

2025 IWRM-related Progress in Africa

Integrated Water Resources Management (IWRM), Disaster Risk Reduction, climate resilience, and financing for infrastructure, based on SDG 6.5.1

The purpose of this summary is to inform regional consultations, and global consultations during PANAFCON 3, on the development of the post-2025 Africa Water Vision and Policy, following the end of the Africa Water Vision 2025 period.

It starts with the context and provides a summary of recommendations for the post-2025 framework. It then covers the critical and inter-related thematic areas of (1) IWRM implementation; (2) water-related Disaster Risk Reduction; (3) water-related climate resilience; and (4) financing for water resources infrastructure.

N.B. All data in this Summary is from SDG indicator 6.5.1, unless otherwise specified: <https://iwrmdataportal.unepdhi.org/>. Further data in relation to the analysis in sections 1-4 can be found in the Supplementary Information: <https://iwrmdataportal.unepdhi.org/publications/regional-reports>.

Disclaimer: The boundaries and names shown and the designations used on the maps in this publication do not imply official endorsement or acceptance by AMCOW, the African Union, or the United Nations.

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Context

Africa Water Vision 2025

The [Africa Water Vision 2025](#) covers multiple areas, including water governance (with a focus on integrated water resources management (IWRM)), water wisdom (data), meeting urgent water needs for water sanitation and hygiene (WASH), food, energy and ecosystems, disaster risk reduction (DRR), and strengthening the financial base for water. Several continental policy decisions and declarations have been taken by the African Union (AU) and AMCOW to foster the implementation of the African water agenda in pursuit of the Africa Water Vision 2025 (AWV2025). Most notably, they include:

- [2004 Sirte Declaration](#) on the Challenges of implementing integrated and sustainable development of agriculture and water in Africa;
- [2008 Tunis Ministerial Declaration](#) on Accelerating water security for Africa's socio-economic development;
- 2008 [Sharm El-Sheikh Commitments](#) for Accelerating the achievement of Water and Sanitation Goals in Africa, Eleventh Ordinary Session, 30/6-1/7 2008, Egypt; and,
- [2008 Sirte Declaration](#) on Water for Agriculture and Energy in Africa: the Challenges of Climate Change.

Agenda 2063: The Africa We Want

Sustainable water resources management directly supports [Aspiration 1](#) under Agenda 2063: "A Prosperous Africa, based on Inclusive Growth and Sustainable Development". The most relevant Goal is [Goal 7](#): "Environmentally Sustainable and Climate Resilient Economies and Communities". Priority areas under this goal: sustainable natural resource management and biodiversity conservation; sustainable consumption and production patterns; water security; climate resilience and natural disasters preparedness and prevention; and renewable energy. Currently, there are [three indicators](#) under the Goal: % of agricultural land under sustainable land management; % of inland water areas preserved; % of coastal and marine areas preserved.

Post-2025 Africa Water Vision and Policy

Activities are underway to formulate an Africa Water Vision and Policy that will provide a strategic framework towards inclusive and climate resilient water security on the continent beyond 2025. Ultimately, the vision and policy must motivate action to achieve the AU Agenda 2063 goal of *environmentally sustainable and climate resilient economies and communities* through assuring water security, among others.

Integrated Water Resources Management (IWRM)

IWRM is the internationally recognized approach that helps to balance competing water demands from across society and the economy, without compromising the sustainability of vital ecosystems upon which our lives and livelihoods depend. It requires coordinated action across sectors, at all levels, and across borders. It is increasingly recognised that IWRM supports climate-resilience and DRR, and that integrated approaches are essential for effective financing. Sustainable Development Goal (SDG) indicator 6.5.1 on [IWRM implementation](#), which includes all these topics, has excellent coverage in Africa across 3 data collection rounds (2017, 2020, 2023).

Monitoring progress on Africa's water and sanitation goals

The [African Water and Sanitation Monitoring and Reporting System \(WASSMO\)](#) is the first ever continent-wide automated web-based system that exclusively captures data on water and sanitation across the 55 member states. The purpose of WASSMO is to aid decision-making through the creation of a continent-wide credible monitoring and reporting system that regularly provides information on progress towards implementation of the Sharm El-Sheikh commitments and SDG targets.

Recommendations for the post-2025 Africa Water Vision and Policy

Informing the post-2025 Africa Water Vision and Policy

IWRM implementation is a key principle and core target of the AWW2025, and re-affirmed in numerous AU and AMCOW declarations since. It is also one of the SDG Targets (6.5), measured by indicator 6.5.1. Crucially, IWRM implementation remains a priority for all countries, as demonstrated by the vast number of policy and legal frameworks and programmes being implemented on the continent (many of which are described in the [country reports](#) for SDG indicator 6.5.1). IWRM is also increasingly recognised as critical to increase climate resilience (see section 3). Furthermore, numerous reports and studies have shown that integrated approaches – as embodied in IWRM – are essential for achieving sustainable development. Thus, implementing IWRM is essential to achieve Goal 7 of Agenda 2063: environmentally sustainable and climate resilient economies and communities. **It is therefore recommended that IWRM implementation, including the various aspects, be included in the post-2025 Africa Water Vision and Policy.**

It is also important that relevant existing and emerging regional and global frameworks are considered in the development of the new Vision and Policy, such as the SDGs and [post-2030 agenda](#), the [Global Goal on Adaptation](#), and the [Global Biodiversity Framework](#).

Monitoring and reporting in the post 2025 agenda

Some core principles and recommendations for monitoring in the post-2025 period: reduce the 'reporting burden' on countries; identify synergies with other subregional, regional and global commitments, using data for multiple purposes where possible; ensure coordination between focal points and teams reporting on related indicators; ensure monitoring and information actively informs policymaking.

It is recommended to continue to use WASSMO as the primary data collection and reporting mechanism

for Africa, undertaking a review of: (a) the indicator framework, in light of the post-2025 AWW and Policy and emerging regional/global frameworks; (b) data collection processes (e.g. using same/similar datasets to fulfil multiple reporting commitments, and coordination between focal points). In addition, a 2023 capacity needs assessment for WASSMO highlighted the need to¹:

- Increase visibility and awareness of WASSMO for decision making.
- Address challenges in reporting on specific data by strengthening the technical capacity of relevant institutions, enhancing data collection and reporting tools and methodologies, and strengthening data sharing and collaboration among stakeholders.
- Increase synergies between the WASSMO reporting system and national monitoring and reporting systems, and with other international monitoring systems (e.g. SDGs).
- Dedicate national budget lines for WASSMO reporting.

Target setting in relation to IWRM implementation

The [AWV2025](#) includes the following targets, among others:

- Development of national policies and comprehensive institutional reform: full implementation in 100% of countries by 2015.
- Sustainable financing for policy and institutional reform and capacity building: operational in 60% of countries by 2005.
- Sustainable financing for information generation and management: secured in 100% of countries by 2005.

While great effort and some progress has been made towards these targets, it is clear from WASSMO and SDG reporting that these ambitious targets are still far from being met.

¹ UNEP-DHI (2023) Strengthening Member States' capacity to report on progress in the water sector, Prepared for African Ministers' Council on Water (AMCOW)

The SDG indicator 6.5.1 survey covers all these themes, and more, allowing for the measurement of incremental progress towards the target in each country, on a scale of 0-100% implementation. However, this resource is not being consistently used to monitor progress.

While the aspirational global SDG target is to achieve 'very high' implementation (91-100%) by 2030, none of the African subregions are on track to meet this. Despite this, most countries have still not set alternative official targets for IWRM implementation. Through the SDG 6.5.1 reporting process², 35 African countries suggested unofficial 2030 targets in the following ranges:

■ **Very high** (91-100%): 5 countries (Zambia, Niger, Rwanda, Mauritania, Mozambique)

■ **High** (71-90%): 17 countries (Sierra Leone, Morocco, Senegal, Madagascar, Eritrea, Cameroon, Côte d'Ivoire, Sao Tome e Principe, Burkina Faso, Tunisia, South Africa, Mauritius, Lesotho, Eswatini, Angola, Zimbabwe, Ghana)

■ **Medium-high** (51-70): 11 countries (Gabon, Liberia, Burundi, Togo, Somalia, DR Congo, Nigeria, Chad, Congo, Malawi, CAR)

■ **Medium-low** (31-50%): 2 countries (Comoros, Djibouti).

Given the above, it is recommended that the post-2025 Africa Water Vision and Policy:

- Includes concrete targets, in the context of the above, that are ambitious yet achievable with the right enabling conditions in place.
- Builds on SDG reporting, including SDG 6, Target 6.5, and indicator 6.5.1.
- Allows for, and encourages, countries to set formal targets for IWRM implementation, with budgeted and actionable plans to achieve them.
- Encourages regional bodies to set regional targets, in line with regional contexts and ambitions.
- Considers continental, subregional and national targets in relation to various aspects of IWRM implementation, as covered by the 6.5.1 survey, not just the overall level of IWRM implementation.

Cross-cutting enabling conditions for implementation

While the following 4 sections provide recommendations in relation to the respective topic, below are some cross-cutting recommendations to support implementation more broadly.

1. **Develop or strengthen cross-sector coordination mechanisms.** Intersectoral committees, including at the basin or catchment level, should be supported by legal frameworks and budget lines, and have wide representation from across sectors, including public and private sector. These coordination mechanisms should support data sharing, joint monitoring and coordinated decision-making.
2. **Mainstream water, using an IWRM approach, into other sector initiatives, actions and plans.** Instead of treating water management as a standalone issue, mainstreaming means recognizing water's integral role in other sectors. This will lead to more efficient and sustainable use of water resources, improved resilience to water-related challenges, and better coordination among sectors for managing water effectively.
3. **Develop implementation plans with realistic actions, timelines, responsibilities and budgets.** The AIP is supporting countries to develop National Climate-Resilient Water Investment Programmes. Technical and financial support is also available through the SDG 6 IWRM Support Programme to develop [water and climate action plans](#).

Box 1: Continental and subregional frameworks support national implementation.

The [Africa Water Investment Programme \(AIP\)](#) has a goal to mobilize an additional USD 30 billion per year towards water and sanitation, built on a foundation of national revenue-raising and budgeting. The AIP is led by the African Union Commission and African Union Development Agency, with several continental and international partners, including the African Ministerial Council on Water (AMCOW). Several subregional frameworks also support the coordinated financing and implementation of IWRM, including [EAC](#) (Eastern), [ECCAS](#) (Central), [ECOWAS](#) (Western), and [SADC](#) (Southern).

² 6.5.1 survey Annex B, consolidated in [global results file](#), and available in [country surveys](#).

1. Integrated Water Resources Management (IWRM) implementation

The relevance of IWRM monitoring (SDG 6.5.1)

SDG indicator 6.5.1 measures the degree of implementation of IWRM through a country survey including [33 questions](#) on various topics and at different levels, covering four main dimensions: (1) policies, laws, and plans; (2) institutions, coordination and stakeholder participation; (3) management instruments; and (4) financing. One of the strengths of this approach is that it provides detailed [country information](#) on status, progress, barriers and next steps on each question topic. A selection of topics included in this note are management instruments to reduce impacts of water-related disasters (section 2), climate resilience (section 3) and financing for water resources infrastructure at national and subnational levels (section 4). The dimension averages are also captured in the [WASSMO framework](#), though more harmonisation between WASSMO and SDG reporting is needed.

Status and progress

Between 2017 and 2023, a significant number of countries progressed from 'low' or 'medium-low' levels of IWRM implementation (where arrangements are generally institutionalised, but not yet being implemented), to 'medium-high' levels (where implementation of the arrangements is generally underway, but objectives are not achieved). However, it is likely that progress will slow as operationalizing aspects of IWRM is likely to be restricted by barriers such as insufficient financing and institutional capacity.

Despite the progress, 48% of countries (25) with low and medium-low IWRM implementation are unlikely to advance sufficiently on the required governance frameworks to balance demands and sustainably develop and manage their water resources by 2030. These countries typically have lower levels of socioeconomic development and are likely to experience rapidly increasing pressures – such as increased water demand and pollution – as they strive to meet development objectives. Such pressures are likely to be exacerbated by increasing climate change impacts. These countries are the highest priority for accelerated action. Although most countries are making some progress, it is unlikely to be at the pace required to address rising pressures. In 2023, no African country had reached high or very high level of implementation of IWRM. At the current rate, Africa will not achieve sustainable water management until at least 2049.

The Northern and Southern subregions generally have higher IWRM implementation (61% and 59% respectively, above the global average of 57%), followed by the West (47%), East (44%) and Central subregions (42%) (figure 1).

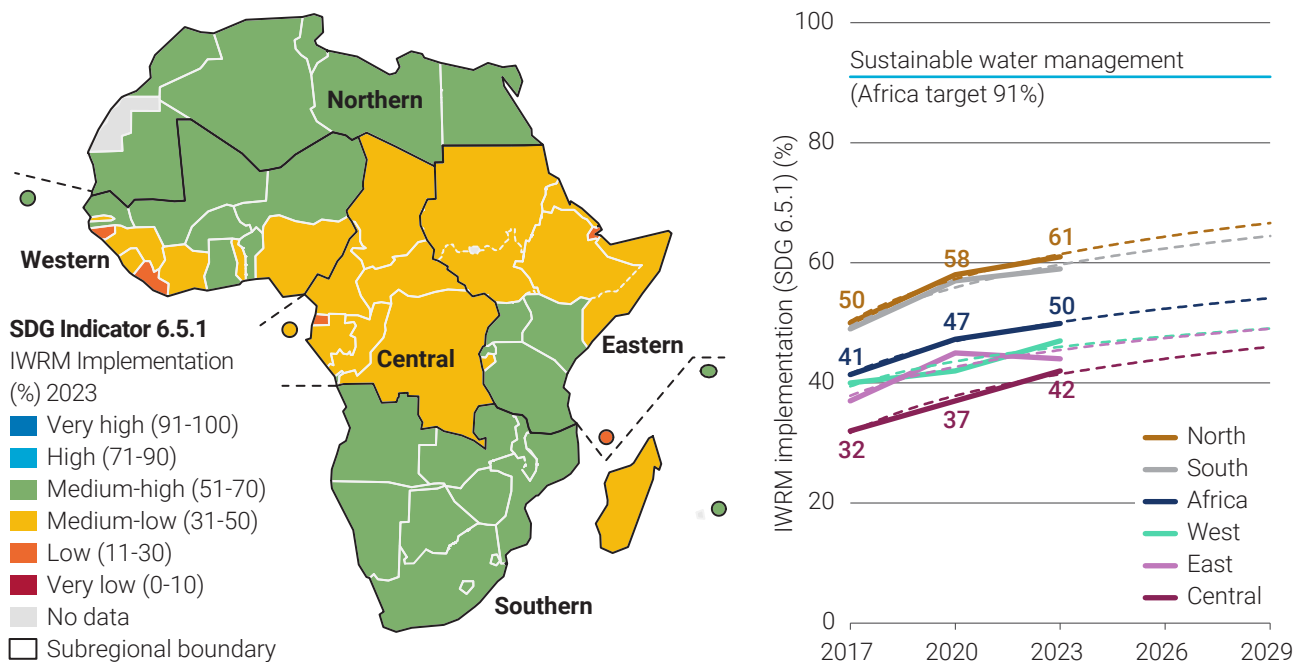


Figure 1: IWRM implementation (%): left: country 2023 status or most recent; right: African and subregion averages, 2017, 2020, 2023. SDG 6.5.1^{3,4,5}

Challenges

Many countries are making progress with developing and revising laws, policies and plans, but often lack the financial, institutional, and technical capacity to implement them. As a result, water resources are not being managed sustainably, with overuse and pollution continuing, and resilience to floods and droughts relatively low.

Recommendations

- Action needs to be prioritized in 5 African countries with low level of implementation (Comoros, Djibouti, Equatorial Guinea, Guinea-Bissau and Liberia), followed by the 20 countries with medium-low level of implementation, building on experiences from countries that are more advanced or making good progress.

- Coordinated planning and management is needed, in partnerships across sectors and at all levels.
- The types of actions needed vary between countries, and gaps can be identified from the [6.5.1 country reports](#), among other sources. Nonetheless, some of the most reported priority areas include addressing the financing gap, better coordination between climate and water authorities, raising political commitments for IWRM to the highest national level, cross-sector coordination and stakeholder engagement, as well as enhancing institutional capacity and developing and implementing laws, regulations, plans and policies.

³ The boundaries and names shown and the designations used on the maps in this publication do not imply official endorsement or acceptance by AMCOW, the African Union, or the United Nations.

⁴ For all maps with SDG 6.5.1 data in this publication, all countries show 2023 data, apart from Libya, which shows 2020 data.

⁵ East Africa: Djibouti and Eritrea reported for the first time in 2023, with relatively low scores, which explains the apparent decrease in score in East Africa from 2020 to 2023.

2. Disaster Risk Reduction

Status and progress

From 2017 to 2023, all regions in Africa have progressed on the implementation of DRR for water-related disasters. However, despite steady progress, implementation remains medium-low at continental level (49%), and progress is insufficient for the continent or any subregions to reach the 2030 target of very high implementation (figure 2).

At regional level, the level of implementation is higher in Southern and North Africa (62% and 60% respectively), with nearly all countries reporting in these regions having a national DRR strategy or plan in place. Additionally, in North Africa, 4 out of 6 countries (Algeria, Egypt, Morocco, Tunisia) report having operational early-warning systems for flood and/or drought.

While West Africa presents a lower implementation level (49%), 13 out of 16 countries have a national DRR strategy or plan in place (all apart Cabo Verde, Gambia and Guinea-Bissau), Gambia and Cabo

Verde have formulated DRR initiatives through projects, and 10 countries have operational early-warning systems in place for at least part of their territory (all apart from Cabo Verde, Gambia, Guinea-Bissau, Liberia, Senegal).

Finally, while Central and Eastern Africa both show important progress on DRR implementation since 2017, with Central Africa's score progressing by nearly 20%, their implementation levels remain under 40%. In both regions, most countries have strategies and plans in place for DRR, but implementation is insufficient, with only 2 countries in Central Africa (CAR, Chad) and one country in Eastern Africa (Kenya) reporting having operational early-warning systems for drought and/or floods in place.

Action needs to be prioritised in Eastern and Central Africa, as well as those countries significantly lagging behind in Western Africa (Guinea-Bissau, Gambia, Cabo Verde).

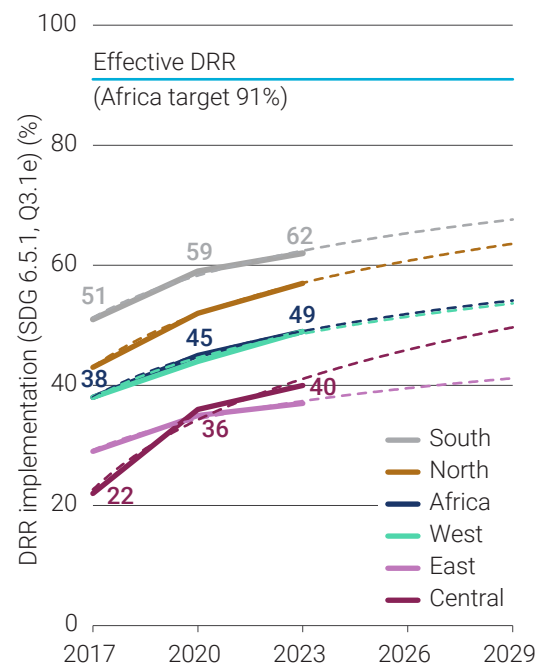
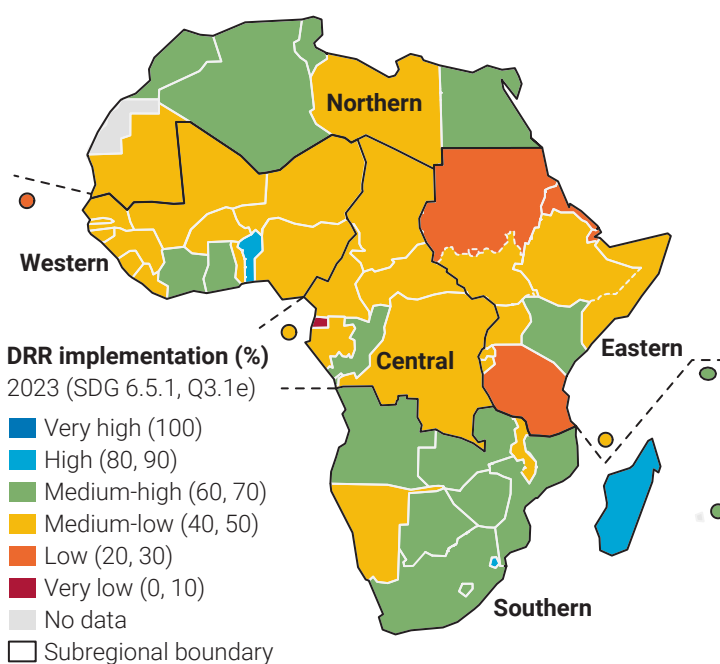


Figure 2: Water-related Disaster Risk Reduction implementation (%) 2023 or most recent (left) and progress (right).

Challenges

Three commonly reported barriers are:

1. Lack of adequate technology and data to inform forecasting and early-warning systems.
2. Lack of awareness raising on disasters to the population and institutions and capacity-building on disaster response mechanisms.
3. Lack of stable funding streams to implement DRR strategies and plans.

Countries report that infrastructure, such as hydromet stations, is insufficient or inadequate to monitor hydrological variables sufficiently. Additionally, poor data-sharing and coordination between sectors and institutions exacerbate challenges regarding insufficient data. It is then reflected in existent early-warning systems which might not be as reliable as intended. In addition to a lack of data and monitoring, countries cite a crucial need to raise awareness about disasters and response mechanisms among the public, as well as institutions and the private sector. Capacity building is necessary to ensure sufficient preparedness throughout the population. Additionally, at the institution level, managers need increased capacity-building on DRR tools such as early-warning systems to inform decision-making.

Without stable funding streams directed towards DRR and early-warning systems from national budgets and international funding mechanisms, countries are struggling to implement their national DRR plans, failing to accelerate progress.

Recommendations

- Support countries with no DRR plans as a priority.
- Countries with basin organisation-based early warning systems (EWS) generally score higher than others: invest in basin organisations to deploy such systems for better data collection and EWS, including at the transboundary level.
- Enhance strategies to leverage national and international financing to develop and upgrade technical tools such as EWS and precipitation models for DRR. Part of the budget should be dedicated to train personnel on their use.
- Undertake actions that support the Sendai Framework for DRR ([targets E and G](#)), and the UN Secretary General's [Early Warnings for All](#) initiative.
- Use and strengthen existing cross-sector plans, coordination mechanisms and projects, such as climate change adaptation or Nature-based Solutions (NBS), to ensure effective coordination.

3. Climate Resilience

Why coordinating climate and water management action matters

Using IWRM approaches – cross-sector, participatory management at the basin scale – in climate change adaptation efforts, presents a great opportunity to build resilience to climate change impacts.

Increasing resilience to climate change goes hand in hand with sustainable water resources management, as showcased by countries in their National Adaptation Plans (NAPs), where 53 out of 59 countries globally defined water as a priority sector for climate change adaptation (CCA) ([NAP Global network 2025](#)).

Integrating IWRM as a solution for CCA promotes a multi-sectoral and coordinated approach for countries to successfully reduce the impacts of water-related disasters. IWRM provides an opportunity to mainstream solutions such as NBS or Ecosystem-based Adaptation (EbA) in water resources management, which is crucial to address both the climate and biodiversity crises and increase climate resilience ([GIZ 2021](#)). IWRM and CCA are interrelated, meaning progress on one will advance the other, further contributing to progress on SDG 6 (Clean Water and Sanitation) and SDG 13 (Climate Action), which are linked through CCA action ([UNDESA and UNFCCC 2023](#)).

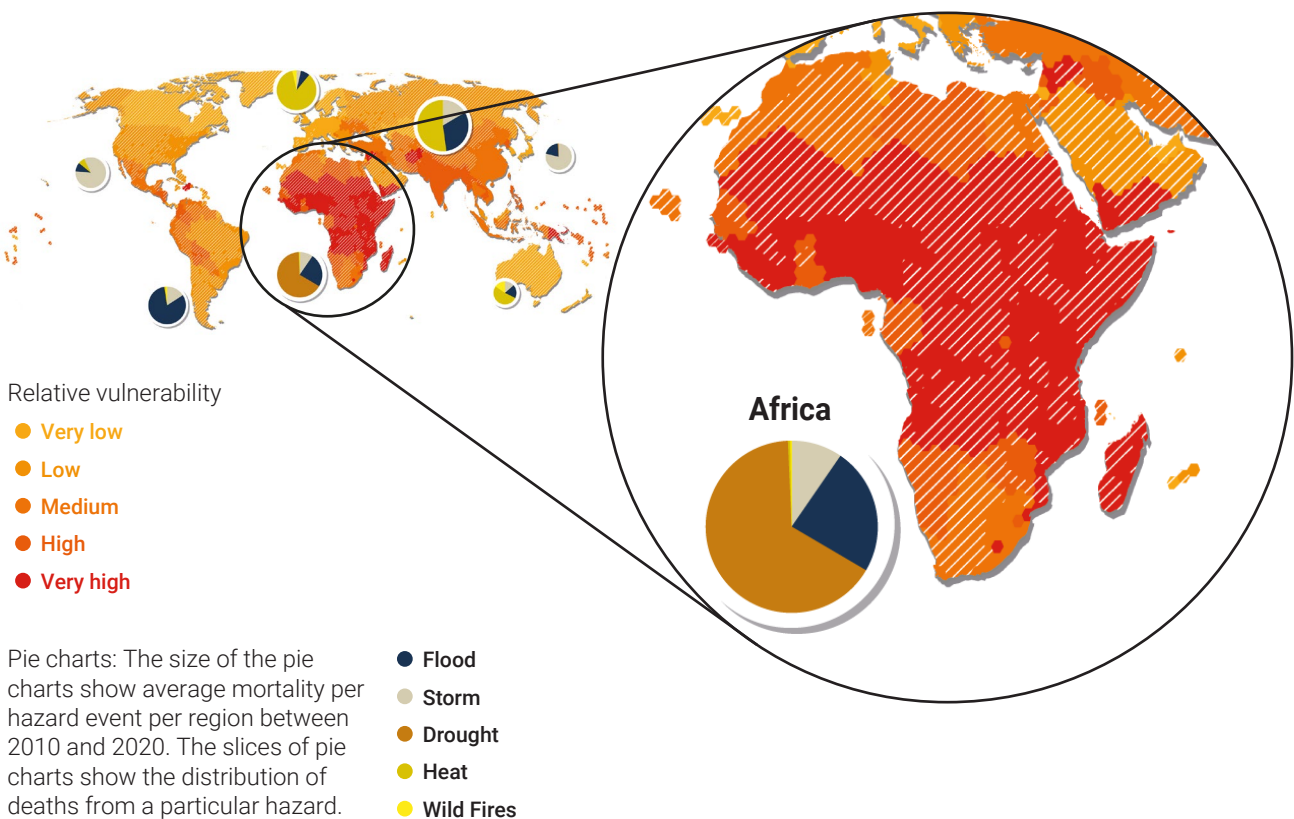


Figure 3: Africa is one of the most vulnerable regions to climate impacts, including droughts and floods ([IPCC 2022](#)).

Climate-water action is gaining political momentum globally, as demonstrated by increasing attention on water at [COP27](#), [COP28](#), [COP29](#), and [UNEA-6](#), the 2023 UN Water Conference, and the 2024 World Water Forum. At the continental level, the Continental Africa water Investment Programme ([AIP](#)), the African Development Bank [Water Strategy 2021-2025](#), the revised [African Water Facility Strategy 2017-2025](#), and AMCOW's strategy 2018-2030, all have a strong focus on climate resilience in the context of water resources management and WASH.

Status

Most countries have strong links between climate and water in planning and policy frameworks. And, while many have some form of coordination mechanisms between climate and water institutions and financing mechanisms, and have various capacity development initiatives, many still face challenges outlined below.⁶ The following challenges and recommendations are based on the analysis of country responses to 6.5.1 survey. Country examples can be found in the [Supplementary Information](#) to this Technical Note.

Challenges

- Insufficient coordination between authorities at different levels, and between sectors, is a recurrent barrier for countries to successfully integrate IWRM into climate actions.
- Many countries lack the human, institutional and technical resources for integrating IWRM as a climate adaptation solution.

Recommendations

- Increase capacities for quantifying the costs and benefits of integrated IWRM and CCA planning and implementation.
- Increase climate-water coordination, including designing and implementing IWRM and climate plans, and enhancing technical and institutional capacity on IWRM and climate action.
- Employ existing international support mechanisms (such as the AIP's National Climate-Resilient Water Investment Programmes and [SDG 6 IWRM Support Programme](#)) to provide technical and financial assistance to coordinate integrated planning processes and systematically mainstream climate adaptation in national IWRM action plans and vice versa.
- Position IWRM in national climate change policy, particularly NDCs, as a means of leveraging finance at scale.
- Explore the opportunities for leveraging climate funding to implement IWRM, building on experiences of many countries that have done so, including through arrangements such as the Green Climate Fund (GCF), the Adaptation Fund, and the Global Environment Facility (GEF), as well as multilateral and bilateral climate funding.

⁶ The data for status, challenges and recommendations are drawn from country responses to the 2023 SDG 6.5.1 survey, which includes "climate change considerations" free-text fields for five questions: 1.1.c National IWRM plans or similar; 2.1.b Coordination between national government authorities representing different sectors on water resources, policy, planning and management; 2.1.e Developing IWRM Capacity; 3.1.e Management of water-related disasters; 4.1.b National budget for IWRM elements.

4. Financing for Water Resources Infrastructure

Lack of financing, particularly domestic finance sources, remains one of the major barriers to accelerating IWRM implementation. This hampers the ‘operationalization’ of IWRM.

This includes financing for the ‘softer’ elements of IWRM related to ensuring institutions have the resources available to develop, implement, and monitor their various plans and management instruments, but also includes the revenue-raising mechanisms needed to secure investments in water resources infrastructure and ongoing financing. This section focuses on the latter.

Status and progress

- Data across 2017, 2020, and 2023 shows that while there is some progress on availability of budget for water resources infrastructure, the continent and all subregions are off-track for achieving the goals of Agenda 2030.
- Sub-national and basin level budgets available for water resources infrastructure are less prominent than national budgets, which may demonstrate that catchment planning is not fully integrated into national budgetary considerations.
- North Africa is accelerating consistently with budgetary allocations (59%), while Southern Africa is middling (41%), and West (31%), Central (28%) and East (26%) are scoring low.
- Globally, as in Africa, the level of implementation in different aspects of the financing dimension of IWRM is lower than the other dimensions.

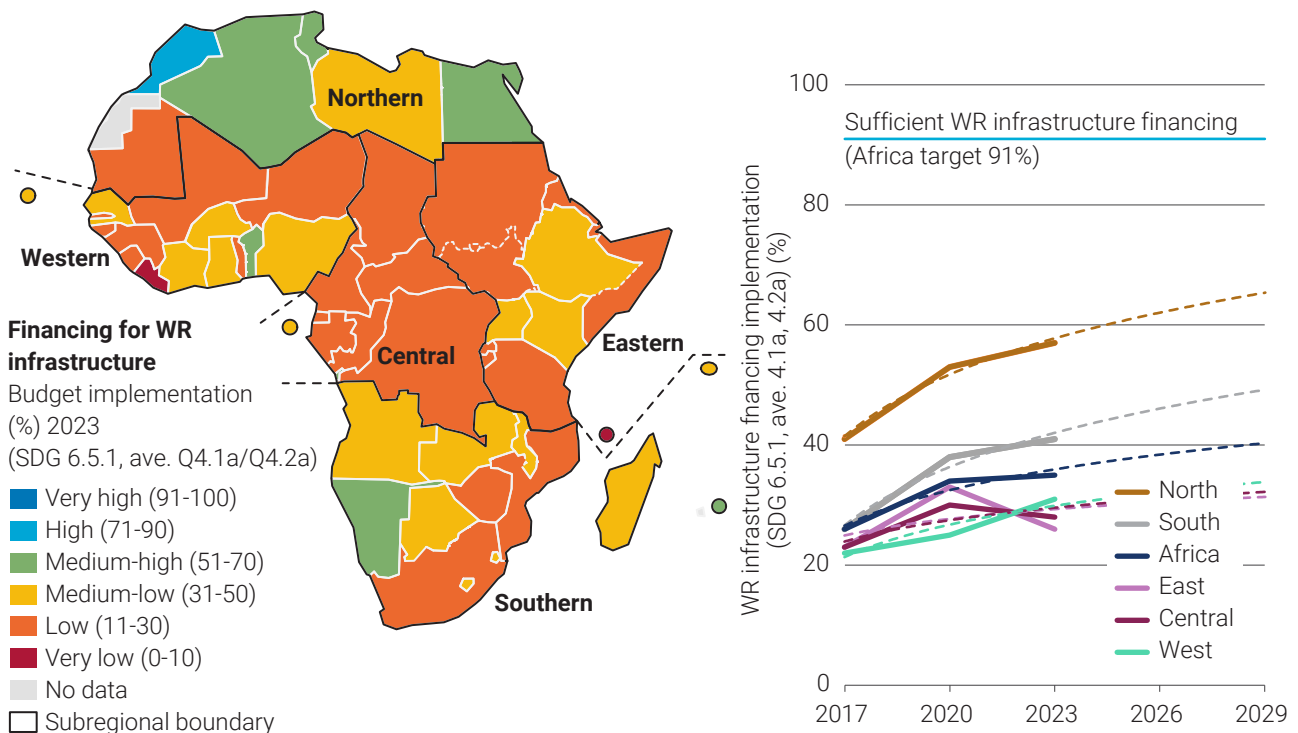


Figure 4: Financing for water resources infrastructure (%) 2023 or most recent (left) and progress (right)⁷

⁷ This data is an average of SDG 6.5.1, questions 4.1a (national level) and 4.2a (sub-national or basin level), on “budgets for water resources infrastructure (investment and recurrent costs)”. For East Africa, the decrease from 2020 to 2023 is mainly due to Djibouti and Eritrea reporting for the first time, with relatively low scores. For Central Africa, the decrease from 2020 to 2023 is mainly explained by a lower, but likely more accurate, score given by Cabo Verde.

Challenges

- Insufficient finance constrains the implementation of integrated water resources management, limiting monitoring networks and infrastructure development, institutional capacity, and the application of management instruments.
- Around 40% of African countries report negligible revenue raising for water management and infrastructure, and more effective mechanisms are needed in almost every single country.⁸

Recommendations

- Develop and implement revenue-raising and cost recovery arrangements, including through cross-sector approaches, ensuring these are backed by the appropriate legislative frameworks and institutional capacity to implement them (box 1)
- Make the case that investments in water management and infrastructure support other economic sectors and multiple development objectives, such as those related to food and energy security, to secure greater allocations from national budgets for implementing IWRM (for example, see Tanzania's "[Valuing Water](#)" report).
- Addressing the above actions in a coordinated manner will have greater impact than if they are undertaken separately. For example, by applying the Water-Energy-Food-Ecosystems (WEFE) nexus lens, cost recovery would not only be considered through water revenues, but for example also in revenues for food and energy production. Similarly, national budgets related to agriculture and energy could consider earmarking contributions to ensure water security, to meet objectives in those sectors.

Box 2: Burkina Faso is prioritizing revenue-raising, but more needs to be done.

The revenues collected through the national "Financial Contribution for Water" mechanism are increasingly considerable and allow the operation of water agencies. The main revenue is through a tax on raw water withdrawals, allowing the mechanism to contribute 22% of the total budget for the national IWRM plan, and the financing of basin-level plans. It is necessary to ensure that all aspects of the mechanism are operationalized in order to recover revenues specific to the water sector that allow it to finance itself. Application of the polluter-pays principle, backed by the relevant laws and decrees, is also needed. In addition, State commitments to the annual budget need to be realized. Source: [SDG 6.5.1 IWRM 2023 survey, Burkina Faso](#): question 4.2b (score of 60%), and Annex B.

⁸ SDG 6.5.1, Q4.2b. See [2024 global 6.5.1 progress report](#), section 2.2, financing section.