building a resilient future for generations to come.

Headlines from this Study:

Urgent Call for Action: Addressing the Water Crisis in SIDS

- SIDS are on the Frontlines of the Water Crisis

SIDS face disproportionate challenges in achieving SDG 6 due to their unique vulnerabilities, including limited freshwater resources, fragmented governance, and the escalating impacts of climate change. These challenges threaten their sustainable development and resilience.

- Climate Change Amplifies Water Insecurity

Rising sea levels, salinization, erratic rainfall patterns, and extreme weather events are severely impacting water availability, quality, and infrastructure in SIDS. Tailored climate adaptation measures must be integrated into water management strategies to safeguard livelihoods and ecosystems.

- Policy and Governance Gaps Must Be Addressed

Fragmented water management policies and weak institutional coordination hinder progress. Advocating for Integrated Water Resources Management (IWRM) frameworks tailored to SIDS' realities can drive more effective governance and resource allocation.

- Financing the Future: Closing the Water Investment Gap in SIDS

Financial constraints are a major barrier. Many SIDS rely heavily on external project-based funding, which is unsustainable for long-term water management. Mobilizing international climate finance is essential to bridging the financing gaps and investing in resilient infrastructure.

- Building Resilient Water Systems with Innovative Infrastructure

SIDS require support to develop decentralized, cost-effective water solutions such as rainwater harvesting, renewable energy-powered desalination, and nature-based solutions to enhance ecological resilience and water security.

- Scaling Success: Change is Possible

Examples from Saint Lucia, Mauritius, and Belize demonstrate that when funding, policy integration, and technology align, significant progress can be made. These models can be scaled and replicated across other SIDS with targeted support.

- Empowering Decision-Making with Data and Knowledge Systems

Weak data on SDG 6 implementation in SIDS is a critical challenge. Nearly half (49%) of SDG 6 indicators in SIDS lack sufficient reporting, significantly higher than the global average of

15%. This impedes evidence-based decision-making and targeted interventions. Establishing centralized data-sharing platforms, enhancing technical capacities, and strengthening institutional systems are essential to close these data gaps and monitor progress effectively.

- The Water-Public Health Nexus: A Crisis in the Making

Inadequate sanitation systems, exacerbated by climate impacts, increase the prevalence of waterborne diseases. Investments in wastewater treatment and public health education are critical to mitigating these risks.

- Fostering Global Partnerships to Leverage Expertise and Resources

Strengthening partnerships between SIDS, regional organizations, and international bodies can foster knowledge-sharing, leverage technical expertise, and mobilize financial resources effectively.

- Amplifying SIDS' Voices on the Global Stage

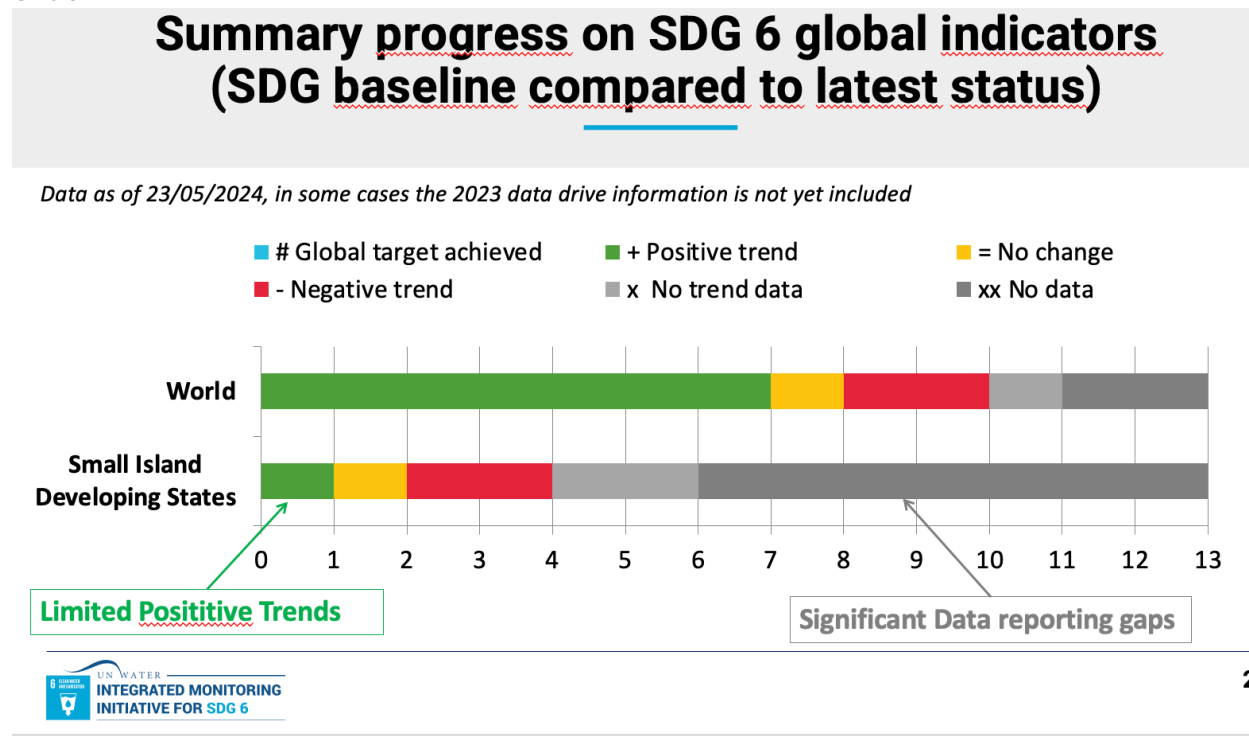
The plight of SIDS in the global water crisis requires heightened visibility. The UN Water Envoy must advocate for greater political will, dedicated funding, and technical support to ensure SIDS are not left behind in the global pursuit of SDG 6.

Annexes

Annex 1: Status of SDG6 in SIDS from the UN-Water Data Portal

The insights presented here are based on data from the UN-Water Data Portal, compiled to evaluate the progress of SDG 6 in SIDS. This analysis underscores the urgent need for enhanced data collection, infrastructure investments, and coordinated action to bridge the gaps in water and sanitation services in these regions.

Slide 1



Slide 1 compares the progress of SDG 6 global indicators in Small Island Developing States (SIDS) against the global average, with data spanning from 2015-2017 to the most recent updates (2019-2022). Key insights include:

1. **Limited Positive Trends:** While the world shows more consistent progress with several positive trends (green bars), SIDS exhibit far fewer positive trends, indicating slow progress or stagnation in implementing SDG 6 targets.

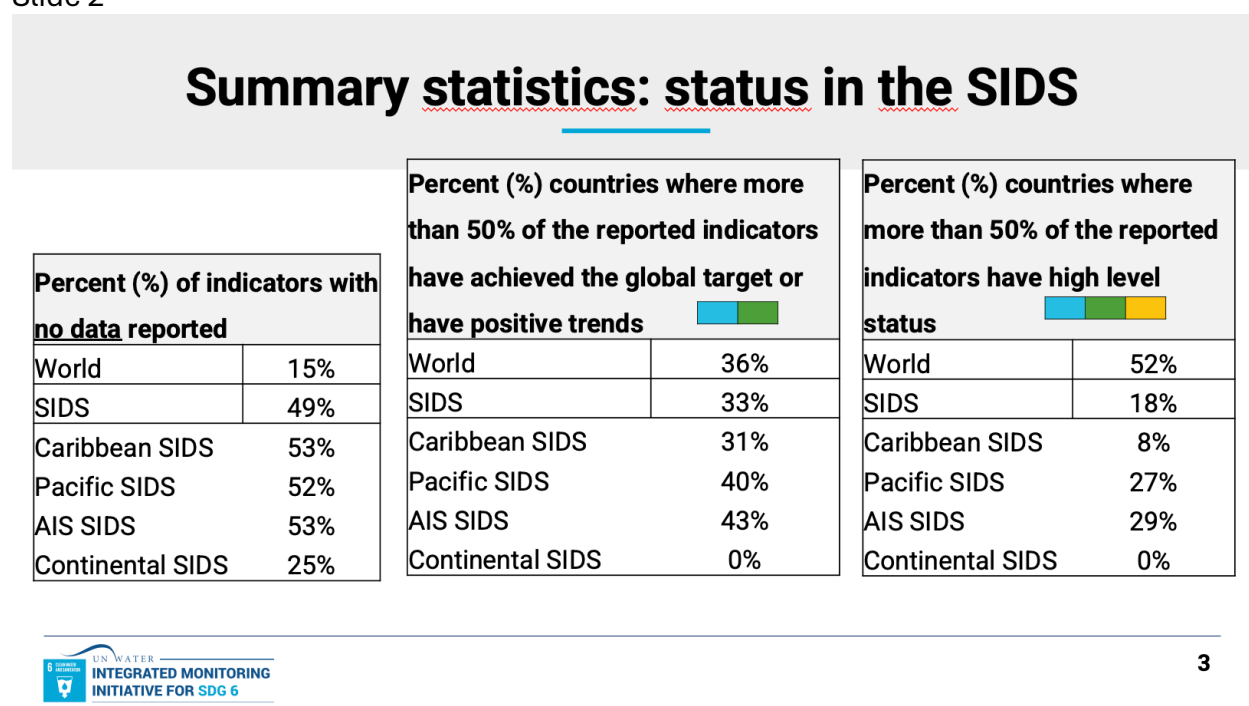
2. **Significant Data Gaps:** A large proportion of the indicators for SIDS fall under "No data" or "No trend data" (gray and "xx"), highlighting the lack of comprehensive reporting. This limits the ability to evaluate progress accurately.

3. Negative Trends: SIDS show red bars for some indicators, reflecting areas where progress has regressed compared to the baseline.

4. Global Target Achievement: Few or no indicators have reached the "global target achieved" status.

The slide underscores the urgent need for better data collection and reporting in SIDS and targeted interventions to address areas showing negative or stagnant trends. It also highlights the disparity between global progress and the situation in SIDS, pointing to the unique challenges these regions face in achieving SDG 6.

Slide 2



Slide 2 provides a statistical overview of the progress of SDG 6 indicators across SIDS compared to global averages, with specific breakdowns for regional groups (Caribbean, Pacific, AIS, and Continental SIDS). Key takeaways include:

1. Data Gaps:

- Globally, 15% of SDG 6 indicators lack reported data, whereas SIDS face a much higher rate at 49%.
- Regional disparities are evident, with Caribbean and AIS SIDS reporting the highest data gaps (53%), while Continental SIDS report fewer gaps (25%).

2. Global Target Achievement or Positive Trends:

- Globally, 36% of countries have achieved global targets or shown positive trends for more than 50% of the indicators, slightly higher than the 33% seen across SIDS.
- Among SIDS, AIS SIDS (43%) and Pacific SIDS (40%) perform better than Caribbean SIDS (31%), with Continental SIDS showing no progress (0%).

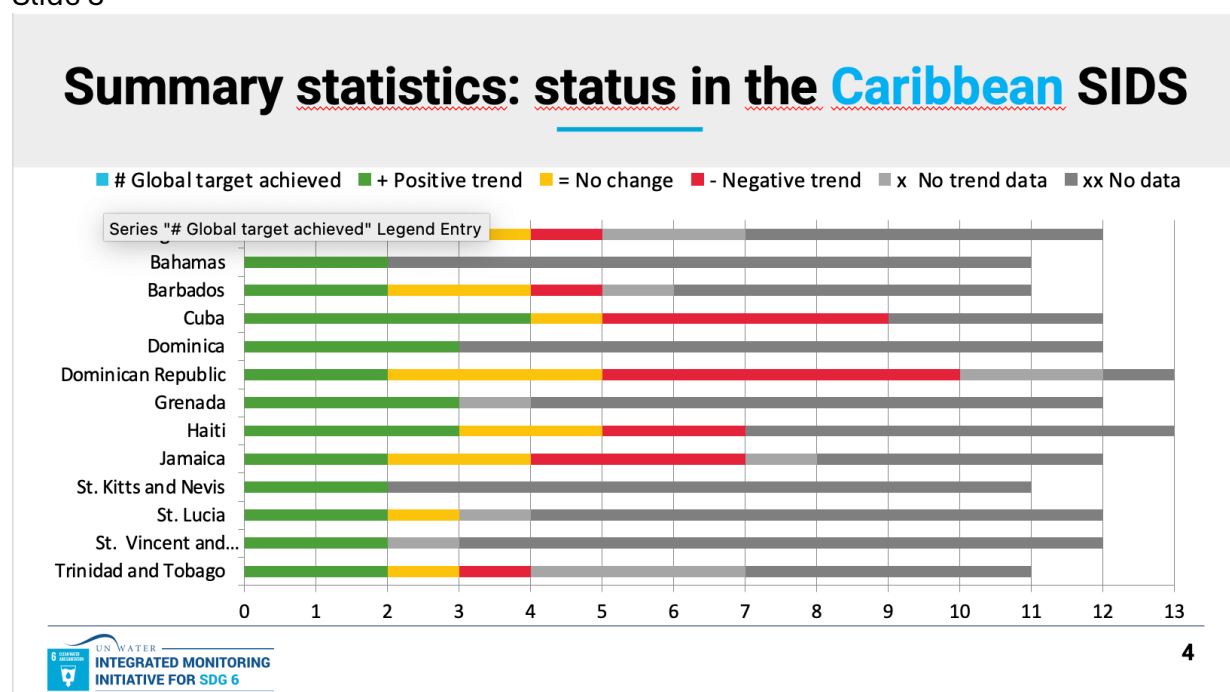
3. High-Level Status

- Globally, 52% of countries achieve a high-level status in over half of their reported indicators, while SIDS lag significantly at 18%.
- Regional analysis shows a stark difference, with Caribbean SIDS achieving only 8%, while AIS (29%) and Pacific SIDS (27%) fare slightly better. Continental SIDS again register no progress (0%).

Key Messages:

- The data highlights significant disparities between global averages and SIDS in achieving SDG 6, with SIDS experiencing severe data reporting gaps that hinder assessment and progress.
- Regional disparities among SIDS emphasize the need for targeted support tailored to specific regional challenges, particularly in the Caribbean and Continental SIDS.
- Achieving high-level status and progress on global targets remains a significant challenge for SIDS, demanding urgent action in data collection, monitoring, and implementation strategies.

Slide 3



Slide 3 provides a detailed breakdown of the progress on SDG 6 indicators in Caribbean SIDS. Key points from the graph include:

1. Variation in Progress Across Countries:

- Countries such as Barbados, Antigua and Barbuda, and St. Lucia show more positive trends (green bars) compared to others.
- Some countries, like Haiti, exhibit more negative trends (red bars), indicating regression in certain SDG 6 indicators.

2. Significant Data Gaps:

- A considerable proportion of the indicators for all countries fall under "No trend data" (x) or "No data" (xx). This highlights major challenges in data collection and reporting, which limits the ability to monitor progress effectively.

3. Minimal Achievement of Global Targets:

- No countries show blue bars, representing indicators where global targets have been achieved, reflecting the overall slow pace of progress.

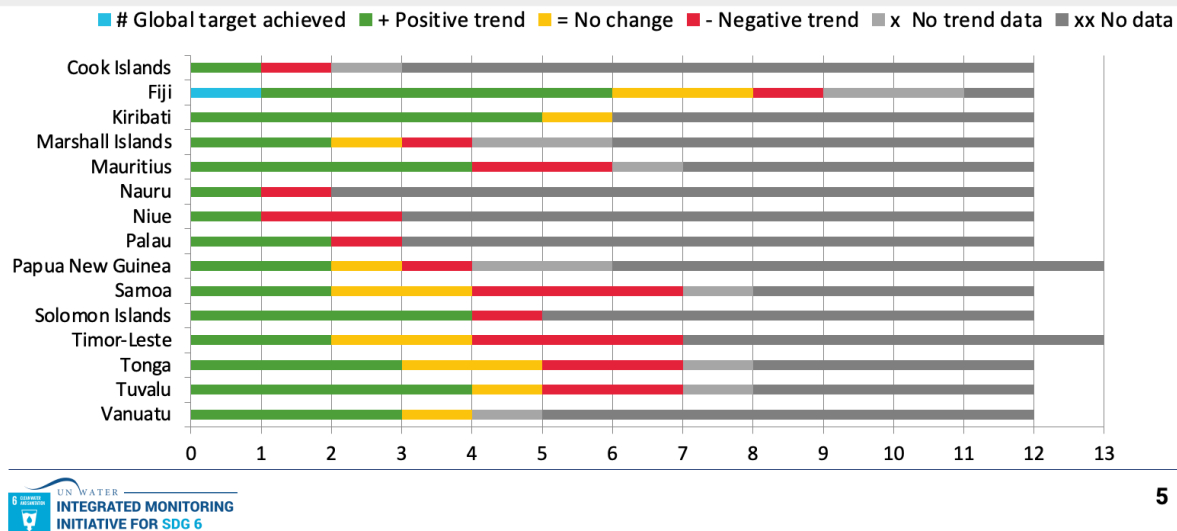
4. Trends Across the Region:

- While there are pockets of progress (yellow bars indicating no change and green for positive trends), the prevalence of gray (lack of data) and red (negative trends) underscores systemic challenges in achieving SDG 6 in the region.

5. Key Messages:

- The Caribbean SIDS are progressing unevenly, with some countries showing improvement while others lag significantly.
 - Barbados, St. Lucia, and Trinidad and Tobago stand out for their significant progress (green bars) across multiple indicators and relatively fewer data gaps compared to other countries. However, they still face regressions (red bars) in some areas that require intervention.
 - Antigua and Barbuda, Jamaica, and the Dominican Republic show consistent progress in several indicators (green bars) but face challenges with negative trends (red bars) and some data gaps.
 - Haiti and Dominica struggle with severe data gaps (gray bars) and significant negative trends (red bars), highlighting the need for immediate focus and support in these countries.
 - Grenada, St. Vincent and the Grenadines, and St. Kitts and Nevis exhibit mixed results with progress (green bars) counterbalanced by data gaps and negative trends, requiring targeted interventions.
- The lack of comprehensive data remains a critical barrier to understanding and addressing specific challenges. More targeted efforts and improved data systems are needed to accelerate progress toward SDG 6 in these nations.

Summary statistics: status in the Pacific SIDS



Slide 4 provides a detailed overview of the progress on SDG 6 indicators across Pacific SIDS. Here are the key observations:

1. Positive Trends Across Several Countries:

- Countries like Fiji, Samoa, and Tonga exhibit notable green bars, indicating positive trends in achieving SDG 6 targets.
- A few countries, such as the Cook Islands, show some blue bars, representing the achievement of global targets for specific indicators.

2. Presence of Negative Trends:

- Red bars, representing negative trends, are evident in countries like the Marshall Islands, Nauru, and Palau, highlighting areas where progress has regressed.
- These negative trends signify challenges in sustaining or improving efforts to meet SDG 6 targets.

3. Significant Data Gaps:

- Gray bars for "No trend data" and "No data" (x and xx) dominate the chart, indicating substantial data reporting gaps across most countries.
- This data scarcity hampers the ability to monitor progress accurately and address issues effectively.

4. Lack of Consistent Progress Across the Region:

- While some countries demonstrate progress, others like Kiribati and Tuvalu face mixed results, with limited positive trends and significant areas lacking data.

5. Key Messages:

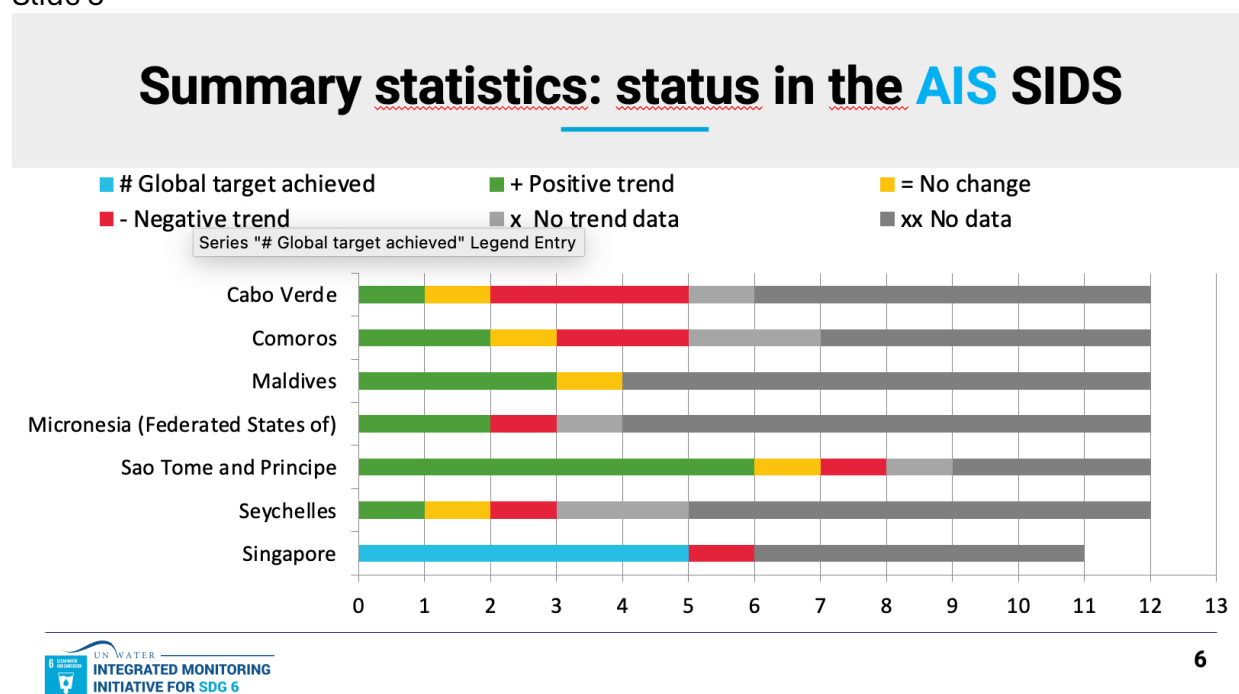
- The Pacific SIDS show a mixed performance in achieving SDG 6, with a combination of positive trends and concerning regressions.

- Fiji and the Cook Islands stand out for achieving at least one global target (blue bars) and making notable progress (green bars). However, both countries still face challenges with data gaps and some regression (red bars).
- Samoa and Tonga demonstrate steady improvements (green bars) with fewer data gaps compared to other Pacific SIDS, showing promise in SDG 6 implementation.
- Kiribati, Tuvalu, and Papua New Guinea struggle with significant data gaps (gray bars), limiting their ability to monitor progress comprehensively. Despite some positive trends (green bars), negative trends (red bars) in these countries indicate ongoing difficulties.
- Marshall Islands and Solomon Islands show mixed results, with progress (green bars) counterbalanced by regressions (red bars) and substantial data gaps, requiring targeted interventions.

- The overwhelming presence of data gaps underscores the need for enhanced data collection and monitoring mechanisms to ensure targeted interventions can be implemented to support these vulnerable nations.

- Across the Pacific SIDS, addressing data gaps and negative trends is critical to sustaining positive progress and ensuring these nations can meet their SDG 6 targets. Regional collaboration and data system improvements are essential to overcoming these challenges.

Slide 5



Slide 5 provides an overview of the progress on SDG 6 indicators across the AIS (Atlantic, Indian Ocean, and South China Sea) SIDS. Here are the key observations:

1. Mixed Progress Across Countries:

- Singapore stands out with a blue bar, indicating the achievement of a global target for at least one SDG 6 indicator.
- Positive trends (green bars) are evident in several countries, such as Cabo Verde, Seychelles, and the Maldives, reflecting progress in certain indicators.

2. Negative Trends:

- Red bars show that negative trends are present in countries such as the Maldives, Comoros, and Micronesia (Federated States of), highlighting regression in specific areas of water and sanitation.

3. Significant Data Gaps:

- Gray bars representing "No trend data" (x) and "No data" (xx) dominate the chart for most countries, indicating widespread gaps in data availability and reporting.
- These data gaps limit the ability to comprehensively assess progress and make informed decisions for policy interventions.

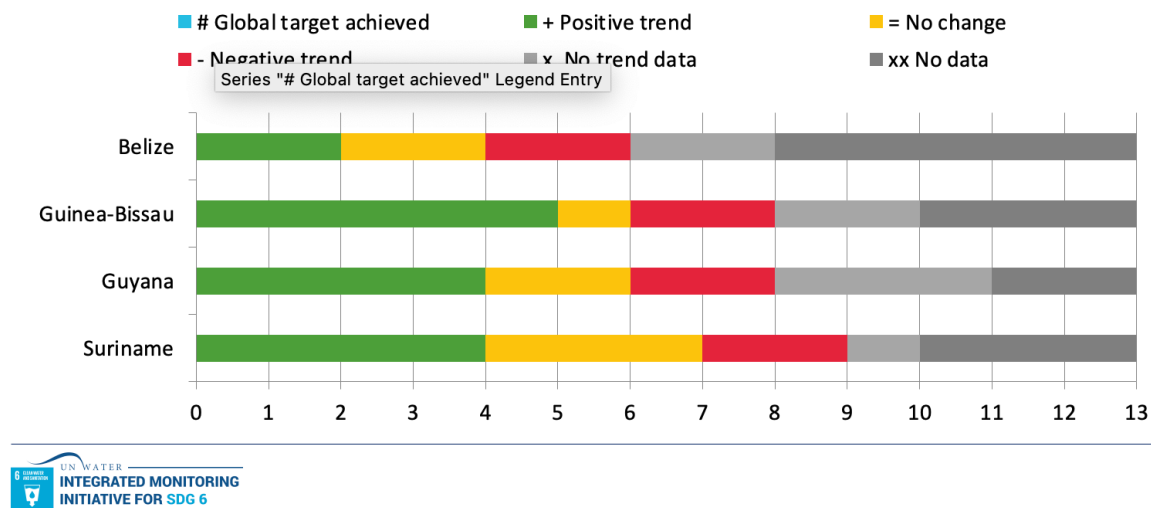
4. Stagnation in Some Indicators:

- Yellow bars for "No change" suggest that progress has stagnated in several countries, emphasizing the need for renewed focus on achieving targets.

5. Key Messages:

- AIS SIDS exhibit varied progress, with a mix of positive developments and significant challenges, particularly in data collection and sustained improvement.
 - Singapore stands out as a leader in achieving at least one global target (blue bar) and has fewer data gaps than other AIS SIDS, demonstrating effective management of SDG 6 goals. However, areas of regression (red bars) need attention.
 - Cabo Verde, Maldives, and Seychelles show steady progress (green bars) in many indicators but require focused interventions to address stagnation (yellow bars) and regression (red bars).
 - Comoros, São Tomé and Príncipe, and Micronesia (Federated States of) face severe data gaps (gray bars) that hinder comprehensive progress assessments. Despite some positive trends, regressions (red bars) in these countries highlight systemic challenges that need urgent solutions.
- Singapore's achievement of a global target demonstrates the potential for success with effective planning and resource allocation.
- Overall, the lack of comprehensive data remains a critical barrier to understanding and addressing the region's unique water and sanitation challenges, calling for immediate investment in monitoring systems and regional collaboration.

Summary statistics: status in the Continental SIDS



Slide 6 illustrates the progress of SDG 6 indicators in the Continental SIDS, focusing on Belize, Guinea-Bissau, Guyana, and Suriname. Key observations include:

Key Messages:

- **Belize and Guyana** show relatively better data availability, with notable progress (green bars) but areas of stagnation and regression that require targeted interventions.
- **Guinea-Bissau and Suriname** face significant data gaps (gray bars), making it challenging to comprehensively assess their progress. While both show some positive trends (green bars), regressions (red bars) highlight areas of concern that need urgent attention.
- Across all four countries, addressing negative trends and improving data reporting systems are critical to achieving SDG 6 targets.

Summary key challenges in the SIDS



- No data on drinking water and sanitation reported in 26/39 SIDS
- Low coverage of safely managed drinking water services (in 54% of the reported), and sanitation in (in 92% of the reported)



- Lack of data on wastewater treatment (in 26/39) and water quality (in 29/39 SIDS)
- Low levels of domestic wastewater treatment (in 92% of the reported)



- Low levels of water-use efficiency in most countries

- Data reported for most SIDS (34/39), but low levels of integrated water resources management (in 79% of the reported)



- Water- and sanitation-related official development assistance (ODA) reported by all SIDS, but low levels in almost all countries



- Low levels of participation in water and sanitation decision-making in 92% the reported countries (25/39 SIDA reported)

SIDS face critical challenges in ensuring universal access to safe water and sanitation, as outlined in SDG 6. Despite global attention, the data reveals persistent barriers:

1. Insufficient Data and Coverage:

- Alarmingly, 26 out of 39 SIDS have no data on drinking water and sanitation. Among those that report, only 54% have safely managed drinking water services, while sanitation coverage is even more dire at just 8%. This reflects the urgent need for better data systems and infrastructure improvements.

2. Wastewater Treatment and Water Quality:

- There is a lack of data on wastewater treatment in 26 SIDS and water quality in 29, highlighting significant blind spots in monitoring. Furthermore, domestic wastewater treatment levels remain critically low in 92% of reporting countries.

3. Water-Use Efficiency:

- Low water-use efficiency is widespread, exacerbating the strain on already limited water resources in these islands, which are highly vulnerable to climate change.

4. Integrated Water Resource Management (IWRM):

- While data is reported by 34 of the 39 SIDS, only 21% implement IWRM effectively, showing a significant gap in cohesive planning and governance.

5. Financial and Institutional Gaps:

- Despite the availability of official development assistance (ODA) for water and sanitation, the levels are insufficient across most SIDS. Additionally, 92% of countries report low participation in water and sanitation decision-making, which limits inclusive and effective policy implementation.

Overall Summary of SDG 6 Progress in SIDS

SIDS face significant and unique challenges in achieving SDG 6, which focuses on ensuring universal access to clean water and sanitation. Despite some progress, critical barriers persist across all regions—Caribbean, Pacific, AIS (Atlantic, Indian Ocean, and South China Sea), and Continental SIDS—due to a combination of data gaps, infrastructure deficiencies, and governance limitations.

1. Limited Progress and Persistent Data Gaps:

- Approximately 49% of SDG 6 indicators across SIDS lack sufficient data, significantly higher than the global average of 15%. This limits the ability to monitor progress and implement targeted interventions.
- Even among reporting countries, 26 out of 39 SIDS lack data on drinking water and sanitation, while 92% have inadequate domestic wastewater treatment. Data on water quality and wastewater treatment is also scarce in most regions, further compounding the problem.

2. Mixed Regional Performance:

- Caribbean SIDS: Progress is uneven, with countries like Barbados, St. Lucia, and Trinidad and Tobago showing some positive trends but also facing challenges with regressions and data gaps. Haiti and Dominica experience severe challenges, including significant data gaps and negative trends.
- Pacific SIDS: Countries such as Fiji and Samoa stand out for achieving global targets and demonstrating positive trends. However, nations like Kiribati and Tuvalu struggle with substantial data gaps and regressions, highlighting ongoing vulnerabilities.
- AIS SIDS: Singapore leads with achievements of global targets and fewer data gaps, while Cabo Verde, Seychelles, and Maldives exhibit steady progress. Comoros and São Tomé and Príncipe face severe data gaps and negative trends.
- Continental SIDS: Belize and Guyana show relatively better progress, while Guinea-Bissau and Suriname struggle with significant data gaps and areas of regression.

3. Key Challenges:

- Low Water and Sanitation Coverage: Only 54% of reporting SIDS have safely managed drinking water, and sanitation coverage is critically low at 8%.
- Low Water-Use Efficiency: Inefficient water use exacerbates the strain on already limited resources in these climate-vulnerable regions.
- Limited IWRM: Despite reporting from 34 SIDS, only 21% effectively implement IWRM, revealing gaps in planning and coordination.
- Inadequate Financial and Institutional Support: Although ODA is available, its levels are insufficient. Additionally, participation in water and sanitation decision-making remains low in 92% of reporting SIDS.

4. Urgent Actions Needed:

- Data Collection and Reporting: Addressing data gaps is critical to understanding progress and designing effective policies.
- Infrastructure Investment: Improvements in drinking water, sanitation, and wastewater treatment infrastructure are essential.
- Strengthened Governance: Enhancing participation in decision-making and integrating water resources management can improve outcomes.
- International Support: Increased financial aid and technical assistance are crucial to overcoming systemic challenges.

5. Key Successes and Opportunities:

- Countries like Singapore, Fiji, and Samoa demonstrate that progress is achievable with effective governance and targeted strategies.
- Regional collaboration and investment in capacity building can bridge gaps and accelerate progress.

In summary, while there are pockets of progress, SIDS face systemic challenges that require urgent and coordinated action. Strengthened data systems, infrastructure investments, and enhanced governance are vital to ensuring sustainable progress toward SDG 6 across these vulnerable regions.

Annex 2: List of References on Water Resources Management and Sustainability in SIDS

1. Synthesis of Policy Interventions for Integrated Water Resources Management in the Caribbean SIDS:

- The synthesis report from ECLAC (Economic Commission for Latin America and the Caribbean) explores the challenges and policy interventions related to Integrated Water Resources Management (IWRM) in the Caribbean SIDS. These regions face significant challenges in managing freshwater resources due to high water demand, changes in land use, climate variability, deforestation, soil erosion, pollution, inadequate wastewater treatment, and overexploitation of water sources. Recognizing these issues, the report underscores the necessity of adopting an integrated approach, internationally recognized as a best practice for sustaining this finite resource.

A particular focus of the report is the evaluation of IWRM implementation in several Caribbean countries including the Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname, and Trinidad and Tobago. The assessment covers various components of the IWRM framework such as enabling environments, institutional frameworks, and management instruments. The findings reveal generally low to medium-low levels of IWRM implementation across these nations, as noted in the recent United Nations 2030 Agenda for Sustainable Development report, which could negatively impact the achievement of SDG 6 targets.

The report provides specific policy recommendations for enhancing potable water management, which have become increasingly pertinent in the wake of the COVID-19 pandemic. It stresses the importance of an effective organizational structure for IWRM to improve coordination and efficiency in water management. Additionally, it highlights the need for a holistic 'whole-of-island' approach that integrates marine and coastal zone management to address SIDS-specific sustainable development challenges effectively. This approach aligns with the directives of the SAMOA Pathway and other international commitments to bolster the resilience and sustainability of water resources in the Caribbean.

The report outlines strategic actions and emphasizes the urgent need to escalate efforts to meet global water management targets effectively, particularly in the face of exacerbated challenges due to global health crises and climatic changes.

<https://www.cepal.org/en/publications/47739-synthesis-policy-interventions-responding-integrated-water-resources-management>

2. United Nations Conference on Midterm Comprehensive Review of Water for Sustainable Development, 2018-2028:

- This UN report presents findings from the midterm review of the International Decade for Action on “Water for Sustainable Development”. It focuses on assessing progress,

challenges, and future directions for water management globally, including significant references to the unique needs and actions within SIDS. The conference aimed to reinvigorate global commitment to sustainable water management.

<https://daccess-ods.un.org/access.nsf/get?open&DS=A/CONF.240/2023/10&Lang=E>

3. Report of the 3rd International Conference on Small Island Developing States, Apia, Samoa, 2014:

- This report details the proceedings and outcomes of the 3rd International Conference on SIDS in Apia, Samoa. It addresses broad sustainable development challenges and strategic responses pertinent to SIDS, with particular emphasis on the crucial role of effective water management in these regions.

<https://digitallibrary.un.org/record/781131?ln=en&v=pdf>

4. Summaries by Chairs of Multi-Stakeholder Partnership Dialogues, 3rd SIDS Conference:

- These summaries reflect the insights and commitments generated during the multi-stakeholder partnership dialogues at the 3rd SIDS Conference. The dialogues focused on enhancing partnerships to tackle water and sanitation challenges, reinforcing the importance of international cooperation and multi-sectoral collaboration in advancing SDG 6 goals in SIDS.

<https://digitallibrary.un.org/record/781223?ln=en&v=pdf>

5. Water Action Agenda:

- The Water Action Agenda provides a framework for global partnerships and actions aimed at achieving SDG 6 (Clean Water and Sanitation). It includes a specific focus on initiatives and commitments tailored to the needs of SIDS, promoting enhanced water management and sustainability through international cooperation.

<https://sdgs.un.org/partnerships/action-networks/water>

6. Partnerships for SIDS:

- This platform lists 58 commitments directly related to achieving SDG 6 in SIDS. It serves as a repository of ongoing efforts and partnerships aimed at addressing the water and sanitation challenges specific to SIDS, facilitating knowledge sharing and collaborative initiatives.

The Global Partnership Dialogue held on 12 July 2018 during the High-Level Political Forum (HLPF) centered around the theme of "Partnerships for Sustainable and Resilient Societies in Small Island Developing States (SIDS)." An extensive analysis was conducted on over 500 partnerships in support of the midterm review process, specifically focused on SIDS. This analysis provided valuable insights into the landscape of partnerships and their contributions to sustainable development in these regions.

Key Findings:

- **Steady Increase in Partnerships:** Between 2014 and 2018, there was a significant rise in the number of partnerships, with 261 new partnerships launched.

- **Regional Distribution:** The Pacific region recorded the highest number of partnerships, followed by the Caribbean and the AIMS (Atlantic, Indian Ocean, Mediterranean, and South China Sea) regions.
- **Leadership in Partnerships:**
 - Governments, regional organizations, and United Nations organizations were the main entities leading these partnerships.
 - At the global level, the majority (52%) of partnerships were led by United Nations organizations.
 - In the Caribbean and Pacific regions, regional organizations and governments generally lead the majority of partnerships.
 - In the AIMS region, governments lead the majority of partnerships.
 - Intergovernmental organizations (IGOs), non-governmental organizations (NGOs), and civil society played a participatory role, albeit leading a minority of partnerships, with the highest participation seen in the Pacific.
 - Participation from the private sector and academia was generally lower compared to NGOs and civil society.

<https://sdgs.un.org/partnerships/action-networks/sids-partnerships>

7. SDG 6 Data Portal:

- The SDG 6 Data Portal is an essential resource for accessing the latest data related to water and sanitation, providing comprehensive, up-to-date statistics from all countries, including SIDS. This portal supports evidence-based planning and policy-making critical for advancing SDG 6.

<https://www.sdg6data.org/en>

8. Series of IWRM Studies by ECLAC

- ECLAC has provided us with drafts of the 7-national IWRM reports. These draft reports are not official documents for the respective participating countries. They are draft reports received from the consultants. In addition, Trinidad and Tobago has an IWRM policy at: <https://www.mpu.gov.tt/wp-content/uploads/2023/04/NIWRM-interior-for-approval.pdf>

9. The Escazú Agreement

- The Escazú Agreement, formally known as the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, is the first environmental treaty in the region. Adopted in Escazú, Costa Rica, on March 4, 2018, and entering into force on April 22, 2021, it aims to guarantee the implementation of rights of access to environmental information, public participation in the environmental decision-making process, and access to justice in environmental matters. These principles are crucial for sustainable water management and ensuring that communities have access to clean and safe water.

<https://www.cepal.org/en/escazuagreement>

10. Rising Up for SIDS: UNDP S.A.M.O.A. Pathway Report by UNDP, 2020.
https://www.undp.org/sites/g/files/zskgke326/files/migration/bb/undp-bb-Full_SIDS-Offer-Rising-Up-for-SIDS.pdf(https://www.undp.org/sites/g/files/zskgke326/files/migration/bb/undp-bb-Full_SIDS-Offer-Rising-Up-for-SIDS.pdf)

The report emphasizes the critical need for enhanced international advocacy, robust data collection and analysis, and integrated policy approaches to address the unique vulnerabilities of SIDS, such as climate change impacts and economic instability. It highlights best practices in development, promotes gender parity and women's empowerment, and underscores the importance of innovative solutions and sustainable financing. The report calls for stronger partnerships and tailored policy advice to ensure effective implementation of the Sustainable Development Goals (SDGs) in these regions.

Annex 3: Summary of the Side-event at the SIDS4 Conference



SIDS4 Conference Side Event

Title: Accelerate implementation of SDG 6 in SIDS - How does the UN System-wide Strategy for Water and Sanitation support SIDS?

Date and Time: Monday, 27 May 2024, 12:00-13:30

Venue: “Overflow ID” Room, American University of Antigua

Organized by: Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) of Germany, United Nations Department of Economic and Social Affairs (UN DESA), and UN-Water.

Background on the Event:

The side event at the SIDS4 Conference focused on the unique challenges faced by SIDS in implementing SDG 6 (clean water and sanitation). SIDS are particularly vulnerable to the impacts of climate change, such as rising sea levels, increased frequency of extreme weather events, and freshwater scarcity. These factors exacerbate existing vulnerabilities, including limited land area, small economies, and geographical remoteness. The event gathered government representatives (Barbados, Cuba, Germany, Singapore), civil society groups (IUCN, youth group), and UN entities (UN DESA, UN-Water, UN ECLAC, UNEP, WHO) to discuss and address these critical issues, aiming to enhance water resilience in SIDS in the context of climate change and contribute to the implementation of the UN System-wide Strategy for Water and Sanitation.

Key Issues Discussed:

- The **Federal Foreign Office of Germany** highlighted the severe impact of climate change on SIDS, noting that over 70% face water shortages which threaten human rights, food security, and economic development. Highlighted cooperation at global as well as bilateral levels between Germany and SIDS.
- The **Prime Minister's Office of Singapore** shared Singapore's experience as a water-scarce nation, emphasizing innovation and strategic planning in achieving water security. Highlighted the importance of water conservation, governance, and international collaboration.

- The **National Institute of Hydraulic Resources of Cuba** discussed the challenges and strategies for achieving SDG 6 in SIDS, emphasizing the need for international cooperation and robust monitoring systems.
- **UN-Water** introduced the first UN System-wide Strategy for Water and Sanitation, focusing on enhancing coordination and delivery of water priorities. The strategy emphasizes collective action, better engagement with countries, and integration across sectors.
- **UN DESA's SIDS Study on Water** was presented with preliminary findings, showing significant gaps in data collection and low levels of water and sanitation services in SIDS. Highlighted the need for better data, policy coherence, and international collaboration.
- The **Barbados Water Authority** highlighted Barbados' vulnerability to climate change and the significant investment required to maintain water security. Emphasized the need for comprehensive data collection, public engagement, and support for the UN system-wide strategy.
- The **ECLAC Caribbean Subregional Headquarters** shared the severe water scarcity and infrastructure challenges in the Caribbean, stressing the importance of data-driven integrated water resource management and regional cooperation.
- **UNEP** highlighted the interconnectedness of freshwater and saltwater ecosystems and the necessity of integrated water resources management into broader environmental policies.

Key Recommendations for Action:

- Enhance international cooperation and coordination among UN agencies to provide comprehensive support to SIDS in implementing SDG 6.
- Improve data management and monitoring by developing internationally agreed methodologies and leveraging citizen science to fill data gaps.
- Invest in innovative technologies and solutions to enhance water efficiency, resilience, and conservation in SIDS.
- Integrate and align water management into broader environmental policies, climate change, disaster risk reduction, biodiversity, and SDGs.
- Strengthen the capacity of local institutions and communities through education and capacity development programs focused on sustainable management of water resources.
- Promote regional cooperation and knowledge sharing among SIDS to develop effective strategies for water resource management and disaster resilience.
- Several speakers stressed the need for a coordinated UN System-wide Strategy for Water and Sanitation and called for a UN Special Envoy for Water to understand and support the unique needs of SIDS.

Annex 4: Summary of Discussions at the SIDS4 Side-Event

Side Event at SIDS4 Conference

Accelerate implementation of SDG 6 in SIDS - How does the UN System-wide Strategy for Water and Sanitation support SIDS?

SUMMARY OF PRESENTATIONS:

Federal Foreign Office of Germany:

The German Envoy highlighted the severe impact of climate change on Small Island Developing States (SIDS), particularly regarding water-related challenges. Emphasizing the need for increased support to enhance resilience, the envoy noted that over 70% of SIDS face water shortages, which threaten human rights, food security, energy production, and economic development. Germany is currently implementing over 80 bilateral projects with SIDS, totaling 300 million euros, and plans new collaborations to protect freshwater resources in the Pacific islands. The envoy stressed the importance of a coordinated UN system-wide strategy to address the diverse challenges faced by SIDS and called for the rapid appointment of a UN Special Envoy for Water to amplify the needs of SIDS globally.

Prime Minister's Office of Singapore:

The Singapore Minister emphasized the significant challenges and strategies Singapore has faced as a water-scarce nation, sharing their journey towards achieving water security through innovation and strategic planning. Initially relying on local water catchments and imported water, Singapore has diversified its water supply with reclaimed water (NEWater) and desalination, both requiring advanced technology and significant investments in R&D. The Minister highlighted three key takeaways: the importance of water conservation and governance, the role of technology in increasing water resilience, and the necessity of international collaboration. He encouraged global efforts to manage water resources sustainably and supported the UN System-wide Strategy for Water and Sanitation to ensure coordinated global action, emphasizing the need for a UN Special Envoy on Water to accelerate the implementation of SDG 6.

UN-Water:

UN-Water introduced the first UN System-wide Strategy for Water and Sanitation, developed by UN-Water to enhance coordination and delivery of water and sanitation priorities. The strategy, endorsed by the UN Secretary General, aims to help countries progress on their national plans, international goals, and human rights while deploying transformative solutions. It emphasizes the needs of developing countries, including SIDS, landlocked developing countries, and least developed countries. The strategy is built around five entry points: leading collective action, engaging better with countries, aligning UN support, accelerating progress through global accelerators, and accounting for progress through joint review and learning.

UN-DESA Study on Water and Sanitation in SIDS:

Preliminary findings of the UN DESA study on the progress of SIDS in achieving SDG 6 were presented by the consultant. She highlighted that SIDS are significantly behind in SDG 6 implementation, with major gaps in data collection and low levels of water and sanitation services. The study aims to capture the voices and needs of SIDS to enhance coordination and coherence of water activities within the UN system. Preliminary findings emphasize the urgent need for better data collection, policy coherence, and integration of international players to improve water resilience and governance in SIDS. The study also identifies specific priorities such as developing smart water infrastructure, reducing non-revenue water, and implementing nature-based solutions for wastewater treatment.

The National Institute of Hydraulic Resources of Cuba

The Cuban representative discussed the main challenges and strategies for achieving SDG 6 in SIDS, highlighting the economic dependence on tourism and services, and the critical need for clean water and sanitation underscored by the COVID-19 pandemic. He emphasized the necessity for SIDS to be included as partners in international cooperation, focusing on hydrological monitoring networks and early warning systems. The speaker stressed the importance of international collaboration, science, technology, and innovation in water management. He noted Cuba's efforts in improving water and sanitation infrastructure, recognizing access to water as a human right in the constitution. The representative called for a UN Special Envoy for Water to understand the unique needs of SIDS and support the integration of SDG 6 goals into national priorities.

Barbados Water Authority:

The Barbados expert highlighted the country's vulnerability to climate change and water scarcity, exacerbated by frequent droughts. Barbados has implemented desalination and upgraded its sewage treatment to address these issues, but maintaining water security requires significant investment. The country faces challenges in integrated water resource management and requires substantial financial resources to meet SDG 6 targets. The expert emphasized the need for comprehensive data collection and public engagement in water management. He called for support for the UN system-wide strategy for water and sanitation to improve monitoring, data collection, and resource management.

ECLAC Caribbean Subregional Headquarters:

The ECLAC Director emphasized the severe water scarcity and infrastructure challenges faced by Caribbean countries, exacerbated by climate change and economic constraints. She highlighted the high costs of desalination and the significant water losses due to poor infrastructure. The Director stressed the importance of data-driven, integrated water resource management, and the need for regional cooperation and nature-based solutions to achieve SDG 6. She praised the UN system-wide strategy for water and sanitation and reiterated ECLAC's commitment to supporting the Caribbean in achieving sustainable water management and resilience.

QUESTIONS & ANSWERS

WHO Representative:

The WHO representative highlighted the critical importance of safe drinking water, sanitation, and hygiene for health, dignity, and resilient communities. They emphasized the challenges posed by climate change, including saltwater intrusion and extreme weather events, which exacerbate water-related health issues like childhood mortality and disease transmission. The representative called for coordinated international cooperation to improve water services and address groundwater contamination sustainably, ensuring the health and well-being of all populations.

IUCN Representative:

Jessica from the IUCN World Commission on Environment inquired about the measures being taken to enhance data collection for water management, particularly through the UN's four-year implementation strategy. She asked how these efforts could be linked with the SIDS Center of Excellence to improve data accuracy and availability.

Caribbean Regional Headquarters Representative:

A representative from the Caribbean Regional Headquarters asked about the impact of land use and urbanization on water resources. They questioned whether urbanization in SIDS affects catchment areas and water resource management, considering that urbanization can both positively and negatively impact water availability and quality, depending on how it is managed.

UNEP Convention Secretariat Representative:

Chris from the UNEP Convention Secretariat commented on the need for integrated water resource management and raised a question about the lack of demand for data development in the Caribbean. He sought insights on what could drive the uptake of available resources for data collection, especially for nature-based solutions and wastewater reuse.

Suriname Youth Ambassador:

Matthias, the Youth Ambassador for the Republic of Suriname, emphasized the importance of involving children and youth, especially those from indigenous and tribal communities, in data collection for water management. He asked the panel for recommendations on integrating water management into primary and secondary education curricula and adapting UNICEF's WASH program within existing policy frameworks to engage young citizen scientists effectively.

Kelly Ann, UN-Water:

Kelly Ann from UN-Water explained the efforts to enhance data collection and monitoring for SDG 6. She discussed the establishment of standardized methodologies for citizen science to fill data gaps and the phases of the integrated monitoring initiative, which aim to

strengthen national monitoring systems. She highlighted the support mechanisms put in place by various UN entities to address data gaps, particularly in areas like water use efficiency and ambient water quality.

Ms. Artie, ECLAC:

The ECLAC representative elaborated on the challenges of data fragmentation and the need for centralized data reporting systems. She stressed the importance of having sufficient laboratory capacities to generate quality data and the high costs associated with maintaining such standards. The representative also highlighted the rapid changes in water quality due to climate conditions and the need for adaptive data collection and management systems.

Singapore Representative:

The representative from Singapore discussed the critical role of urbanization in managing water resources in a water-scarce environment. They highlighted Singapore's integrated approach, including using underground spaces for water management, stringent coordination among government agencies, and the importance of technology and climate science in urban planning. The representative emphasized the need for robust water policies, appropriate pricing of water, and creating multifunctional water bodies for sustainability and livability.

Cuban Expert:

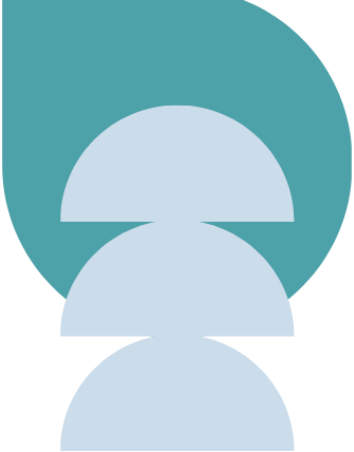
The expert from Cuba emphasized the importance of hydrological monitoring networks for collecting and conserving water data. He highlighted Cuba's efforts to guarantee freshwater sanitation through robust monitoring systems, suggesting that integrating these networks could significantly improve the management of water resources and the achievement of SDG 6 goals.

Barbados Representative:

The representative from Barbados shared their experience of managing water resources on a densely populated island. They discussed the implementation of zoning policies to protect water catchment areas and the need for continuous data collection and analysis. The representative emphasized the importance of training in data analytics and the involvement of youth in water management through educational programs and the establishment of a water academy.

Closing Remarks by Ms. Leticia Calvo, UNEP:

Ms. Calvo underscored the urgent need for strengthening international cooperation and data collection to meet water-related SDGs. She highlighted the interconnectedness of freshwater and saltwater ecosystems and the necessity of integrating water management into broader environmental policies. Ms. Calvo called for accelerating efforts to bridge data gaps, particularly in SIDS, and emphasized the centrality of water management in achieving global environmental goals. She encouraged continued dialogue and collective action to implement the outcomes of the meeting effectively.



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