African Union

Africa's Rising Investment Tide:

How investment partnerships will mobilize USD$30 billion/year to achieve water security and sustainable sanitation in Africa

International High-Level Panel on Water Investments for Africa



March 2023

International High-Level Panel on Water Investments in Africa Report

How to Mobilise US$30 Billion Annually to Achieve Water Security and Sustainable Sanitation in Africa

Published by the International High-Level Panel on Water Investments for Africa. The Panel was formally launched on 25 March 2022, during the 9th World Water Forum in Dakar, by the President of the Republic of Senegal His Excellency Macky Sall.

Download the full report: https://aipwater.org/high-level-panel/

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Foreword

Water remains a pervasive challenge for Africa with grave consequences for our people, our communities, and our economies. So many of our developmental aspirations – health, climate resilience, prosperity, equitable economic growth, and peace – are tied up in water security. We cannot advance our collective development agenda when one in three Africans faces water scarcity.

This report by the International High-Level Panel on Water Investments for Africa is about opportunity. Africa is a continent of opportunity. By 2030, young Africans will constitute 42% of global youth. Africa's young people can be the foundation of global sustainable development but only if we invest in them now by securing water security and sustainable sanitation that can support better health outcomes, education for both boys and girls, food security, economic prosperity that is shared by all, as well as safe and climate resilient communities.

Investment in climate-resilient water and sanitation has an economic return of US$7 for every US$1 invested. It is an equitable approach to addressing multiple development priorities and necessitates political prioritisation at the highest level.

It is my honour to serve as Co-Chair of the International High-Level Panel on Water Investments for Africa, with my fellow Co-Chairs: H.E. H.E. Hage Geingob, President of the Republic of Namibia; H.E. Mark Rutte, Prime Minister of the Netherlands; and Alternate Co-Chair H.E. Jakaya Kikwete, Former President of the United Republic of Tanzania.

The Panel was launched during the 9th World Water Forum March 2022 in Diamniadio, Senegal in alignment with one of the key outputs from that event – the Blue Deal for Water Security for Peace and Development. The Dakar Blue Deal outlines a set of five principal domains for action: acceleration of the implementation of the rights to water and sanitation, ensuring the availability and resilience of water resources, ensuring adequate financial resources to invest in water and inclusive water governance, and enhancing cooperation in the domain of water and sanitation.

As the 9th World Water Forum was a pathway to the mid-term Comprehensive Review of Implementation of the UN Decade on Water and Sanitation, it is significant that the Panel's report forms part of the commitments in the Water Action Agenda towards achieving Sustainable Development Goal (SDG) 6 and other water-related goals and targets.

At least an additional US$30 billion per year needs to be invested to meet SDG 6 target on water security and sustainable sanitation in Africa. This report presents pathways for mobilising at least US$30 billion per year by 2030 and the actions that Africa and its development partners can take to remove systemic obstacles to investment in water security: ensuring strong water governance with robust national water policies; effective regulations and strategies that are multisectoral, comprehensive, and gender transformative; mobilising domestic resources; and securing global and continental finance.

The International High-Level Panel on Water Investments for Africa stands in commitment to cross-sectoral political leadership at the highest level, to tracking progress and holding each other mutually accountable, to exploring new sources of funding, and to strengthening institutional regulations for water investments.

We invite African governments, development partners, finance institutions, civil society organisations and the global water community to seize the opportunity presented here. A prosperous, peaceful, and equitable Africa is possible for every child, every farmer, every entrepreneur, every African. Let us dedicate ourselves to rise together.



His Excellency Macky Sall

President of the Republic of Senegal

Co-Chair of the International High-Level Panel on Water Investments for Africa

Acknowledgments

The International High-Level Panel on Water Investments for Africa acknowledges with immense gratitude the contributions of the AIP Steering Group, AIP Expert Advisory Core Group, AIP Technical Working Group, and Independent Reference Group who guided the development of this report.

The AIP Steering Group, Expert Advisory Core Group, Technical Working Group is made up of the following organisations:

African Union Commission; African Union Development Agency-NEPAD; African Ministers' Council on Water; World Bank Group; African Development Bank; United Nations Development Programme; United Nations Children's Fund – UNICEF; Development Bank Southern Africa; the Sherpas for the High-Level Panel Co-Chairs from Governments of the Republic of Senegal, the Republic of Namibia, and the Kingdom of the Netherlands; Organisation for Economic Co-operation and Development; Global Water Partnership Africa Coordination Unit; World Health Organization; United Nations Industrial Development Organization; Food and Agriculture Organisation; International Water Management Institute; United Nations Environment Programme; International Union for Conservation of Nature; Stockholm International Water Institute; UNDP Cap-Net; C40 Cities Climate Leadership Group; Global Centre for Adaptation; AUDA-NEPAD Centre of Excellence on Science, Technology and Innovation; Sanitation and Water for All; Alliance for Global Water Adaptation; CARE International; ANEW and Africa Investor.

The Panel also acknowledges the ongoing support provided by the International High-Level Panel on Water Investments for Africa Convenors' Secretariat, hosted by Global Water Partnership Africa Coordination Unit.



List of Acronyms

AAAP	Africa Adaptation Acceleration Program
AIP	Continental Africa Water Investment Programme
AMCOW	African Ministers Council on Water
AUDA-NEPAD	African Union Development Agency- New Partnership for African Development
AWF	African Water Facility
BRICS	Brazil, Russia, India, China, and South Africa
CPIA	Country Policy and Institutional Assessment
DAC	Development Assistance Committee
DRM	Domestic Resource Mobilisation
GDP	Gross Domestic Product
GLAAS	Global Analysis and Assessment of Sanitation and Drinking Water
GWP	Global Water Partnership
IIAG	Ibrahim Index of African Governance
IMF	International Monetary Fund
IWRM	Integrated Water Resources Management
MFIs	Microfinance Institutions
NDCs	Nationally Determined Contributions
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PPP	Public-Private Partnership
SDG	Sustainable Development Goal
SDR	Special Drawing Rights
TA	Technical Assistance
UN	United Nations
WASH	Water Sanitation and Hygiene
WASSMO	Water and Sanitation Sector Monitoring and Reporting System
WHO	World Health Organization

About the Continental Africa Water Investment Programme (AIP)

The Continental Africa Water Investment Programme (AIP) was adopted by the Assembly of the African Union Heads of State and Government as part of the Programme for Infrastructure Development in Africa – Priority Action Plan 2 (PIDA-PAP 2) during the 34th ordinary session of the African Union Summit on 7 February 2021.

Delivery of water investments across Africa is significantly below target in meeting the continent's growing needs. It is estimated that at least US$30 billion per year needs to be invested to meet the Sustainable Development Goal (SDG) 6 target on water and sanitation. Currently, only US$10-US$19 billion is invested each year. The AIP aims to close the water investments gap by mobilising at least an additional US$30 billion per year by 2030 and creating five million jobs towards the African Water Vision 2025 and SDG water related targets in 2030.

His Excellency Macky Sall, President of Senegal and then Chair of the African Union, formally launched the International High-Level Panel on Water Investments for Africa during the 9th World Water Forum in Dakar, Senegal, in March 2022. The Panel is convened by seven agencies who jointly adopted a resolution to convene the Panel in August 2021: the African Ministers Council on Water, African Union Development Agency (AUDA-NEPAD), African Development Bank, UNDP, UNICEF, Global Centre on Adaptation and Global Water Partnership. The Panel draws representatives from current and former Heads of State as well as other global leaders.

The mandate of the International High-Level Panel on Water Investments for Africa is to drive global political mobilisation and international engagement to meet the socio-economic needs of the continent, achieve SDG 6 and other water-related goals, and address the twin challenge of climate change and the COVID-19 pandemic.

This report meets a specific objective of the AIP High-Level Panel to develop a high-level report and an investment plan with actionable pathways for mobilising US$30 billion annually by 2030, implementing the AIP and closing the existing water investment gap in Africa.

This AIP High-Level Panel Report will contribute to the UN Water Conference in March 2023 in New York, USA, where it will be launched. It will inform the High-Level Panel investment plan that will be developed following the UN Water Conference. It draws together several other initiatives and partners of the AIP and presents pathways to achieve water security and sustainable sanitation.



International High-Level Panel on Water Investments for Africa and Invited Members

1. H.E. Macky Sall, President of Republic of Senegal, Chair-African Union (2022/23) (Co-Chair)
2. H.E. President Hage Geingob, President of the Republic of Namibia (Co-Chair)
3. H.E. Mark Rutte, Prime Minister of the Kingdom of the Netherlands (Co-Chair)
4. H.E. Jakaya Kikwete, former President of United Republic of Tanzania (Alternate Co-Chair)
5. H.E. Matamela Cyril Ramaphosa, President of The Republic of South Africa
6. H.E. Samia Suluhu Hassan, President of the United Republic of Tanzania
7. His Majesty King Mohammed VI, King of Morocco*
8. H.E. Félix Tshisekedi, President of the Democratic Republic of Congo*
9. H.E. William Samoei Arap Ruto, President of the Republic of Kenya
10. H.E. Hakainde Hichilema, President of the Republic of Zambia
11. H.E. Adama Barrow, President of the Republic of The Gambia
12. H.E. Olaf Scholz, Chancellor of Germany*
13. H.E. Sanna Marin, Prime Minister of Finland*
14. H.E. Ulf Kristersson, Prime Minister of Sweden*
15. H.E. Mette Frederiksen, Prime Minister of Denmark*
16. H.E. Narendra Modi, Prime Minister of India*
17. H.E. Moussa Faki, Chair of the African Union Commission
18. Dr. Akinwunmi A. Adesina, President of the African Development Bank*
19. Nardos Bekele-Thomas, Chief Executive Officer of AUDA-NEPAD
20. Achim Steiner, Administrator of United Nations Development Programme (UNDP)
21. Catherine Russell, Executive Director of United Nations Children's Fund (UNICEF)
22. Prof. Dr. Patrick Verkooijen, CEO of the Global Center on Adaptation
23. Pablo Bereciartua, President of the Global Water Partnership Organisation
24. Amb. Prof. Howard Bamsey, Australian National University

* Invited



Africa's Rising Investment Tide:
How investment partnerships will mobilize USD$30 billion/year to achieve water security and sustainable sanitation in Africa



Every US$1 invested in climate-resilient water and sanitation returns at least US$7

Investing in Africa's water security will realise rights to water, health, education, energy, food security, a healthy environment, gender equality, and many other societal gains for this generation – and those to come.

A watershed investment partnership moment

African and global institutional investors hold significant pools of capital. African governments must tap into these pools of capital in order to mobilise an additional US$30 billion/year towards water security and sustainable sanitation in Africa. This unprecedented acceleration in both the pace and scale of financing, demands changes to the status quo that is reflective of the current global water and climate emergency.

African governments can unlock and scale an unprecedented pipeline of investable water by forging closer institutional investor-public partnerships and greater risk sharing between public and private finance. Achieving this is both a continental and global imperative and offers a significant investment opportunity for African and global institutional investors with long-term patient capital. Multi-lateral development banks as well as financial and private institutions have a crucial role to play.

Water security is a catalyst for Africa's growth and prosperity

Water security in Africa is central to the continent's, and the world's, sustainable developmental ambitions. The International High-Level Panel on Water investment for Africa calls on Heads of State and global investments leaders to seize this watershed investment partnership moment and double the current level of annual water investments by 2030.

The cost of inaction is too high, nearly US$200 billion/year

African countries are currently losing up to US$200 billion/year due to insufficient investment, coupled with the impacts of climate change and inefficiencies. Africa's population is forecast to grow to 1.6 billion by 2030. The continent will need to produce at least 50% more food and at least ten times more water for energy production to enable growth and development. By 2050, 6 out 10 people in Africa will live in urban areas and 70% of them will be children and youth.

Sub-Saharan Africa loses 5% of its GDP annually (estimated at US$170 billion per year) because of a lack of water, contaminated water, or poor sanitation. Every year, 40 billion hours of otherwise productive time is spent collecting water – a burden disproportionately shouldered by women and girls.

By 2050, climate impacts, largely driven by water-related hazards, could cost African nations US$50 billion annually. Unpredictable floods and droughts aggravate displacement, migration, and food insecurity; they inflict costly damage to infrastructure, devastate livelihoods, and biodiversity. Water pollution significantly degrades available freshwater and ground water resources, further exacerbating water insecurity. One-third of potential economic growth is forgone in heavily polluted water and threatening human and environmental well-being.

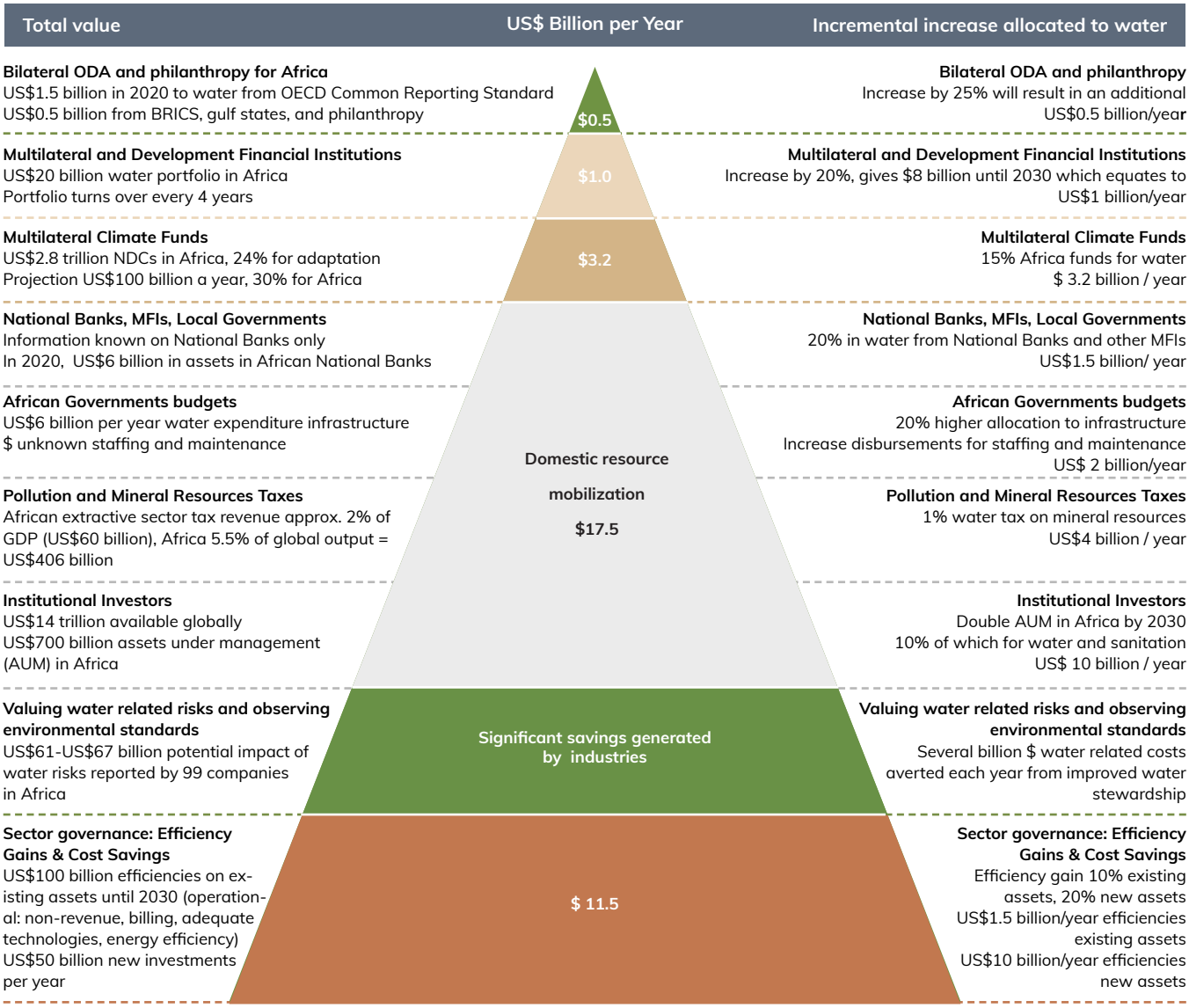
A paradigm change in water investments partnerships is needed

Delivery of water investments across Africa is below the target to meet the continent's growing needs. Currently, US$10-US$19 billion is invested each year. At least an additional US$30 billion/year needs to be invested by 2030. Approximately US$50 billion annually, or US$40 per African per year is required, to achieve water security and sustainable sanitation in Africa by 2030.

The investment gap is even larger to achieve the 2025 Africa Water Vision which requires US$64 billion/year, according to the African Development Bank.

While current sources of funding show only incremental potential for increase, there are several sources that are currently untapped or under-tapped. With appropriate government regulatory frameworks, investors must equally assume responsibility as water stewards and include the full costs of water in their balance sheets and allocate a fraction of their investment to water security.

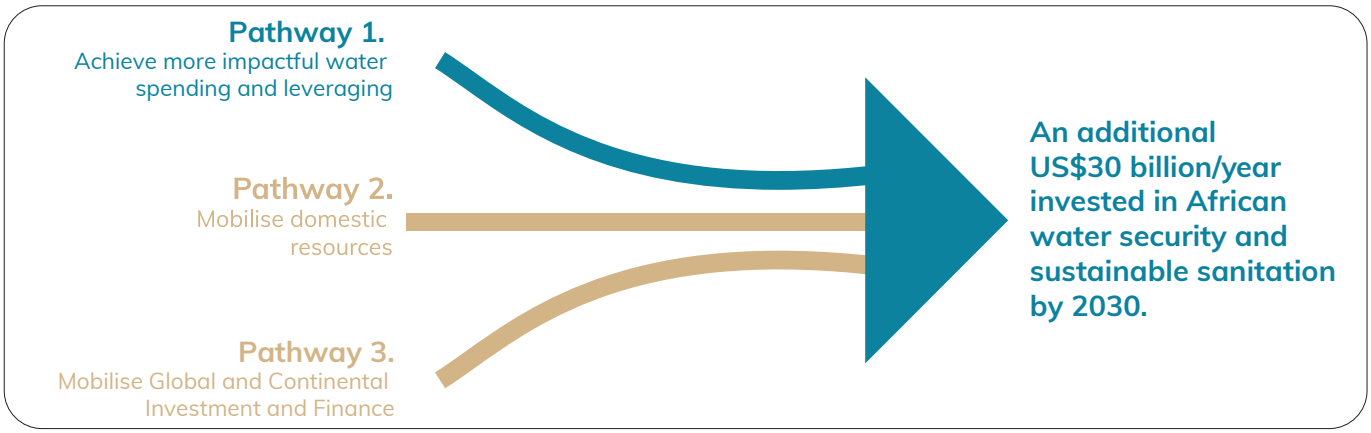
At least USD$ 30 billion additional finance could be raised for water security in Africa.



With conservative assumptions, over US$30 billion per year can be mobilised through three actionable pathways

Pathway 1 is a necessary condition to generate finance through Pathways 2 and 3. The pathways are strongly inter-connected. Underlying all pathways is high level political commitment, leadership and governance reforms that raise the attractiveness of water as an investment opportunity. A well-diversified and skilled workforce of water professionals, increasing gender balance, to deal with water insecurity and management of international waters are critical enablers of all three pathways.

Pathway 1. Achieve more impactful water spending and leveraging



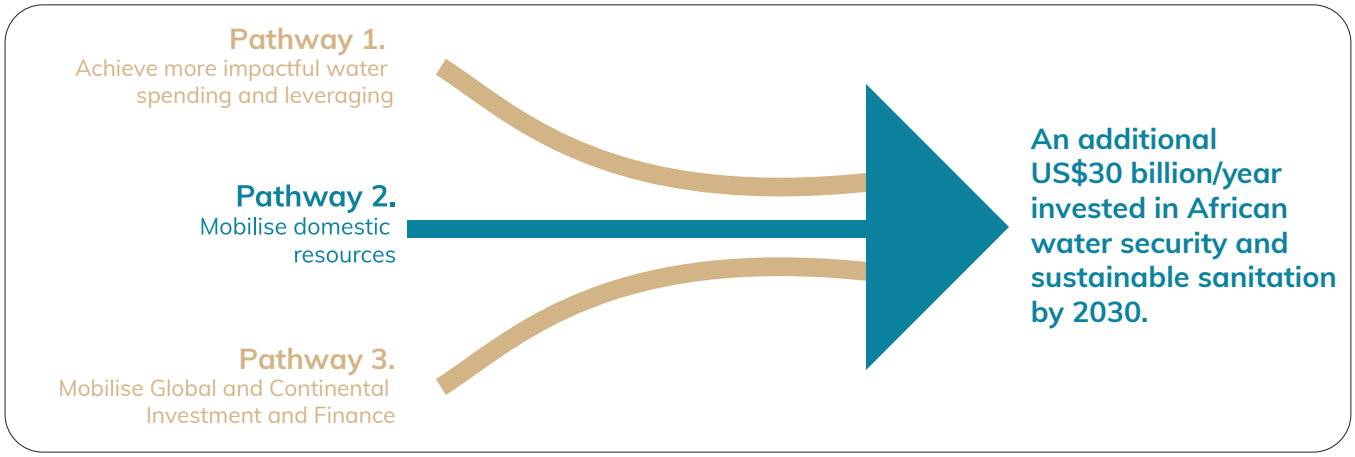
The foundation of water security is strong water governance with robust national water policies, effective regulations as well as strategies that are multi-sectoral, comprehensive, and gender transformative. Properly recognizing the true value of water to reflect its value as an input to economic growth should lead to improved water stewardship in major productive sectors with high water use, such as agriculture, energy, manufacturing, mining and others, with appropriate regulations and incentives to ensure compliance and targeted subsidies to those who need it and ensure that no one is left behind.

It is vital to strengthen data to inform investment decision making, ensure clarity in institutions' responsibilities, foster mutual accountability for results and capacities to deliver on their mandates and prepare well sequenced and prioritised bankable investment projects and pipelines.

Enforcing regulations is paramount to strengthen governance for equitable and sustainable water allocation, management, service delivery and use, and provide the right incentives and risk environment for private investments. Innovative practices and technologies can further improve efficiencies. Comprehensive and coordinated monitoring, review of sector performance will increase transparency.

Together these elements build the foundation for increased investment through Pathways 2 and 3.

Pathway 2. Mobilise Domestic Resources

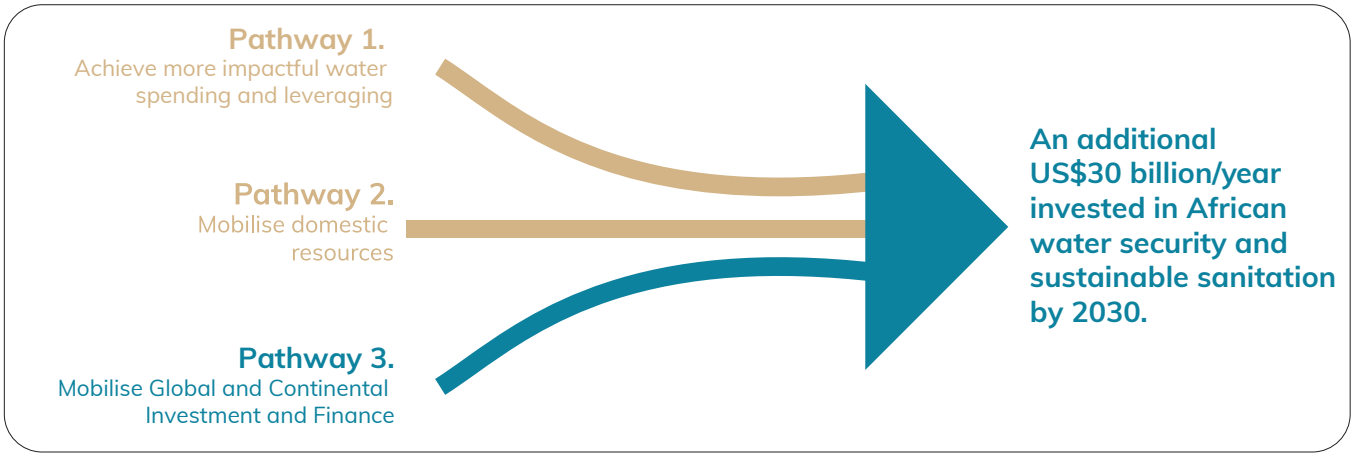


The financial performance track record and creditworthiness of service providers should be built to attract private capital and finance. Prioritise matchmaking of the supply and demand for finance with a special focus on climate resilient and blended public-private investment and gender transformative approaches. Efficient delivery modalities and investable legal and regulatory water investment regimes must be prioritised, implemented, and enforced to mobilise private capital at scale by 2030.

With an enabling environment, public development banks and microfinance institutions could also increase spending in the water sector – especially if they are mandated to do so and with appropriate risk mitigation instruments.

Transformative change towards water security will require scaling up proven innovations and moving beyond the traditional "three Ts" of water finance sources: taxes, tariffs and transfers to include a 4th "T" for 'transformative' financial flows through dedicated budget allocations for water in economic sectors and investments in agriculture, industry, mining, energy, and others. This will be additional to current allocations to water ministries for social services. A finance instrument for transformative financial flows will need to be developed.

Pathway 3. Mobilise Global and Continental Investment and Finance



A significant pool of global institutional capital is seeking competitive risk-adjusted returns from bankable sectors – including aspects of the water value chain. To attract this investment, legal and regulatory frameworks with appropriate risk-sharing mechanisms among public and private investors must be pursued. The frameworks must be supported by the recognition of water and wastewater as a valuable asset classes.

Companies should do more to conserve, recycle, reuse, and protect water resources through internalising the full costs of water across all their operations, and embed transformative financial flows through dedicated budgets for water in their balance sheets and operations.

Water is a central part of climate adaptation and needs to be prioritised within global and regional climate finance and investment. ODA should be used to leverage much greater finance through guarantees schemes, strengthen systems, project development with funding for early-stage project pipeline development, risk management, and results-based financing.

International finance institutions and multilateral development banks should champion water at the highest levels and crowd-in large pools of institutional private capital. Reform of global financial systems, technology transfer, and South-South collaboration are key enablers of access to affordable capital, transboundary, and international cooperation.

Achieving water security for all on the continent is possible by 2030 and within the power of African leaders.

To mobilise at least additional US$ 30 billion a year, the High-Level Panel proposes a 5-point Action Plan for Heads of State and governments, business and global leaders, to support the implementation of the three actionable pathways.

1. Establish cross-sectoral political leadership at the highest level, with commitment to substantially increase public budgets and investments for water security and sustainable sanitation. Water affects all economic and social sectors. Cross-sectoral leadership is critical. Make increased water security and sustainable sanitation a national and continental priority.

2. Track progress and enhance mutual accountability for results in the mobilisation of water investments and in peer review mechanisms at continental, regional, national, sub-national, and community levels. Recommit to allocation of at least 5% of national budgets for the water and sanitation sector and 0.5% of GDP per annum for sanitation and hygiene programmes.

3. Mobilise new sources of funding and innovative finance, such as institutional investors. Actively support matchmaking platforms to bring together the supply and demand for finance with a special focus on climate resilient, blended public-private finance, and gender transformative approaches.

4. Strengthen institutional regulation for water investments, create incentives and penalties for increased water efficiency across multiple industries to lead water stewardship efforts, biodiversity, and ecosystem protection.

5. Use ODA to de-risk water investments and leverage larger funding streams. Improve implementation capacity and quality of bankable projects, and strengthen international cooperation by aligning technical and financial support with regional, transboundary and national water investment programmes, strategies and plans.

THE HIGH-LEVEL PANEL INVITES AFRICAN HEADS OF STATE AND GLOBAL LEADERS TO JOIN EFFORTS TO DOUBLE CURRENT WATER INVESTMENTS AND IMPLEMENT NATIONAL WATER INVESTMENT PROGRAMMES BY 2030.



Chapter 1: Why invest in water security and sustainable sanitation?



The cost of inaction is too high: nearly US$200 billion per year

Water security is central to Africa's future growth and sustainable development, but countries are currently losing up to US$200 billion per year due to insufficient investment and inefficiencies.

Africa is the region most affected by climate shocks, which are primarily felt through water. Over 130 climate change related disasters were recorded on the continent in 2020-2021. Unpredictable floods and droughts aggravate displacement, migration and food insecurity; they inflict costly damage to infrastructure; and devastate livelihoods, quality of life, biodiversity – ultimately undermining economic growth and human security. By 2050, climate impacts, largely driven by water-related hazards, could cost African nations US$50 billion annually.[1]

Meanwhile, water pollution significantly degrades available freshwater resources, further exacerbating water insecurity. According to the World Bank,[2] an invisible crisis of water quality is eliminating one-third of potential economic growth in heavily polluted areas and threatening human and environmental wellbeing.

Over and above this, Sub-Saharan Africa loses 5% of its GDP annually estimated at US$170 billion a year[3] because of a lack of water, contaminated water, or poor sanitation. Before the COVID-19 pandemic, poor countries with improved water and sanitation services recorded annual average growth of 3.7% of GDP, while their counterparts without improved access had an average annual growth of just 0.1%.[4] Every year, 40 billion hours of otherwise productive time is spent just collecting water, which disproportionately falls on women and girls.[5]

Water security and sustainable sanitation are the basis for peace, stability, and growth

Water security and sustainable sanitation provide a foundation for overall social and economic development and are the focus of Sustainable Development Goal (SDG) 6. They are key to attaining almost all other SDGs. Water security is fundamental to transforming the African continent: boosting food security and agricultural productivity, industrial growth, public health, gender equality, education, affordable and renewable energy – including emerging innovative solutions like green hydrogen – all key ingredients for green and inclusive growth. The appropriate development, governance and use of water resources is therefore a central part of the African continent's overall development trajectory and will drive that development as well as offer significant employment opportunities.[6]

Box 1. Definitions of water security and sustainable sanitation

Water security is the reliable availability of an acceptable quantity and quality of water for drinking purposes, health, livelihoods, and production, coupled with an acceptable level of water-related risks. Water security is framed as a situation where water-related risks are managed, and water-related opportunities are captured.[7]

Sustainable sanitation is a sanitation system designed to be economically and socially acceptable, technically and institutionally appropriate, protect the environment and natural resources, and be durable (i.e., work well over the long-term). Sustainable sanitation systems meet the 'safely managed' sanitation standard by considering the entire sanitation value chain, from the experience of the user, excreta and wastewater collection methods, transportation or conveyance of waste, treatment, and reuse or disposal.[8]

Box 2. Water security and sanitation are vital to achieving all the Sustainable Development Goals



Water security and sanitation for SDG 6 "Ensure availability and sustainable management of water and sanitation for all": water resources management, efficient water use, protection and restoration of water-related ecosystems, wastewater management, and access to safe and affordable drinking water, sanitation, and hygiene (WASH).

Water and sanitation in other SDGs:

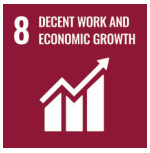
Water security for production:



Food production



Energy production



Decent work and economic growth



Industry

Water in social goals



Good health and wellbeing



Quality education



Gender equality



Basic services in human settlements



Water in climate action

Water as foundational:



Sustainable consumption and production patterns



Life below water



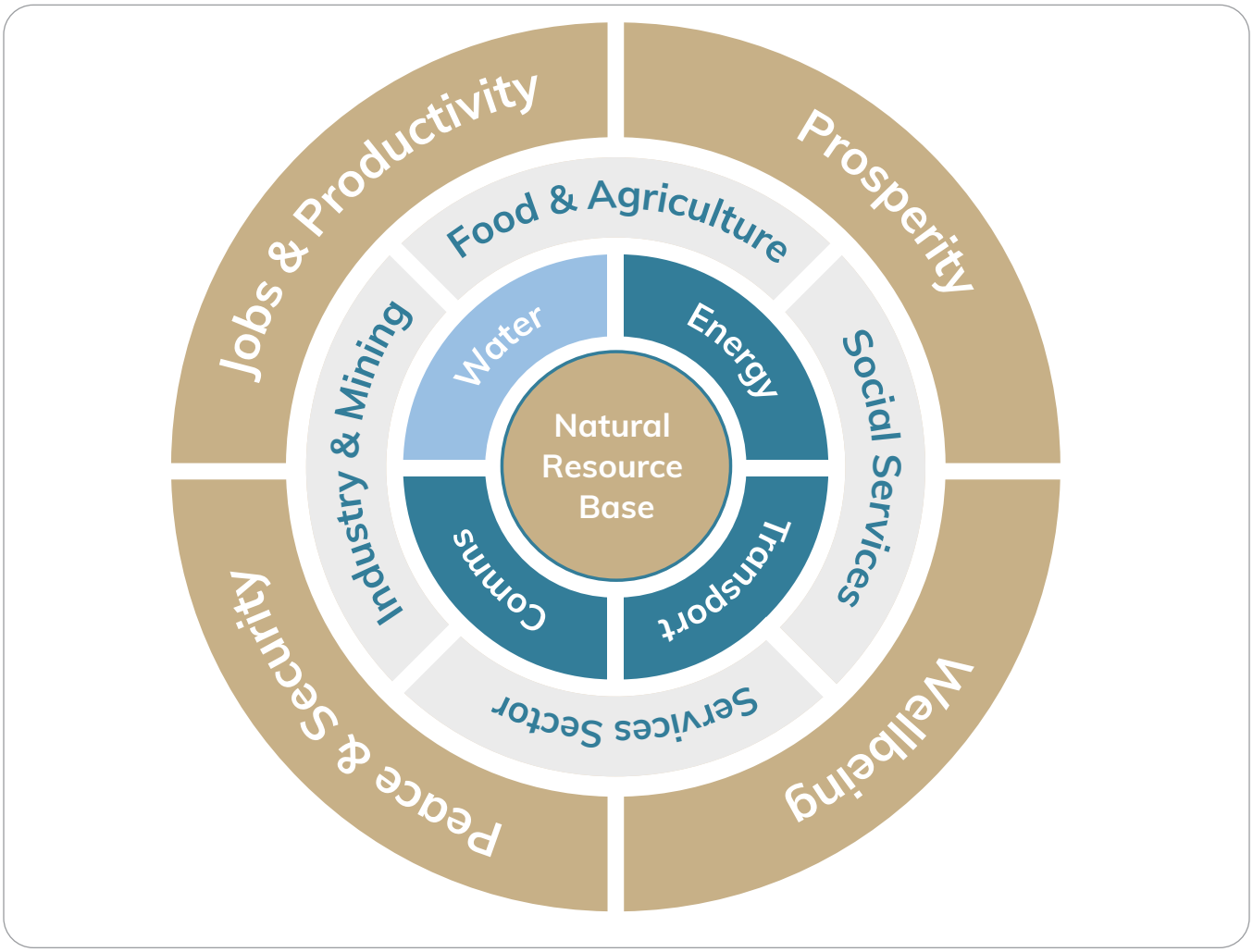
Life on land

Figure 1 represents the interconnectedness of water as a foundation of peace, human security, wellbeing, prosperity, jobs, and productivity. Water security affects the whole economy. As part of the natural resource base, the basis for productive economic sectors and revenue generation,[9] water is essential for human security.

Water resources contribute to jobs and productivity when effectively managed, developed, stored, and conveyed to be used for basic social needs and by water-dependent sectors of the economy such as agriculture, energy, transport, mining, industry and others. Implementing integrated water resource management (IWRM) provides a holistic framework for addressing different demands and pressures on water resources, across sectors and at different scales. In most cases, the costs of water infrastructure development and provision of water services are ultimately met through the benefits generated in the economic sectors.

For example, the costs of water infrastructure for hydropower and irrigation are met through revenues collected through electricity tariffs, food prices, and the costs of water for industry and manufacturing in the price of goods. The value of water includes its social or environmental value which transcend its economic worth.

Figure 1. Interconnectedness of water as a foundation of peace, human security, wellbeing, prosperity, jobs and productivity



Source: Africa Water Investment Programme (2018)[6]

While water is a factor of production in the economy, its availability and quality are significantly affected by how it is used. Water use has an opportunity cost, especially when it is in short supply. Even when in plentiful supply, the return of degraded water to a water system can render the entire water supply polluted and unusable – or less usable – for downstream users. Hence, a fair system of financing for water security and sustainable sanitation will introduce appropriate regulation, incentives, and tariffs to correct for market failures that lead to unabated water pollution and impose costs on downstream users.

Africa's population is forecast to grow to 1.6 billion by 2030, and the continent will need to produce at least 50% more food. Africa will also need at least 10 times more water for energy production to support modernisation of economies. To meet these needs, Africa must unlock its potential through innovative, cross-sectoral investment in water and reducing inefficiencies. Africa possesses large groundwater resources, yet only 5% of irrigation is with groundwater. Development of groundwater can catalyse economic growth by improving agricultural yields and crop diversity.[10] Savings from non-revenue water losses through leaking pipes and uncollected water bills, estimated at 35% of total production, could increase African water utilities revenues by as much as US$800m per year.[11]

Three out of four jobs are water dependent[12] and Africa needs to create more job opportunities, especially for its youth. Africa's population of young people will have increased by 42% by 2030, and with youth comes the opportunity to industrialise, innovate and transform Africa's economy towards prosperity and peace. A well-diversified and skilled workforce of water professionals – increasing the gender balance through women professionals in all categories – who can deal effectively with the complex issues of water scarcity, climate variability and joint management of international waters are a critical enabler of all three pathways.

There are compelling reasons to substantially increase investments in water security and sustainable sanitation. The benefit-cost ratio for climate resilient water and sanitation is estimated at 7:1 for Africa.[13] Indeed, investment in water security is widely known to deliver positive socio-economic returns. The benefits in terms of productivity, health, environmental and food security far outweigh the costs.

Table 1 provides perspectives of some global finance and investment firms towards water security.

Table 1. Global finance and investment firms' perspectives on the centrality of water security to growth development and human security.

Bank	Quote
Citi	'Water Worries: Climatic Consequences' [14]
JP Morgan	'Watching water: A guide to evaluating risks in a thirsty world' [15]
Credit Suisse	'Water: The Paramount Megatrend of our Time' [16]
Goldman Sachs	'Water could be a constraint on growth' [17]
HSB	'GDP will be severely hampered by water scarcity'[18]
Merrill Lynch	'Water scarcity a bigger problem than assumed'[19]
Morgan Stanley	'Water: The Perfect Storm' [20]
Standard Chartered	'Water – The Real Liquidity Crisis' [21]
UBS	'Water Scarcity: The Defining Crisis of the 21st Century? Internal Conference on Socially Responsible Investment' [22]

Source: Cited sources and World Wildlife Fund (2018) [23]

Water security helps guarantee human security and the national interest. For example, only 31% of Africa's arable land is under irrigation. More efficient use of water in agriculture could reduce Africa's dependence on food imports thereby protecting from the adverse effects of global food price fluctuations and safeguarding scarce international currency reserves.[24] If more food was produced in Africa instead of imported, it would lead to 239 million equivalent livelihoods in 2030 instead of 76 million today.[25] Costs of inaction on agriculture adaptation alone are estimated at US$90.7 billion.

With 90% of all disasters directly related to water and nearly 60% of climate adaptation interventions addressing water-related hazards, water is arguably the most crucial factor to climate adaptation. Water management averts significant spending to both respond to disasters such as floods and to cope with the impacts of drought and failed harvests at large scale. It also saves many tens of thousands of lives a year.[26]

We cannot live safely without water security. Water can be the basis of conflict or a weapon of war, while water diplomacy can be instrumental in peace-building initiatives.[27] Transboundary water resources are especially important in Africa, where 63 international transboundary river basins cover about 62% of the region's land area and account for 90% of the total surface water. Only 29% of transboundary river basins in Africa and fewer than 10% of transboundary aquifers are the object of transboundary water agreements. Few agreements consider changes in future water supply and quality brought about by climate-induced water variability. [28]

Inadequate drinking water, sanitation and hygiene also have major adverse health consequences. Sustainable sanitation is critical to security by protecting water resources from pollution and averting negative externalities (indirect external costs) and consequences for downstream users. Untreated release of septage and municipal wastewater through piped systems onto land and into rivers, lakes and groundwater, leads to major pollution, rendering water unusable for domestic and productive uses, impacting ecosystems and wildlife. Inadequate water, sanitation and hygiene (WASH) in institutions impacts schooling outcomes, especially for girls, and compromises the safety of the population seeking health services. Inadequate WASH also has major adverse health consequences and is responsible for at least 4% of the global disease burden, contributing to 430,000 preventable deaths each year in Africa.[29] Options for wastewater reuse and recycling can introduce additional revenue streams and investment opportunities. [30]

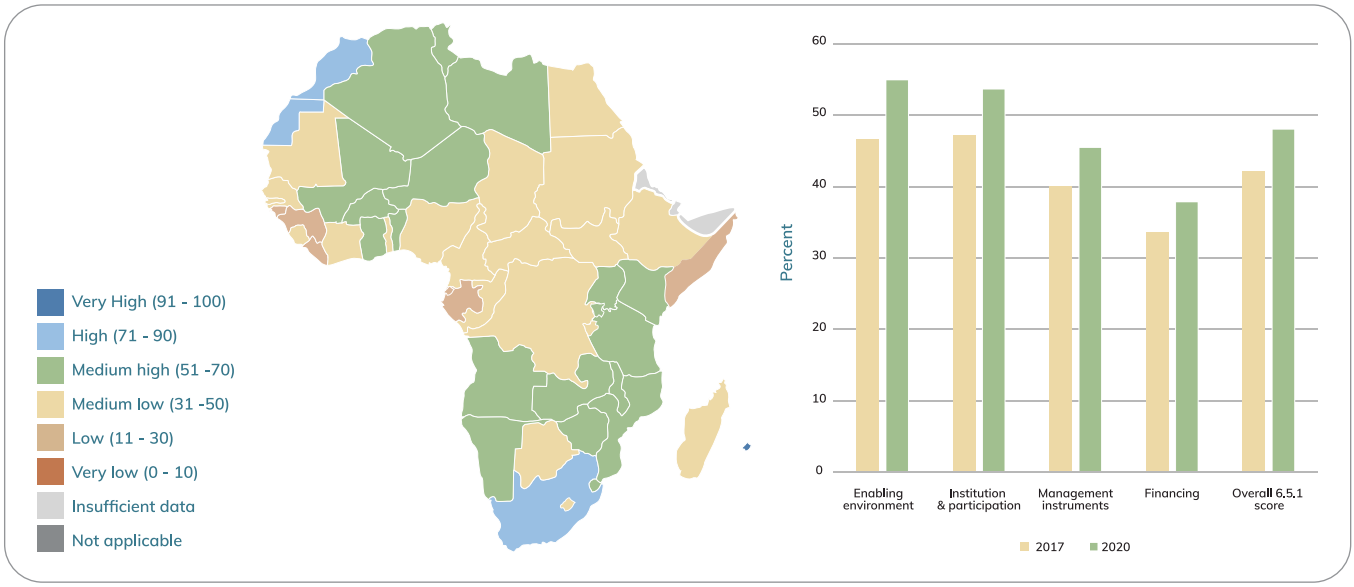


Chapter 2: The water investment gap and how to meet the social and economic needs of the continent

The finance needed to achieve water security and sustainable sanitation in Africa is approximately US$50 billion annually, or US$40 per African per year. [31,32,33] The annual water investment requirement for Africa to achieve the Africa Water Vision 2025 is US$64 billion per year, according to the African Development Bank. Currently, only US$10-US$19 billion is invested each year. This leaves an annual water investment gap of between US$45 and US$54 billion per year by 2025.

While progress has been achieved for some indicators over the past two decades, there remain gaps that need to be addressed to achieve water security [34,35] in Africa, sustain economic growth on the continent and meet SDG water related targets. Available data on SDG 6 indicator 6.5.1 show considerable variation in adoption of integrated water resources management (IWRM) across Africa (see Figure 2).[36] Most countries fall within the range 31% to 70%, meaning there are large gaps in IWRM implementation. From 2017 to 2020, the average score increased by six percentage points from 42% to 48%, with progress across all pillars; however, the pillar on financing is the weakest with the average score still below 40%.

Figure 2. Performance of IWRM in Africa (SDG Indicator 6.5.1) in 2020 (left) and IWRM scores per governance pillar for 50 African countries (right)

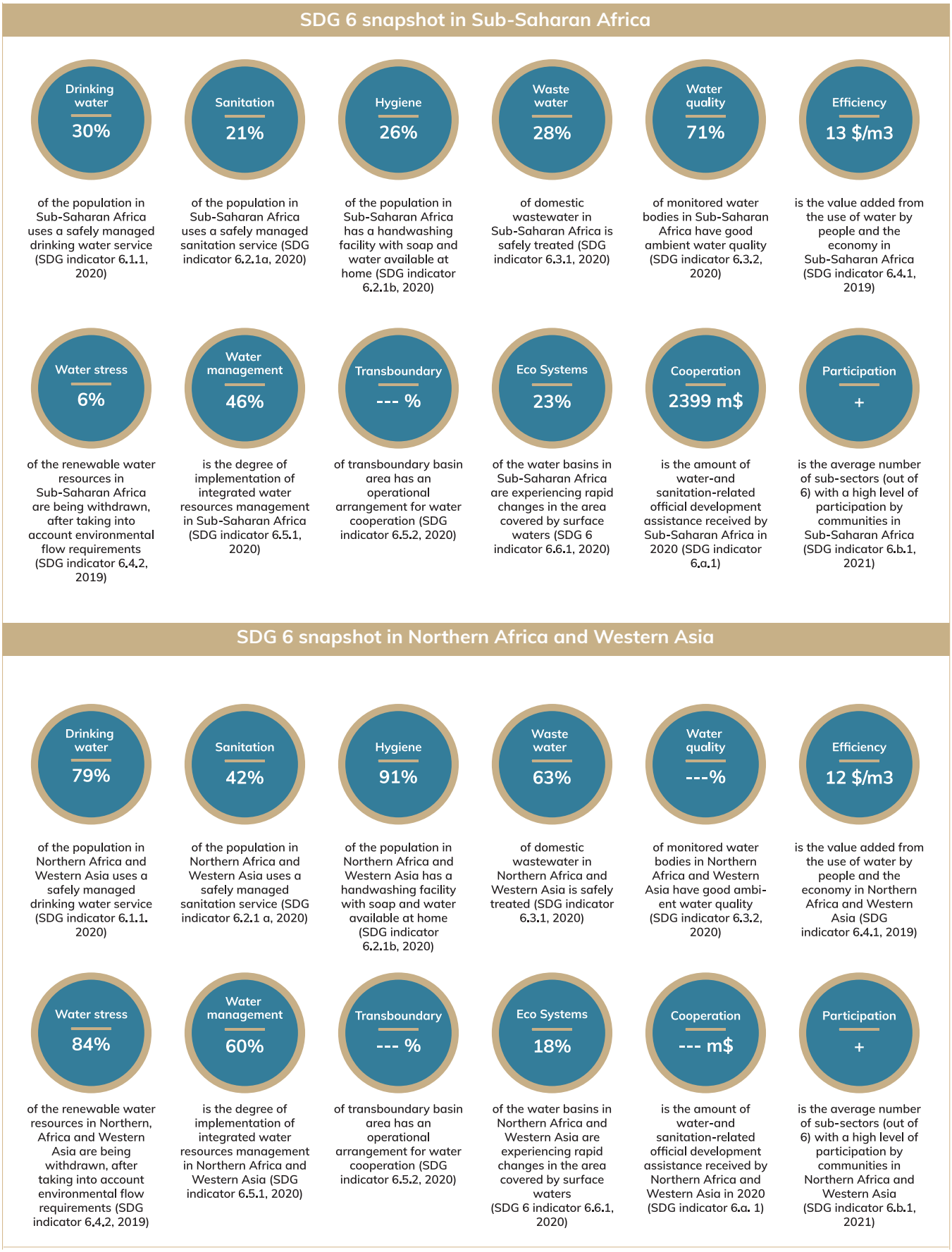


Source: SDG 6 monitoring: http://iwrmdataportal.unepdhi.org/
Note: SDG indicator 6.5.1 aggregates 32 indicators into a single score for IWRM



Figure 3 presents the status of SDG 6 indicators for Africa in the year 2020, showing all indicators to be off-track if universal access is the goal.

Figure 3. SDG 6 snapshots in sub-Saharan Africa and Northern Africa and Western Asia, year 2020



Source: UN-Water SDG6 Data Portal (2022)

A huge potential to close the finance gap

A diversity of sources provides significant potential for increasing finance for water security in Africa. Table 2 presents a summary assessment of the potential of each source to increase overall development finance, or for water and sanitation investments to capture a greater share of development finance. It also identifies how greater efficiency savings can be made.

How financing is secured will vary across the entire value chain of water resources and the type of services being provided. Investments can range from investing in water infrastructure for the abstraction of raw water, pumping stations, water distribution and treatment, wastewater treatment, or reuse of water. Water services cover a range of users for basic and productive needs and will be of different scales depending on the investment type and the population size or density involved. Furthermore, investments will also need to target systems strengthening for creating the enabling environment for water investment and deliver the required efficiency gains and cost savings.

Table 2. Summary of potential sources to increase investment for water security and sustainable sanitation in Africa

Finance source	Water and sanitation investments lead to overall increase in development finance in Africa	Water and sanitation investments benefit from an increased share of overall development finance in Africa	Sector governance: Efficiency gains and cost savings
INTERNATIONAL PUBLIC FUNDS			
Bilateral ODA and philanthropy	ODA doubles to 0.7% GDP Capture ODA from BRICS Advocacy with high-net-worth individuals and company foundations	Advocacy on socio-economic benefits and urgency of water security to reverse negative trend in ODA allocations	Output-based aid / results-based financing (RBF) Support national plans Best practice and technical assistance (TA) for operational efficiency and sustainability Strengthen enabling environment
Multilateral and Development Financial Institutions	Leverage commercial finance (blended finance)	Strengthen project pipeline to increase share of development finance for water security	
International Monetary Fund	Special Drawing Rights (SDRs)		
United Nations	No increase expected	Climate funds allocated to water (see below)	
Multilateral Climate Funds	Water raises overall financing envelope of adaptation funds	Water becomes more central to Nationally Determined Commitments and National Action Plans	
DOMESTIC PUBLIC FUNDS			
National banks, microfinance institutions (MFIs) and local government	Support municipal borrowing	Increase profile of water in national bank and MFI lending Introduce water reuse and recycling facilities Raise local pollution taxes	Address non-revenue water and leakages Invest in green infrastructure to reduce flood risks

Finance source	Water and sanitation investments lead to overall increase in development finance in Africa	Water and sanitation investments benefit from an increased share of overall development finance in Africa	Sector governance: Efficiency gains and cost savings
DOMESTIC PUBLIC FUNDS			
African government budgets	Leverage private financing Economic growth Tax collection efficiency Debt	Strengthen project pipeline Ngor commitments for sanitation and hygiene [37] Financial data transparency	Strengthen enabling environment Redirect subsidies Operational efficiency of service operators
	Water and sanitation championed in budget setting to achieve 5% of national budgets and 0.5% of GDP per annum for sanitation and hygiene programmes		
Pollution and mineral	Revenue raised through taxing water polluters		Averted water pollution through good water
Resources taxes	Revenue raised through mineral resources tax		Stewardship and compliance with revised, stricter regulations
Institutional investors	Strong project pipeline and bundling projects to create scale Tariff reform Strengthen investment environment, including regulation		Increase transaction efficiency and reduce bureaucracy
WATER USERS & WATER BUSINESSES			
Water businesses	Advocacy for water business expansion Strengthen business models and creditworthiness	Attract greater share of lending from national banks and MFIs	Operational efficiency, reduce non-revenue water and cost savings
Households	Loans to invest in WASH Growth in HH income	Spend more of household budgaet on better WASH services	Switch away from costlier WASH services
Industry Agriculture Tertiary Sector	Spend more on better water and wastewater services Fines for water pollution		Switch away from costlier water services Invest in water reuse and recycling facilities, and in catchment and storage

Solutions to transform investment in water are available

The solutions to address the factors constraining investment in water security in Africa are available and well understood. The actions to address the challenges for achievement of water security in Africa cover multiple natural pressures on water as well as manmade threats.[38] Several more recent continent-wide and national studies enable a good understanding of what is constraining water investments in Africa. Some of these factors relate to the general situation of a country, such as political stability, macroeconomic conditions, degree of transparency and accountability, and public financial management systems. Other factors are specifically related to the water and sanitation sector, such as fragmentation of financing streams, weak institutions, inadequate regulation, and operational inefficiencies of water and sanitation providers. These aspects go a long way to explaining why finance is not flowing to the water and sanitation sector.

While progress is slow and there remain many challenges, it is possible to accelerate water security for African countries by 2030. Over recent decades, many nations have made considerable progress in water resources and WASH development through both public and private investment. Much of this progress can be explained by political prioritisation, the presence of supporting policies, and strengthened institutions and capacities. Thus, there is a pathway towards water security that is well understood. Indeed, many of the challenges can be turned into opportunities for investment and accelerating development on the African continent. In other words, the approximately US$50 billion annual cost to achieve water security for all or US$40 per African per year represents hundreds of billions of dollars of potential return on investment.

Raising an additional US$30 billion by 2030 is possible given the hundreds of billions of dollars that could be invested in the African continent under the right conditions. Also, governments already spend large amounts of money: around US$100 per capita is spent every year on public health in sub-Saharan Africa[39] and over US$30 billion per year was spent on the military across the continent. [40] Countries and development partners therefore need a clear roadmap for how financing can be mobilised to achieve water security and sustainable sanitation. A roadmap covering three actionable pathways is presented in Chapter 4. A five-point action plan is provided in Chapter 5. To propose a way ahead, next steps are presented in Chapter 6.

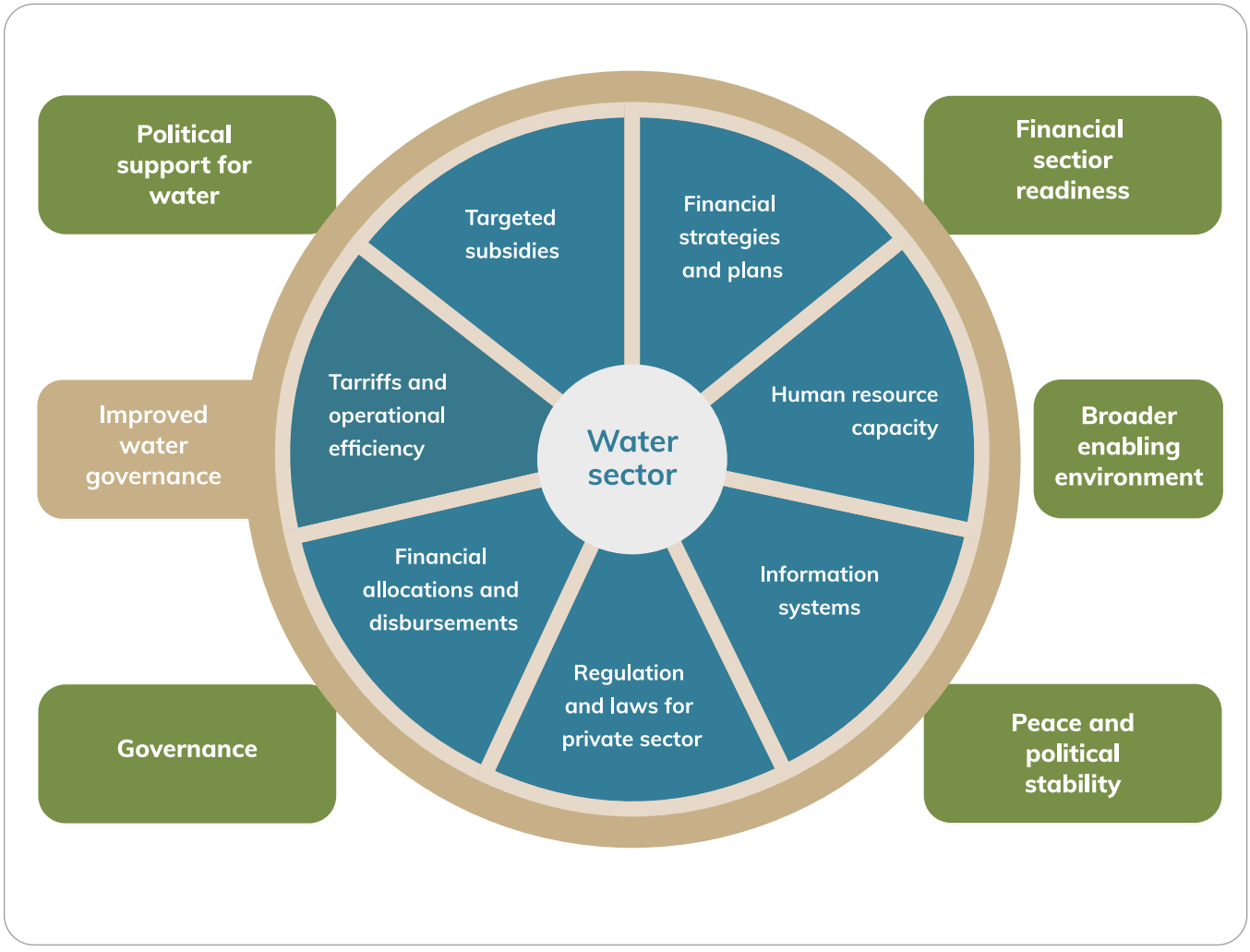


Chapter 3: How can Africa's water sector attract investment?

To implement the roadmap for water investment in Africa, it is important to understand the underlying conditions required for further investments to be made - including the broader enabling environment which can constrain or enhance water investments.

This chapter presents a brief snapshot of the status of the African continent with respect to water and sanitation, pinpointing some of the key opportunities and challenges faced (see Figure 4).

Figure 4. Key actions required in the water sector and broader enabling environment to attract greater investment



Political support for water security and sustainable sanitation

High level political leadership and commitment – is the most fundamental requirement for augmenting investments in water security. This is foundational for all other developments needed in the broader enabling environment as well as the water and sanitation sector itself. Given that governments have so many priorities for all other developments needed in the broader enabling environment as well as the water and sanitation sector itself. Given that governments have so many priorities for development,[41] water and sanitation will not receive the needed funds to meet the needs of social and economic sectors, unless high level commitment and leadership is demonstrated. Leaders must therefore champion water security as a key part of efforts to achieve national development goals, with increased budget allocations for water and climate resilient development.

Sustained public investment in water security and sustainable sanitation has only been achieved when there is high level leadership and commitment from the most senior levels of government, such as Presidential or Prime Ministerial campaigns.

Many African countries have gone some way to raising political interest in water and sanitation, but typically it is not sustained and does not significantly increase public budgets to have real impact. While water is generally well integrated into national development plans, national water investment plans and strategies have been less developed and implemented – which explains the lack of progress on SDG 6.

Low budget allocations and implementation capacity for water translate into weak institutional mandates. Even if a Water Ministry exists, it is often under-resourced or has multiple mandates. The level of political interest also determines to what extent water and sanitation are spotlighted when leaders make international commitments and track progress.

Readiness of the financial sector

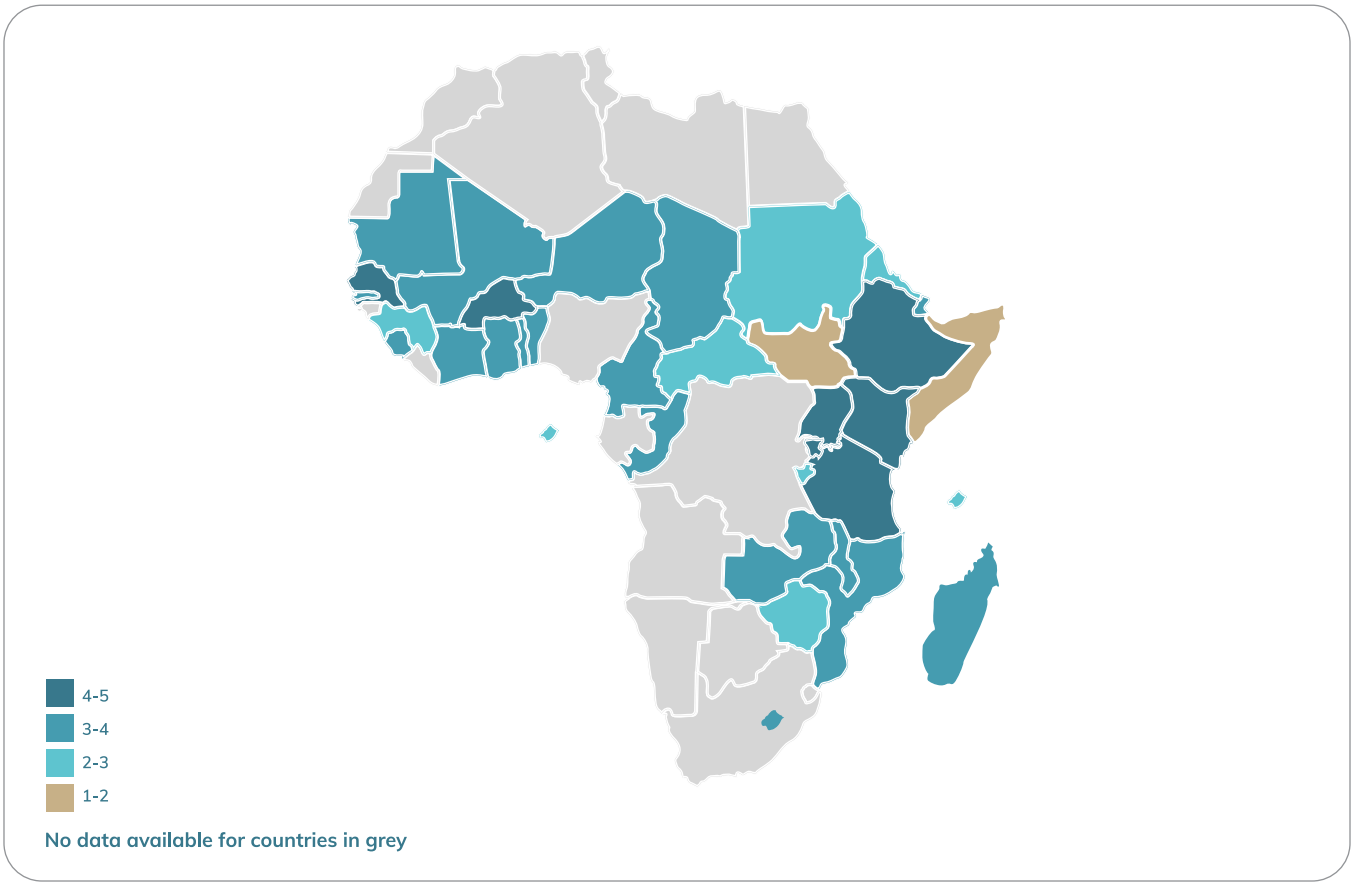
To attract finance, the appropriate financial regulations and instruments to enable investments by institutional investors must be in place. While the regulations and instruments may exist for specific sectors in Africa such as for mining, telecommunications, and energy, they typically do not yet exist for water investments. Overall, the financial sector is underdeveloped in Africa, as stated in the African Development Bank's 2022 African Economic Outlook:

> *"Financial systems in many African countries are small and underdeveloped, often dominated by commercial banks, which constrains intermediation of long-term capital for several reasons, including high interest rates on the demand side. Further, most domestic financial institutions do not lend to key, low-carbon sectors, even with third-party partial guarantees, because they have little knowledge of these sectors or ability to assess returns on low-carbon projects. They prioritize high-return investments with explicit risk profile information, such as real estate."*
>
> *"Africa's capital markets are equally under-developed and illiquid... Africa's investment rate of 24 percent is lower than that in other emerging economies and regions... and under-developed financial markets also struggle to attract the growing pool of climate finance, such as green bonds"*
>
> *AFDB African Economic Outlook 2022, pages 105-6*

Financial sector development, as monitored by the African Development Bank's Country Policy and Institutional Assessment (CPIA) Index, shows significant variation across the African continent. The indicator measures the quality of the country's financial system based on three criteria: (a) financial stability; (b) the sector's efficiency, depth, and resource mobilisation strength; and (c) access to financial services. Across 37 African countries, the CPIA ranges from 1.7 in Somalia and South Sudan to 4.8 in Rwanda, out of a maximum score of 6 (see Figure 5).

Sovereign risk – the likelihood of a country becoming unwilling or unable to meet its loan obligations – is a vital indicator for international investors. Sovereign risk is measured by the Standard and Poor's Global Ratings (S&P), with a rating range from triple A (AAA) to D.[42] Data suggest that most African countries are hovering in the B ranges and several countries have a CCC rating, indicating a level of vulnerability. It will therefore be important to explore measures that might improve sovereign ratings or mitigate against them.

Figure 5. Quality of financial systems in Africa

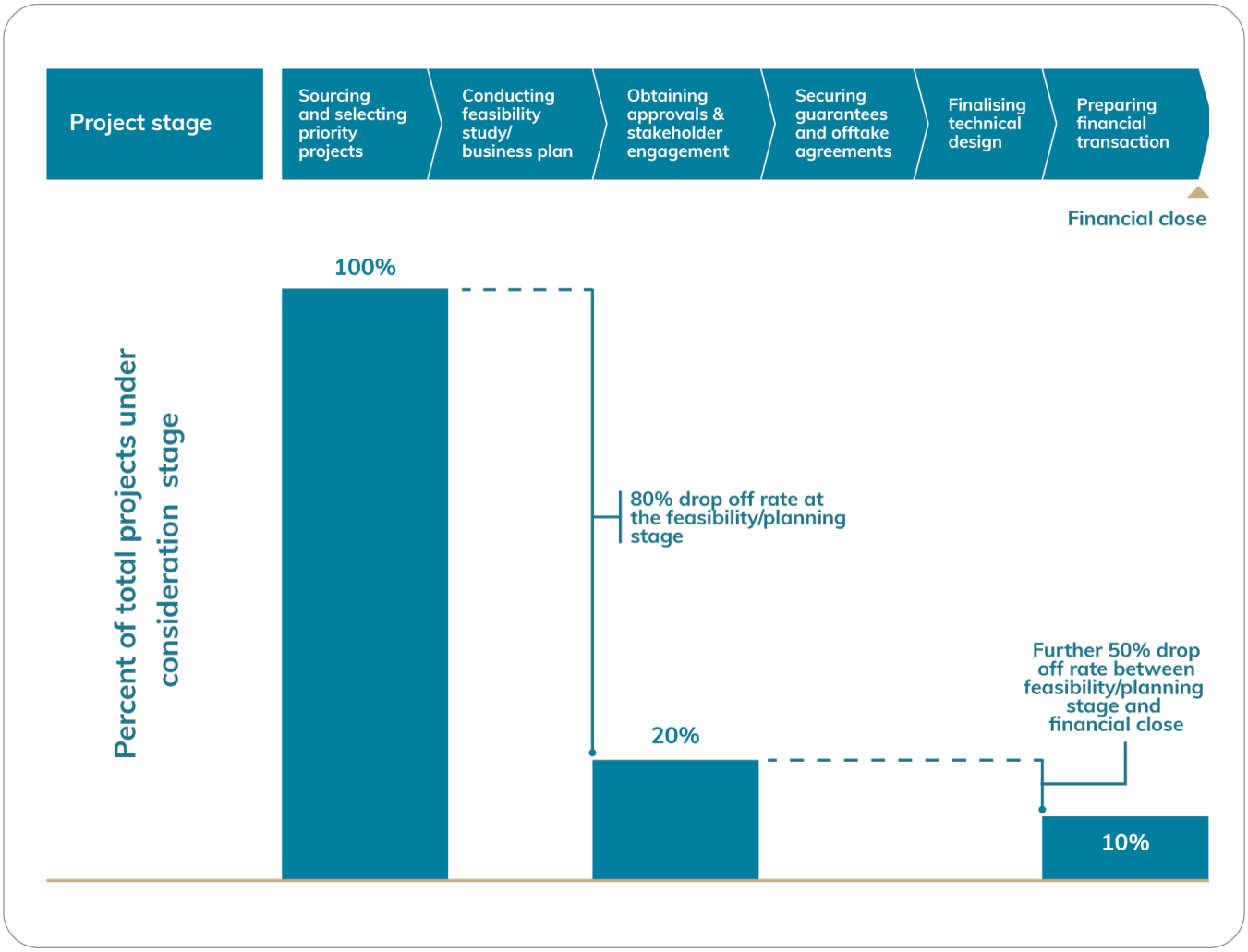


Source: AfDB CPIA Index 2020. Score from 1 to 6. Grey = no data submitted.

International investors have considerable appetite for African infrastructure projects, having as much as US$550 billion in assets under management.[43] They include government agencies (17%), private-sector pension funds (13%), investment companies (12%), banks (11%) and public pension funds (11%). Several funds are now raising investment in infrastructure in Africa, targeting transport, logistics, power, and telecommunications. [44,45]

However, water often loses out when infrastructure projects are proposed due to a weak investment case and inadequate investment-ready projects. Despite available finance, a large pipeline, and clear needs, few projects that are prepared result in a financial transaction ('financial close'). McKinsey terms this as 'Africa's infrastructure paradox'. As shown in Figure 6, a large drop-off is observed at the feasibility and planning phase due to low technical capabilities and limited financial resources dedicated to developing feasibility studies and business plans. Also, there is inadequate financial vehicles or special incentives for investment in some countries, and for water specifically.

Figure 6. Less than 20% of proposed infrastructure projects result in financial transaction



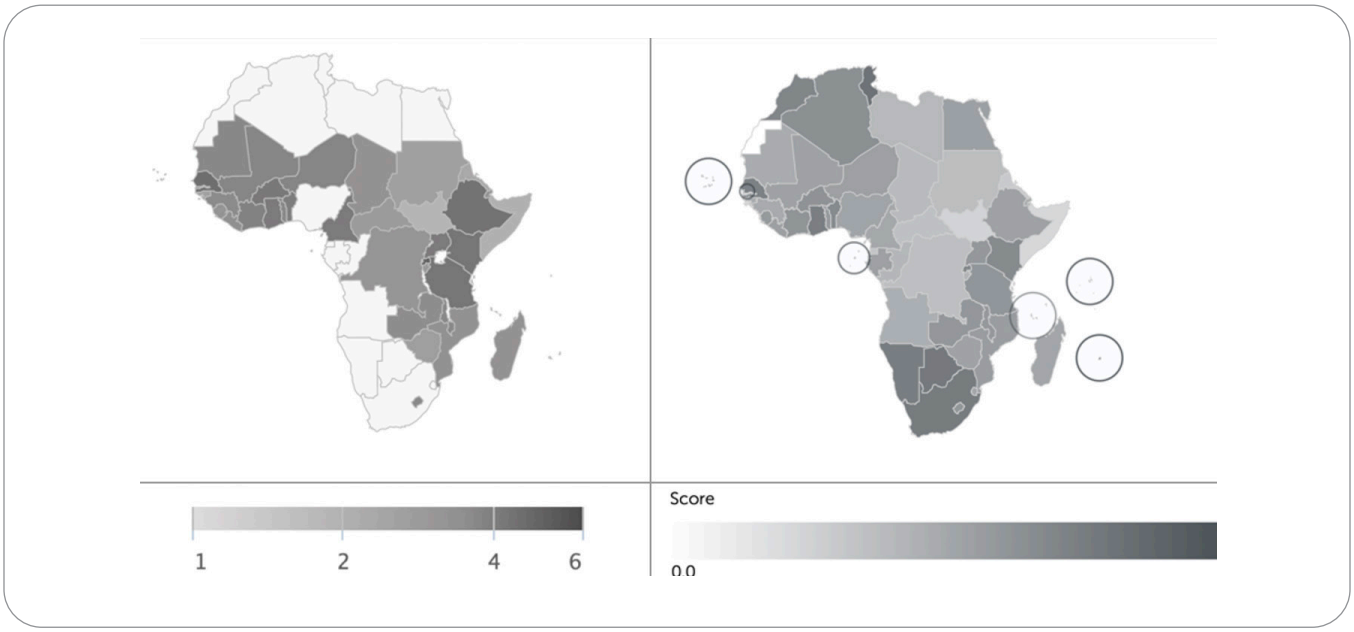
Source: "Solving Africa's infrastructure paradox", McKinsey & Company, March 2020, https://www.mckinsey.com/capabilities/operations/our-insights/solving-africas-infrastructure-paradox

Governance

The rule of law and absence of corruption are key requirements for financiers investing in the water sector, especially institutional investors. For multilateral development banks or bilateral donors, structures are typically set up to enable project implementation within environments where there is weak governance. This draws resources away from overall systems strengthening and investment in governance which is required for larger scale investments that could occur, such as from the private sector.

Governance varies significantly across the African continent and some progress has been made.[46] Two monitoring systems facilitate an understanding of the strength of the overall enabling environment for investment in Africa. The African Development Bank's Country Policy and Institutional Assessment (CPIA) assesses the quality of policies and the performance of institutional frameworks in some African countries.[47] The Mo Ibrahim Foundation's Ibrahim Index of African Governance (IIAG) includes 300 measures of governance in four categories, measured since 2007.[48] Figure 7 shows an overall picture on governance that demonstrates a wide range of performance across the African continent.

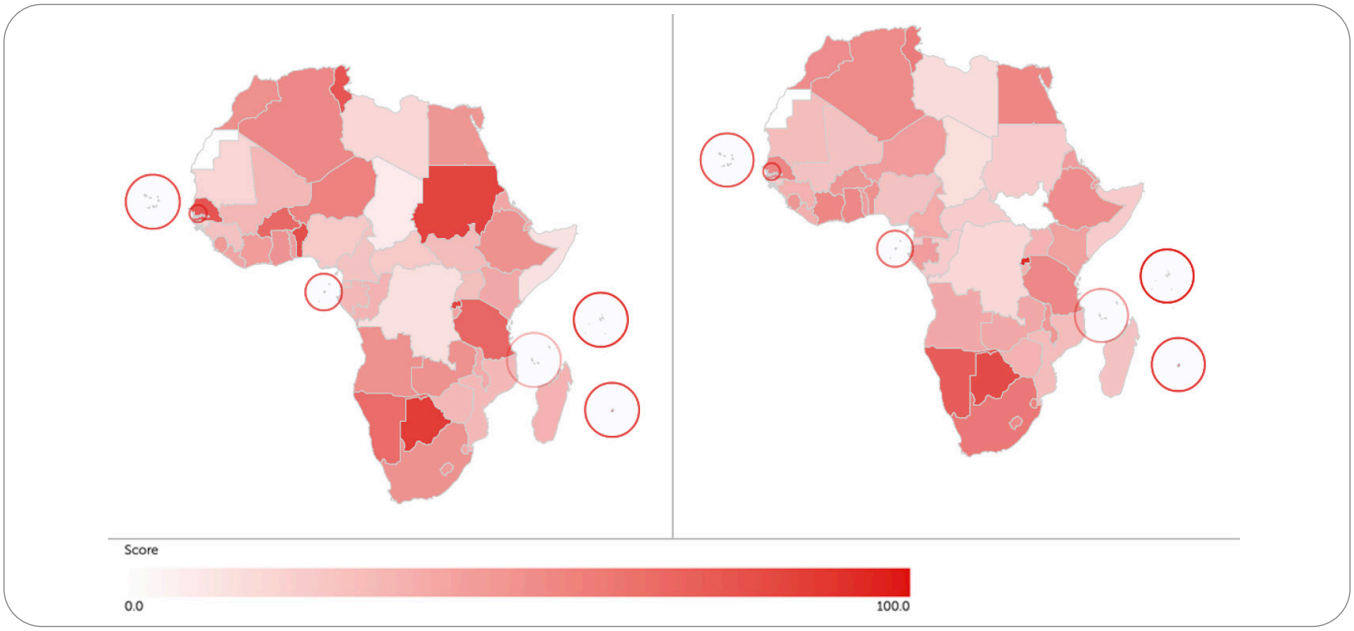
Figure 7. Overall results of Country Policy and Institutional Assessment (left) and Ibrahim Index of African Governance (right)



Sources: The African Development Bank's CPIA website for year 2020, score 1 (weak) to 6 (strong) (left figure) and Mo Ibrahim Foundation's IIAG website for year 2019, score 0 (weak) to 100 (strong) (right figure) – accessed 27 December 2022. Countries in white = no data.

Three specific aspects of governance are explored here: corruption, capacity to raise revenue, and fiscal decentralisation. The IIAG presents data on the absence of corruption in the public and private sector, shown in Figure 8. The conclusion is that many countries in Africa still need to address corruption, indicating the importance of implementing anti-corruption measures, improving accountability, and providing incentives for improved performance.

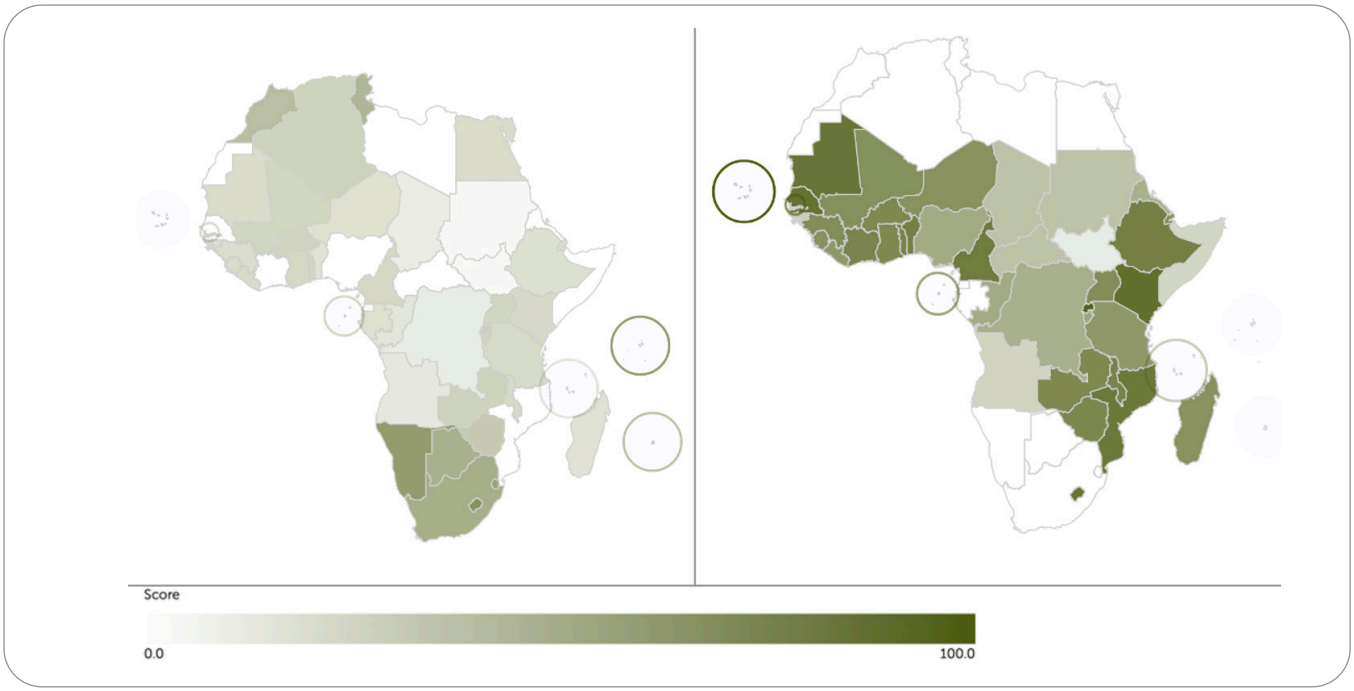
Figure 8. Absence of corruption in the public sector (left) and in the private sector (right)



Source: IIAG (accessed 31 January 2023)
Note: the darker the colour, the greater the absence of corruption. Countries in white = no data.

The future of government spending is determined by the capacity of taxation and the efficiency of revenue mobilisation. Some countries have shown strong improvements in tax collection in the past 10 years.

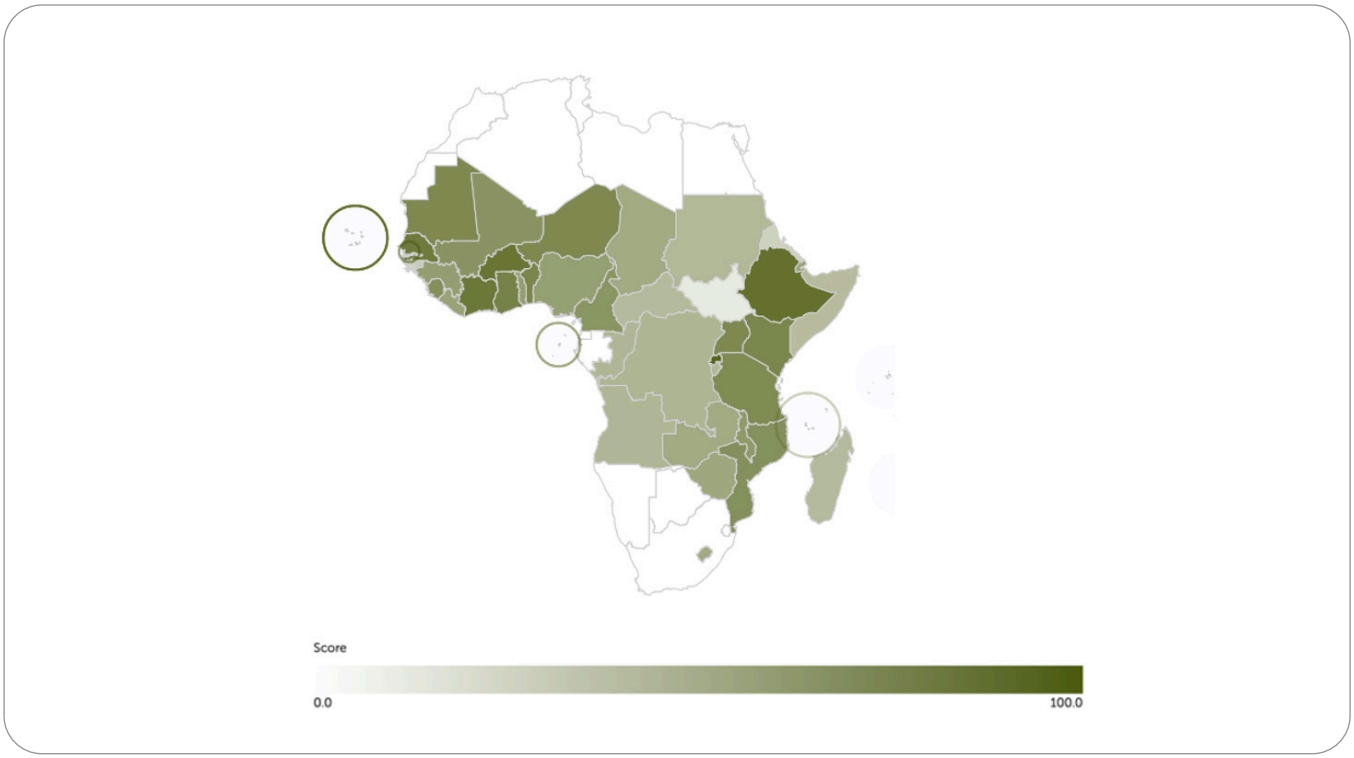
Figure 9. Capacity of taxation (left) and efficiency of revenue mobilisation (right)



Source: IIAG (accessed 31 January 2023).
Note: The darker the colour, the greater ability to collect tax and mobilise resources. Countries in white = no data.

Good governance also requires the presence of appropriate government structures and mechanisms for fiscal decentralisation to ensure that funds flow in a timely manner to where they are needed and that fund managers are held to account. The IIAG indicator on budgetary and financial management is shown in Figure 10, indicating quite strong performance in many countries of East and West Africa.

Figure 10. Budgetary and financial management performance



Source: IIAG (accessed 31 January 2023). Countries in white = no data.

All aspects of public finance management can be improved to ensure policy-based fiscal strategy and budgeting; predictability and control of budget execution; transparency of public finances; management of assets and liabilities; proper accounting and reporting; and external audit and scrutiny.[49] Transparency in budgeting and reporting is improving in Africa based on the International Budget Partnership data.[50] Despite this, there is significant room for improvement to establish greater trust both from investors and water users.

Peace and political stability

Conflict and major political instability are among the primary reasons why some countries receive little investment for infrastructure development, including for water security and sustainable sanitation. Armed conflict often leads to forced migration, long-term refugee problems, destruction of infrastructure, and permanent damage to institutions.[51] With climate change resulting in rising temperatures and greater water scarcity, the Sahel region of Africa is particularly vulnerable to future conflicts.

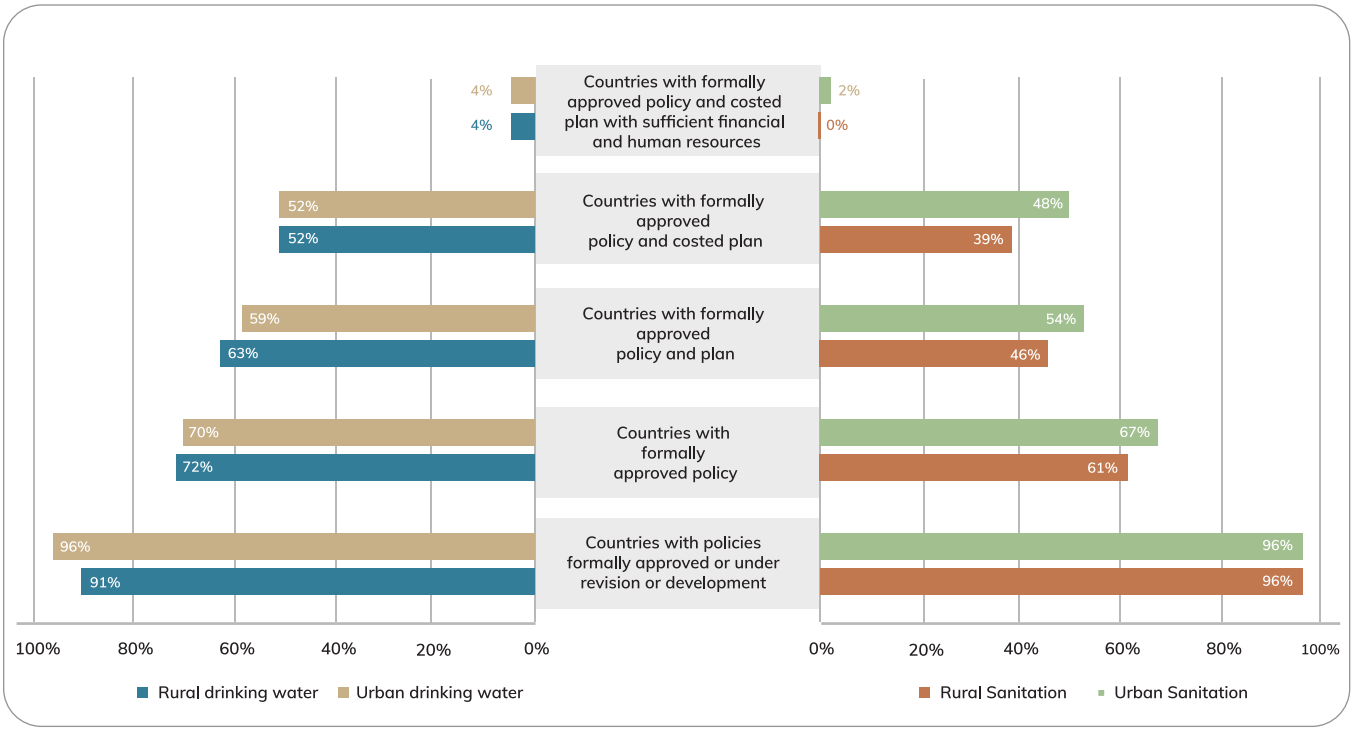
Financial attractiveness of investing in water security

Financial strategies and plans

One of the key opportunities in many African countries is to translate polices and plans into concrete investments opportunities with clear outcomes and impacts on the ground. The AIP Scorecard found that most of the 10 pilot countries have water sector policies but few countries have dedicated investment plans. SDG monitoring shows that at least 30 African countries had a score of 50% or lower on the existence of national and sub-national IWRM plans.[52] Two-thirds of countries have WASH policies, but at most half of African countries have a formally approved policy with a costed plan, and less than 5% have sufficient financial and human resources to implement the plans (see Figure 11).[53]

Also, few strategies reflect considerations of disaster risk reduction, and despite its recorded benefits, integrated planning across multiple water use schemes is not fully achieved.[54]

Figure 11. Percentage of countries that reported formally approved policies supported by resourced plans for urban and rural areas for water and sanitation



Source: UN-Water GLAAS 2021/2 country report

Note: "Sufficient financial and human resources" is defined as having more than 75% of what is needed to implement sanitation plans



For many countries in Africa, Official Development Assistance (ODA) is highly fragmented and follows traditional grant mechanisms. In 2021, less than 50% of donor funds were aligned with the national WASH plan in 10 African countries.[55] Despite several good examples of pooled funding mechanisms in Africa,[56] they remain the exception rather than the norm in the water sector. To support implementation, major stakeholders and water financiers should contribute to financial strategies and plans.

Human resource capacity

Skilled human resources are foundational for strengthening the enabling environment and for operating water and sustainable systems. UN Water's Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) reports a strong correlation between a country having sufficient human resources in place and being on track to meet its WASH targets.

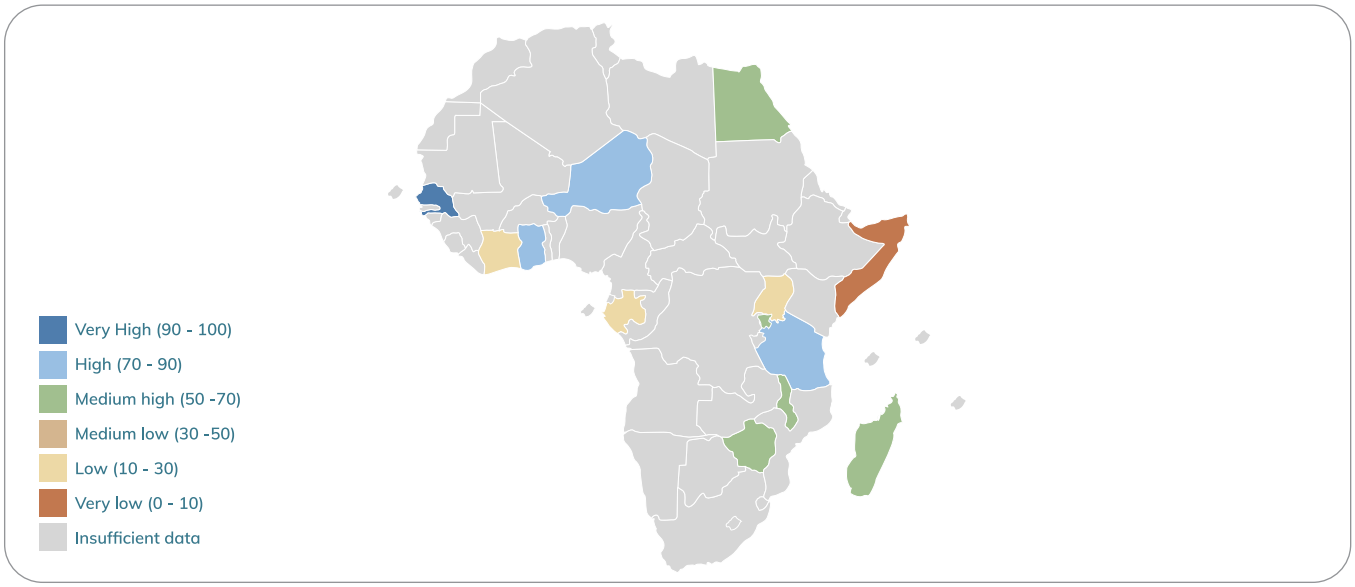
Develop national human resources strategies to develop and manage human resources for water and sanitation.[57] SDG monitoring shows that at least 32 African countries had a score of 50% or lower on national capacity to implement IWRM.[58] More than 80% of African countries reported they have less than 50% of the human resources needed to carry out key functions for the delivery of WASH services. Despite that, only 28% of countries reported conducting national human resources needs assessments for WASH. Critical skill gaps exist for leadership and management both in government and service providers as well as for financing expertise (planning, budgeting, auditing, blended finance) and basic engineering. In addition, community participation (SDG 6.b.1) needs to be strengthened to ensure community voice and empowerment in small-scheme management. A gender transformative approach is key, ensuring women have a greater voice at all levels, take advantage of capacity building opportunities and take on leadership positions.

Information systems

Robust monitoring systems, including financial data, are critical to the efficient operation of the water sector. Service coverage data provide the basis for financial assessments and planning. A recent United Nations University report concluded that "the lack of water data in Africa manifests itself so strongly that some critical components of water security simply cannot be assessed without introducing second-best surrogates. With such poor data availability, progress is difficult to assess accurately."[59]

Strengthen national monitoring system for water. The Africa Water Sector and Sanitation Monitoring and Reporting (WASSMO), managed by the African Ministers Council on Water (AMCOW), measures the degree of establishment of national water resources monitoring and reporting systems. Data gaps and fragmentation of monitoring frameworks is a challenge. Figure 12 indicates most African countries have insufficient data for monitoring SDG 6[60] while some countries such as Senegal, Ghana, Tanzania, and Niger which have well established systems could share their experiences with other countries.

Figure 12. Degree of establishment of national water monitoring and reporting systems



Source: Modified from Africa Water Sector and Sanitation Monitoring and Reporting

Climate financing and sustainability-linked facilities focus on results-based financing, whereby implementers are paid some or all of the agreed payment after results are achieved and verified. This highlights the critical nature of information management and reporting.[61] WHO/UNICEF Joint Monitoring Programme, which is the custodian of global WASH data, reports that 57% of sub-Saharan Africa report on safely managed water and 73% on safely managed sanitation.[62] About half of countries globally report on the proportion of bodies of water with good ambient water quality.[63] Most monitoring systems do not capture informal service providers, who a larger proportion of poor and vulnerable populations rely on.

Financial data need to be routinely reported through public financial management systems. Financial audit can be improved in Africa, according to the Supreme Audit Institution oversight scores.[64] Funds raised and spent by local administrations and non-government partners are rarely reported at national level, and water user payments are rarely aggregated at national level. A handful of countries in Africa have adopted WASH accounts, but still only 25 out of 46 African countries reporting to the UN-Water GLAAS survey could report separate budgets for drinking water and sanitation. Lack of financial data was also a constraint on reporting to the AIP Scorecard on public, private and philanthropic finance.

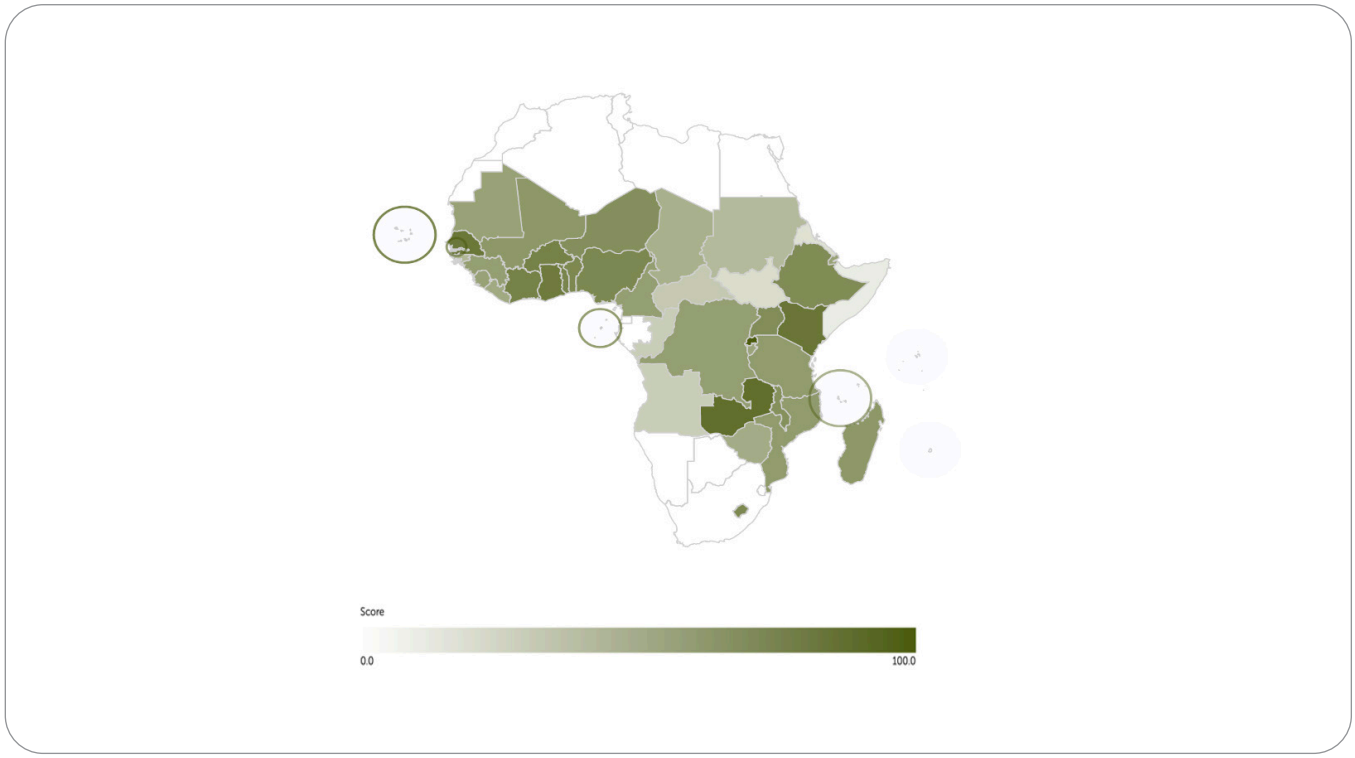
Coverage and financial data are used by about half reporting African countries in decision making such as budget allocation decisions, regulatory functions or to inform sector policy.[65] For WASH, 31 out of 46 countries reporting to the UN-Water GLAAS say they conduct joint sector reviews, but few of these are conducted annually.

Strengthen assessments on the impacts of water-related investments or the costs of inaction at national level. An absence of data and information makes it hard to conduct evidence-based advocacy for water investments. The capacity of water ministries to retrospectively assess the economic, social, and environmental impacts of past investments therefore needs to be strengthened to support planning and facilitate results-based financing. Studies on the cost of inaction can assess an evolving context and help plan for future scenarios.

Regulation and laws

Regulation is improving in the water sector in Africa, where the regulatory authority is mandated in law. For drinking water 82% and 71% of countries have established a regulator for urban and rural areas, respectively. For sanitation and wastewater, the regulatory authority has been established by law in 65% of countries.[66] However, few regulators in Africa have the data, the human resource capacity or power to enforce the regulations. SDG monitoring shows that 28 African countries had a score of 50% or lower on the existence of gender in IWRM laws and plans.[67] Figure 13 shows the strength of the business regulatory environment in Africa.

Figure 13. Strength of business regulatory environment in Africa



Source: IIAG (accessed 31 January 2023)

Studies of public-private partnerships (PPPs) in urban water utilities have found significant efficiency gains achieved through involvement of a private party, including reduced water losses, increased staff efficiency, coverage, and daily hours of service.[68] In the 20 years from 1991 to 2012, there were only 51 PPP projects in the water and sewerage sector in Africa totalling US$3 billion.[69] However, this ignores several hundred small water schemes under private management. The AIP Scorecard found that only two of 10 countries have a comprehensive PPP institutional framework to attract water investments. Regional guidelines provided by the Southern African Development Community (SADC) support countries in strengthening PPP legal frameworks.[70]

Financial allocations and levels of disbursement

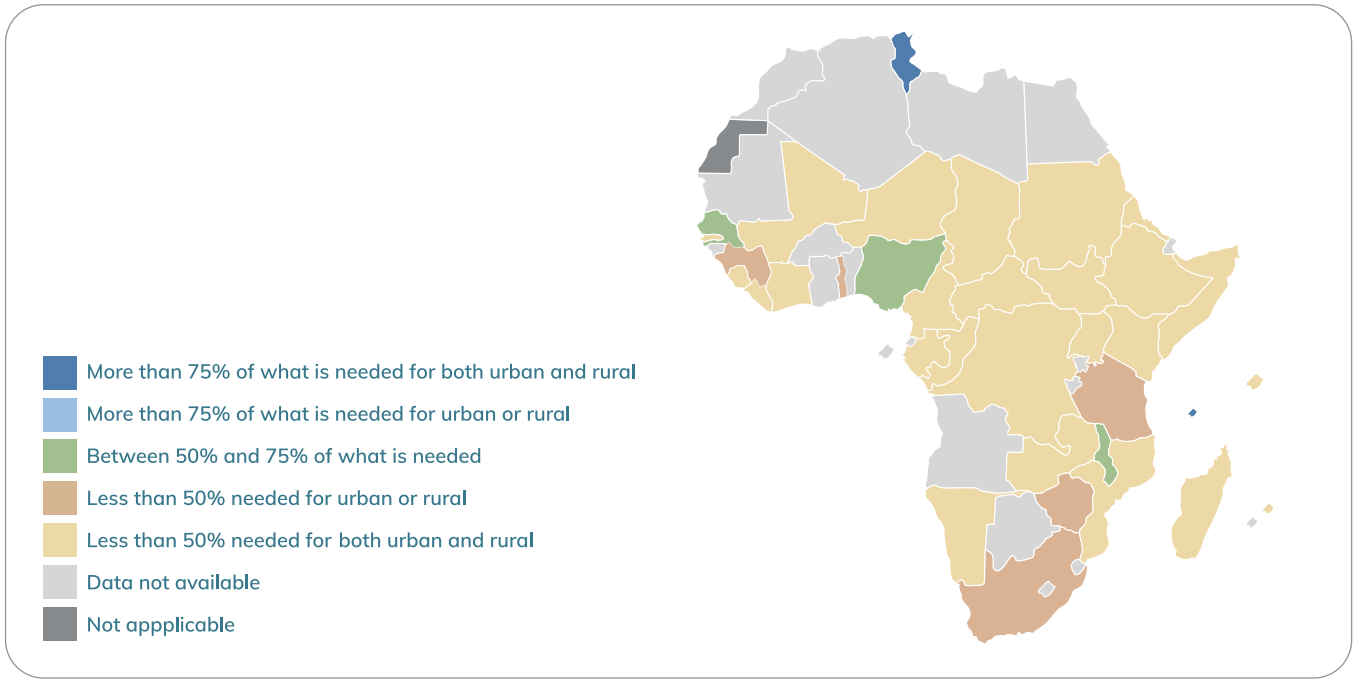
Public allocations to water and sanitation are well below what is needed to achieve national goals. African national government budget allocations to water have declined from US$6.1 billion in 2016 to US$4.3 billion in 2020, a decline from 20% to 13% of total spending.[71]

The influence of the water sector over other sectors or ministries for securing funding needs to be strengthened. For example, many countries still need to fully integrate water into national climate change and adaptation plans, including financial allocations. There is a significant shortfall in funding from health and education ministries to scale up investment in WASH in healthcare facilities and in schools. Indeed, only three African countries could report on a budget for WASH in healthcare facilities and one for WASH in schools.[72]

Most reporting African countries (see Figure 14) have less than half the financial resources to meet their national sanitation targets. Only four countries that signed up to the Ngor commitments in 2015 – which require countries to spend 0.5% of their GDP on sanitation – has achieved this target.[73]

One key problem is that water budgets are often not fully disbursed. In the latest fiscal year, fewer than 50% of countries had a higher than 75% absorption of capital commitments for WASH. [74] Low disbursement is explained by weak capacity, slow public financial management (PFM) systems, approvals being withheld, and water budgets being reallocated to other sectors. To increase the effectiveness and impact of public funding, absorption capacity and disbursement levels must increase.

Figure 14. Sufficiency of funding from all sources to reach national sanitation targets



Source: GLAAS 2021/2022 country survey

Tariffs and operational efficiency

Tariffs are well below cost recovery levels in most water and wastewater utilities in Africa. Less than half of responding countries indicate that tariffs are sufficient to recover at least 80% of WASH operating and maintenance costs.[75] However, the political economy of tariff-setting requires transparent and inclusive processes both nationally and locally. This should re-examine how tariffs can be adjusted to serve water and sanitation users better, while keeping affordability in mind.

One way of boosting cost recovery – and hence financial viability of water and sanitation operators – is to decrease costs by reducing wastage, thereby achieving savings. A World Bank analysis of water utilities in Africa shows that a high number of utilities register an efficiency of 0.30 (out of a maximum of 1.0), indicating significant potential for improvement in utility performance.[76] In the same study, sampled utilities had a water loss (non-revenue water) of 40%. Another World Bank study analysed data from 605 utilities and found that three actions (increasing bill collection rates, reducing labour costs and reducing non-revenue water) can boost the proportion of utilities that fully cover operations and maintenance costs from 15% to 77%.[77] Good project preparation and competitive procurement can also lead to major cost savings.

In the case of water supply, a major contributory factor to inefficient operations is inadequate spending on operations and maintenance. In many countries, limited financing provided for water supply is spent on rehabilitating installed facilities instead of expanding services.[78] Apart from being a drain, this is a major constraint to the expansion of services to the unserved. Incentives and technological improvements can reduce such waste and improve the efficiency of investments in water resources.

Targeted financial support to poor households

The World Bank estimates that just less than a half billion Africans live in extreme poverty, or one in three Africans.[79] Despite these poverty rates, the UN Water GLAAS reports that only half of responding countries have established targets for affordability of sanitation and drinking water and only a third of countries have widely used financial schemes to support affordable drinking water and sanitation services.[80] The AIP Scorecard found that in just three out of 10 countries included provisions for vulnerable communities in the water tariff mechanism.

As a result, water and sanitation subsidies are not reaching the most deserving populations. The World Bank finds that 56% of subsidies are spent on households in the top 20% income level whilst the poorest 20% of households receives only 6% of subsidies.[81] Hence, the way public budgets are spent needs to be revisited, drawing on evidence of to what extent public budgets are reaching the poor.

Smart instruments for delivery of public subsidies (or cross-subsidies between different user groups) need to be designed that ensure the most deserving have adequate access to water and sanitation services while using prices to incentivise responsible use and stewardship of water resources.



Chapter 4: Three actionable pathways to mobilise at least US$30 billion annually by 2030

While every country is unique, decades of experience show how investments can be leveraged to progress towards water security. Success factors include having the right policies and strategies, fit-for-purpose institutions and regulations, financing instruments, competitive procurement, robust projects, solid data, sector review mechanisms, and capacities.

The three actionable pathways presented in this chapter are:

1. Achieve more impactful water spending and financial leveraging;
2. Mobilise domestic resources; and
3. Secure global and continental finance.

These pathways will be most effective when pursued together and in coordination as they are complementary, with pathway 1 essential for the success of pathways 2 and 3. They will all need the engagement and support of political leaders to be successfully realised. To aid this, key actions are proposed in Chapter 5.

Figure 15. Three actionable pathways to achieve water security in Africa

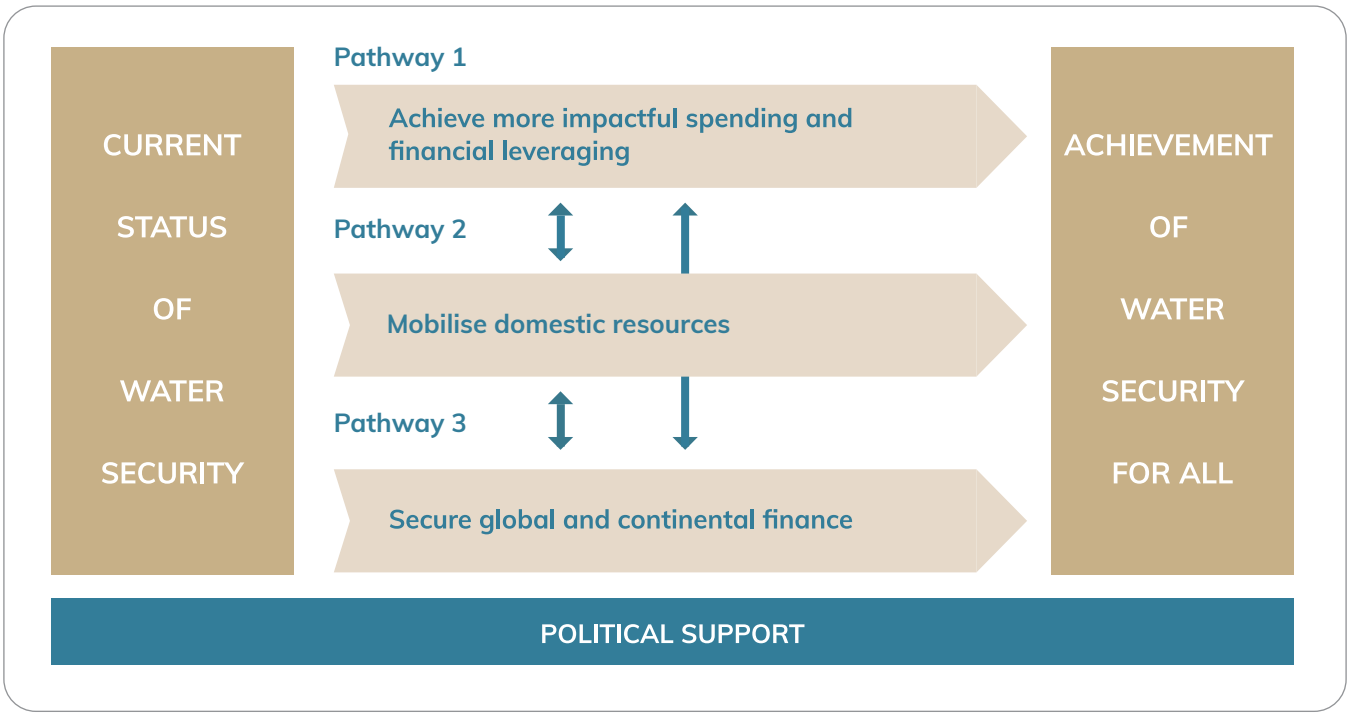


Figure 16 shows several key sources for raising additional resources to close the finance gap. To access new innovative sources of finance, a paradigm shift is needed to link the better use of finance and the value of water and efficiency gains with new sources of finance from a range of domestic and international sources. If just a fraction of climate and private institutional investor funds available can be tapped, water investment in Africa can exceed the target of US$30 billion a year by 2030. The three pathways can be located in the pyramid as follows:

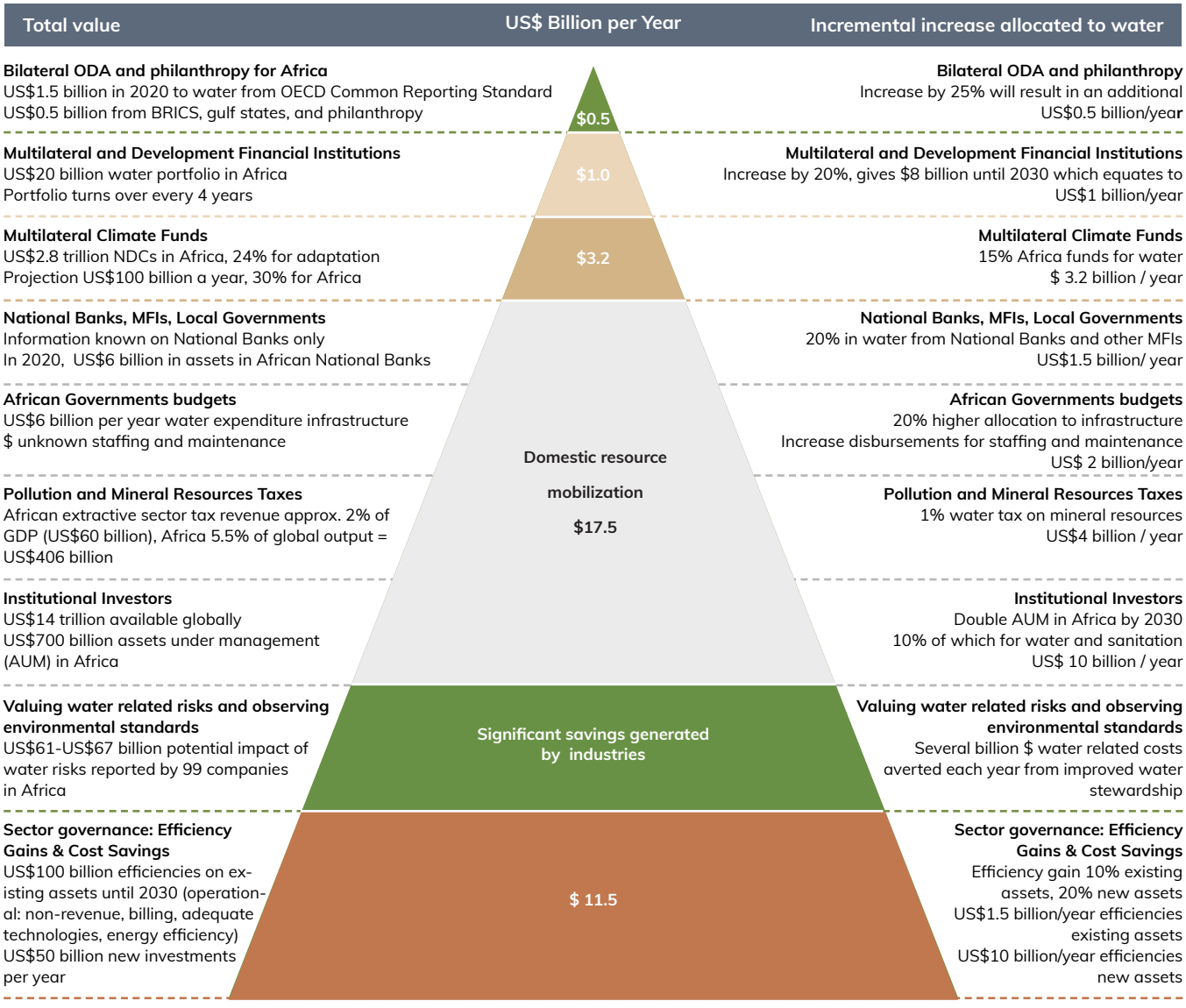
• Pathway 1: at the bottom of the pyramid are the efficiency savings and reduction in water risks which provide the foundation for achieving impactful water investments.

• Pathway 2: in the middle of the pyramid is domestic resource mobilisation which leverages public, concessional and private finance, including raising significant additional earmarked taxes to finance water security.

• Pathway 3: at the top of the pyramid is continental and global finance, accessing official development assistance and mobilising the private sector to invest in climate adaptation.

Strengthening the enabling environment for investments is vital to achieving efficiency savings and unlocking additional public and private finance.

Figure 16. Potential finance sources to close the water investment gap





Political commitment and leadership to prioritise water security

Strong political leadership is critical to support the recommendations for increasing and enhancing finance for water and sanitation presented in this chapter. Two levels of leadership are needed: institutions and individuals.

It is vital to strengthen high level political leadership and commitment to water security and sustainable sanitation at the continental level. The African Union needs to consider establishing a dedicated committee of Heads of States on water security and sustained sanitation within its structure, similar to its Committee of Heads of States and Government on Climate Change (CAHOSC). A dedicated African Union Heads of States and Government Committee on Water Security and Sanitation could provide high level ongoing leadership and be accountable to the Assembly of the African Union Heads of States and Government.

At the national level, a high-level inter-ministerial body could be set up, comprising all delegated government ministries, including the Ministry of Finance, Ministries in charge of productive and social sectors, Commissions or Committees that encompass water. This could be coordinated by the Prime Minister's or President's office, with support from the lead Ministry responsible for water. The latter could be existing commissions or committees, or they could be new ones, provided with added authority. The engagement of parliaments can be crucial in the process of strengthening the enabling environment, such as promoting the regulatory framework, introducing legislation, and approving public budgets.

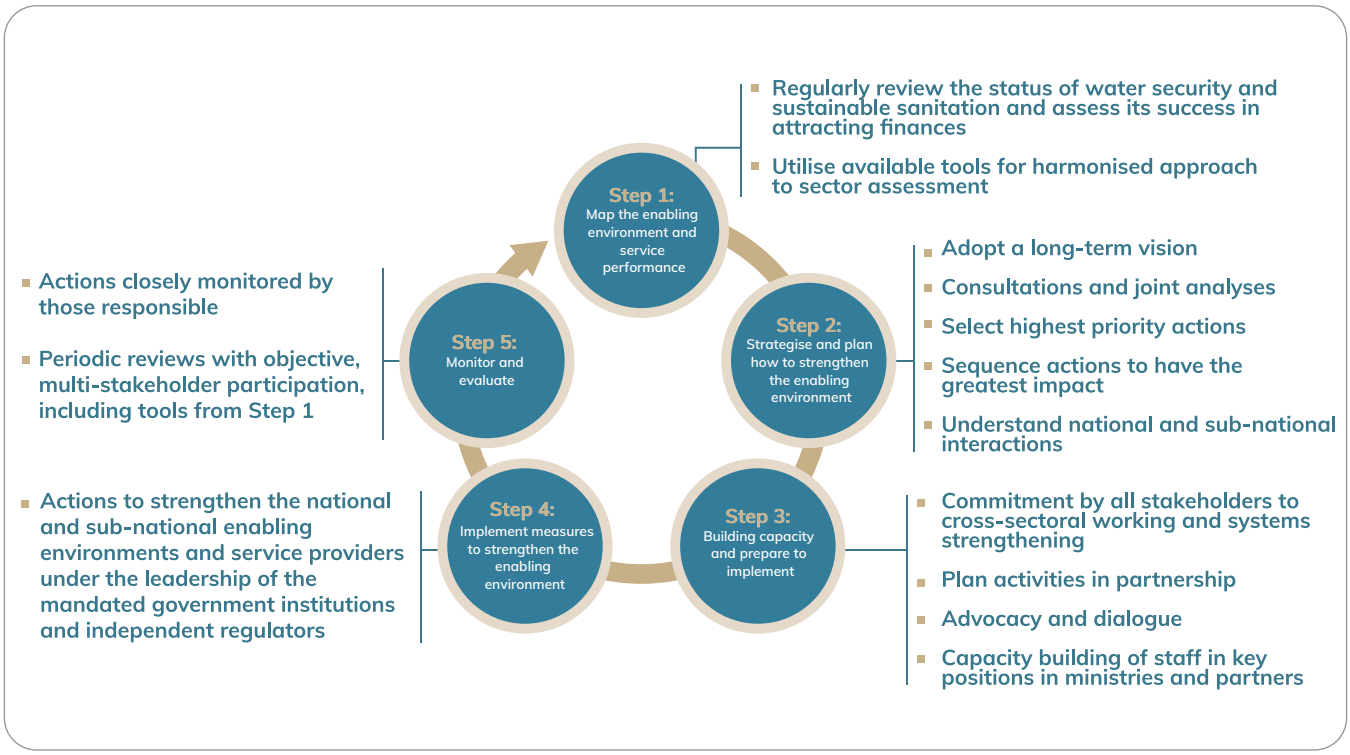
Strong economic arguments are needed to promote the business case for investments in water security and sustainable sanitation for all. These include the contribution of water to national economic development and the costs of inaction. Specific areas that need support include cross-sectoral coordination, institutional systems strengthening; increasing public finance; engaging private finance; improving transparency through better data and reporting; regional initiatives, fighting corruption; and raising the voice (and outcomes) of the poor and vulnerable.

Pathway 1: Achieve more impactful water spending and financial leveraging

The main purpose of this Pathway is to make water security a more attractive investment by facilitating transactions and increasing the impact of resources spent on water security, to be more efficient, equitable and sustainable. When major inefficiencies exist in a delivery system, they must be addressed before spending additional resources which lead to further waste .[82] As Figure 16 showed, operational efficiencies could be achieved in existing as well as future assets in the order of US$11.5 billion, while implementing measures that fully consider the value of water would bring significant additional savings.

The five steps to implement Pathway 1 are shown in Figure 17. This section outlines several of the key actions that are needed within this pathway.

Figure 17. Five steps to achieving more impactful spending and financial leveraging (Pathway 1)



Use existing tools and data sets to help assess water sector performance and the status of the enabling environment for water investments; most are based on information provided by countries to global or continental platforms. These include: the SDG Integrated Monitoring Initiative;[83] Water Sector and Sanitation Monitoring and Reporting[84] (WASSMO); the UN-Water GLAAS survey; and the WASH Bottleneck Analysis Tool.[85]

The AIP-PIDA Water Investment Scorecard developed by the African Union Development Agency (AUDA-NEPAD) includes diverse qualitative and quantitative indicators that assess water investment governance and planning, the water investment climate, current expenditures, as well as issues related to social and environmental inclusion within the sector's policy environment (see Figure 18).[86] Following initial experience in 10 countries in 2022, the tool's use is being expanded across Africa.



Figure 18. The AIP-PIDA Water Investment Scorecard Framework

1) Enabling envirnoment for water investments

1.1) Water investment

1.1.1a Water sector governance and institutional coordination

1.1.1b Water, sanitation, hyginene and COVID-19 recovery planning

1.1.2 Integrated climate resilient national water, sanitation and hygiene investment plan and financing strategy(multiple sectors, rural and urban, climate-resilient, gender-sensitive, transboundary element)

1.1.3 Water and sonitation information and data management

1.1.4 Water-related international treaties and cooperation in transboundary investments

1.1.5 Integration of water in national climate change and adaptation plans (NDCs, NAPs)

1.1.6 Integration of water and sanitation investments in national development plans

1.1.7 Capacity of institutions and human resources

1.1.8 Disaster management planning, early warning forecasting and response

1.2) Investment climate

1.2.1a Financial sector development

1.2.2 Sovereign risk

1.2.3 Government payment risk quality of overall ghovernance

1.3) Social environmental inclusion

1.3.1a Gender equality and transformative water investments

1.3.2 Social inclusion (youth gender, vulnerable and marginalised populations

1.3.4 Environment Impact Assessment

2) Mobilising water investments and financing

2.1) Government expenditure

2.1.1 Public budget commitment / allocation on (WASH, irrigation, energy, Nature and biodiversity protection) per capita

2.1.2 Public budget disbursement on (WASH, agriculture, energy, Nature and biodiversity protection) per capita

2.1.3 Public budget execution rate (WASH, agriculture, energy, Nature and biodiversity protection) per capito

2.1.4 Gender responsive budgeting system

2.2) Official Development Assistance (ODA)

2.2.1 ODA commitment / allocation for water (WASH, agriculture, energy. Nature and biodiversity protection) per capita

2.2.2 ODA disbursement for water (WASH, agriculture, energy, Noture and biodiversity protection) per capito

2.2.3 Climate financing and investments (WASH, agriculture, energy, Nature and biodiversity protection)

2.3) Private sector and philanthropic investments

2.3.1 Domestic private sector investment (WASH, agriculture, energy, Nature and biodiversity protection)

2.3.2 Public Private Partnerships on water (WASH, agriculture, energy, Noture and biodiversity protection)

2.3.3 Philanthropic finance to water sanitation and environment

3) Enhancing investment perfomance and sustainbility

3.1) Investment performance/ efficiency

3.1.1 Structure of tariff mechanisms (including ring fencing)

3.1.2 Water and sanitation pricing efficiency

3.1.3 Operation and maintenance (O&M) asset management plan

3.2) Investment Sustainability

3.2.1 Climate resilient water investments

3.2.2 Water allocation efficiency and demand management

3.2.3 Economic, social and gender impact evaluation of water investments

Strengthen the enabling environment to support inter-sectoral coordination, the case for water investment and unblock the bottlenecks constraining investment. Strategies to strengthen inter-sectoral coordination and improve the enabling environment depend on the local context and include: policy and regulatory measures; institutional strengthening and capacity development; public finance management; efficient operational management; monitoring and evaluation; and partnerships.

Develop policy guidance and implement water security and sanitation investment programmes and plans. Update national water sector policies, IWRM management plans, investment plans and strategies, ensuring they are comprehensive and inclusive and put in place mechanisms to ensure adoption at all levels. Translate policies into cross-sectoral water finance strategies and investment plans, with the end goal to close the water investment gap, achieve financial sustainability and reduce reliance on ODA (see Pathway 2). Policies need to be explicit on how gender will be integrated ensuring that water investments are gender transformative.

Implement legal and regulatory measures to bring a clear set of rules and provide the right incentives and risk environment for private investments. In every context legal frameworks should balance multiple and competing objectives (e.g., cost recovery versus affordability) and perspectives of different partners. [87]

However, international experience suggests that regulators should be independent and free from political interference.[88] Regulators at local level need sufficient capacity to play their role.

A model law has been proposed that provides a legal framework to mobilise private capital at scale for the delivery of the projects under Nationally Determined Contributions (NDCs) of African nations.[89] In addition, there is a wealth of experience from regulatory frameworks on how regulators have worked in the water sector across the world, including Africa. There are also good examples from the telecommunications and energy sectors in Africa, which are more advanced in their regulatory frameworks than water.

Capacity to implement national and local strategies and ensure the effectiveness, efficiency, and sustainability of programmes. Sector governance and management can significantly improve efficiency, and reduce non-revenue water and pollution. Institutional strengthening; human resource capacity development; specialised public finance capacity, professional, engineering and operational skills; and robust procurement and monitoring systems are critical to address sector challenges. Sub-national contract management capacity for utility contracting or concessions, as well as performance assessment and improvement, are key.

Strengthen public-partnerships to enhance capacity and support investment for water security. It is important that private sector operators are recognised by law, and have recourse to a functioning judicial system. A PPP legal framework is needed, which is the sum of a country's laws and regulations, guidance, precedents and other materials that impact and govern the full lifecycle of PPP projects.

This framework should confer legal authority on the entities involved in their delivery. [90]

Strengthen institutional arrangements, ensuring clarity in responsibilities, accountability for results and capacities of institutions to deliver on their mandates. Build human resource capacity by identifying skill gaps, providing training, improving incentives systems including salary and non-salary perks, improved staff planning and achieving fair pay and a gender balance. National leaders should coordinate stakeholders and bring development partners' financial and technical support behind the strengthening of national systems (e.g., procurement, monitoring, reporting, auditing, and capacity building). The role of river basin organisations in implementing policy and raising finance needs to be clarified in the institutional set-up.

Public finance management capacity development can ensure stronger planning and budgeting processes using evidence and not historical budgets. Strengthened public financial management systems, including financial reporting and auditing can lead to more effective and efficient spending. Key areas of focus include providing for long term certainty relating to funding allocations, public finance options to improve grant funding, intergovernmental fiscal transfers, and mechanisms for subsidies to reach the poor. Measures to speed up the disbursement of funds at both national and local level, especially for disaster response, are key to manage risks.

Improve operating efficiency and introduce asset management systems. At project planning phase, it is important to assess value-for-money and do an options- and cost-benefit analysis, to select investments that will be socially, financially, and environmentally sustainable. Preventive maintenance supported by

asset management systems can prolong the asset life of water infrastructure, improve service quality, and prevent sewerage spills. Properly recognising the true value of water should lead to improved water stewardship in major productive sectors, with increased penalties imposed on those not complying with regulations. Metering water use and testing wastewater discharge, where feasible, helps utilities manage demand and introduce conservation measures as well as discharge penalties. Water reuse and recycling can provide an additional asset class from which revenues can be earned.

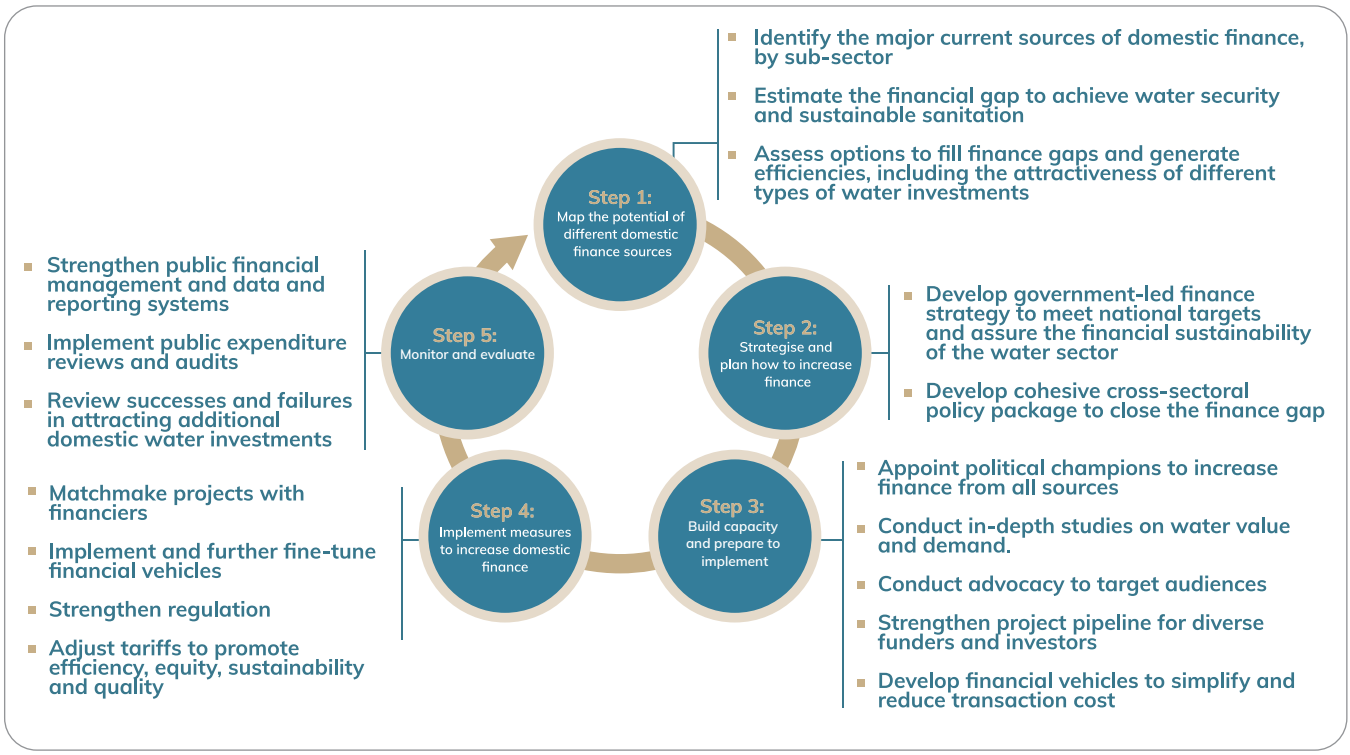
Implement comprehensive and coordinated monitoring, reporting and review of sector performance. A strong system of national monitoring, review, and evaluation is vital for formulating the right strategies and designing and implementing plans. Where possible, this should be replicated at sub-national levels. A single, credible national system should be supported by all stakeholders and used in decision making. Regular review is needed of how the sector is progressing towards the targets and what needs to change, using established annual joint sector review mechanisms where undertakings and responsibilities are agreed. [91] Research and evaluation are key to assess whether strategies are working or need to be adjusted. User feedback mechanisms are key, requiring strengthening of civil society organisations and encouraging active participation.

Pathway 2: Mobilise domestic resources

The main purpose of this Pathway is to identify significant national finance sources that could be allocated to water security in African countries and take measures to access those funds. Given the many national priorities considered during the budget setting process, it is vital that Heads of State and other senior influencers are ready to champion water security as a top national priority. As was shown in Figure 4, funds raised through Domestic Resource Mobilisation (DRM) could be in the order of US$17.5 billion per year. The five steps for Pathway 2 are shown in Figure 19.

Improve service payments by water users. Water users include any individual, household, group, or business that demands and pays for water, sanitation, or wastewater services. It includes municipal, agricultural, industrial, and other business demand.

Figure 19. Five steps for Pathway 2 to mobilise domestic resources



According to recent evidence, 61% of WASH services are paid for by the user, while less than 40% of countries indicated that user tariffs are sufficient to recover at least 80% of operation and maintenance costs.[92] Tariffs should be guided by costs, but not exclusively.

For example, the value of water,[93] the ability or willingness of users to pay,[94] the importance of the water user in the local economy, and the need to reduce demand based on water scarcity will all be factors guiding the pricing of water services. Adjusting tariffs can be a long and complex process involving many stakeholders; different objectives and voices need to be balanced to promote equitable, sustainable, and quality services. National policies should provide a guide to water utilities and service providers, drawing on policy-based tariff-setting guidelines[95] and ensuring subsidies are successful in targeting the poor.

Fiscal allocations are crucial due to low levels of affordability among some users and the lack of access to financing for significant upfront payments for infrastructure. Greater allocations need to be sought from central government pots to the ministries responsible for water security and water using sectors. Additional funds raised could be in the order of US$2 billion per year (not including funds allocated for climate adaptation, which are covered in Pathway 3). Fiscal space studies open a dialogue about how much governments can increase budgets. Learning can be taken from previous experiences on how to engage with Ministers of Finance.[96,97] It is often difficult to monetise the benefits of investing in water and sanitation that span health, food security, gender benefits, economic and employment growth and ecological health.[98] Ministries of Finance can support the monetising of water benefits as public funds are frequently employed to provide these benefits.

Line ministries responsible for implementing water security and sustainable sanitation. Line ministries should advocate for more funds from Ministries of Finance. When a ministry has multiple mandates, departments responsible for water and sanitation should advocate for a higher budget within the ministry budget.

Productive sectors. Investment in water security can be significantly increased through the economic sectors that use water for production such as agriculture, industry, mining, and energy. Non-compliance with regulations should provide sources of revenues (see below).

Social sectors. Health and education are key sectors that should be investing in WASH facilities as well as supporting advocacy and awareness raising on the importance of water security, and WASH more specifically.

Service sectors, including tertiary sector. Examples include hospitality/tourism, real estate, retail, media, transportation, and financial and professional services. Many of these are water users and can be charged tariffs above cost recovery levels to help cross-subsidise other users. Some service sector businesses can be approached as investors to have debt or equity stakes in water businesses.

Local governments that generate their own revenues will be able to allocate more to water security over and above what is allocated from higher levels of government. As well as increasing budgets to reflect the local priority of water security, local authorities should be encouraged to review the patterns of existing expenditures and whether the poorest and most marginalised populations are benefitting. Transfers to local government can be motivated based on the outcome of water investments that benefits national finances though healthcare savings, economic growth, food security, and through green infrastructure[99] that reduce the costs of disasters in the case of flooding. Actively managing non-revenue water provides assurance when requesting additional funding from national government.

Public debt is constrained in many African countries. According to the International Monetary Fund, public debt has reached about 60% of GDP in Africa,[100] with the composition of debt shifting towards higher-cost private sources.[101] Nineteen of the region's 35 low-income countries are now in debt distress or at high risk of distress, with the COVID-19 pandemic further stretching Africa's economies. Therefore, many African countries will not be able to take additional loans to finance water security and sustainable sanitation. Taking on debt at sub-national or service provider level might be more feasible in some countries.

Transformative change towards water security will require scaling up proven innovations and moving beyond the traditional "three Ts" of water finance sources (taxes, tariffs and transfers) to include a 4th "T" for 'Transformative' financial flows through dedicated budget allocations for water in economic sectors such as agriculture, industry, mining, energy and others. This should be additional to current allocations to water ministries for social services. An appropriate finance and economic instrument will need to be developed building on the three Ts.

Additional public finance sources should be considered to create a sound basis for sustainable and stable water finance, including effective use of subsidies, targeting those who need it most, rather than those who don't, with appropriate tariffs. It will be important to keep tariffs affordable, particularly for the poorest, while reducing distortion by subsidies.

Additional revenue can be generated based on the principle of polluter pays, with water as a new asset class and earmarked taxes. There is considerable potential here, possibly more than an additional US$4 billion per year. To reduce externalities caused by water users, waste discharge penalties create both a disincentive for pollution and a dedicated revenue source. The overall goal, however, should be to enact measures that incentivise investment in good water stewardship, given the greater efficiency in preventing pollution at source. Innovation in water reuse and recycling can create a new wastewater asset class able to generate revenue. Ways to bring in additional taxes can also be explored, if viable and politically palatable.

Tax on polluters of water resources. The polluter pays principle is founded on the notion of fairness and its primary purpose is to incentivise users to reduce pollution. If they continue to pollute, a tax is imposed which compensates downstream users of water for the additional costs they incur. The size of penalty should be set so it provides a strong incentive for the business to reduce pollution over a reasonable timeframe. A global assessment explores the impacts across multiple industries and identified eight critical and emerging threats.[102] A recent study estimated the costs of eliminating companies' impacts on freshwater in the apparel sector and meat packaging industry, with annual costs for single companies as high as US$1.77 billion for apparel and US$301.4 million for meat packaging, [103],[104] If these costs were paid for, it would reduce the profits of these companies by an average of 73% and 65% for the two industries, respectively.

In 2022, 99 companies reported 215 water related risks in Africa to the Carbon Disclosure Project, with estimated impacts of at least US$61 billion. A sub-sample of these companies estimated the cost of responding to water-related risks in Africa would be $2.6 billion.[105] Hence, further study and more comprehensive monitoring are needed of the water pollution caused by different businesses, the impacts on the ecosystem and downstream users, and the levels of penalty that would be payable and politically feasible.

Wastewater as a new asset class. Innovation in wastewater recycling and water reuse open opportunities to generate a new revenue source from wastewater, support water conservation and the preservation of water.[106] To facilitate innovation, specifically in water scarce regions, policies would need to prioritise water reuse. International cooperation and capacity building must be prioritised to support African countries in programmes promoting green infrastructure,[107] desalination, water efficiency, wastewater treatment, recycling, and reuse technologies. These technologies allow localised responses to climate change risks. Wastewater reuse and desalination technology can address droughts whilst green infrastructure such as water catchment, permeable pavements and bioswales can reduce flooding.

Resource tax. Specific taxes such as on mineral resources can raise significant additional funding for a national priority such as water security and sustainable sanitation. Considerable additional resources could be raised from mining companies that avoid tax, thus transferring water-related risks onto the public balance sheet. IMF estimates that profit shifting in African mining leads to a loss in tax revenue of between US$470 and US$730 million per year.[108] If additional taxes were to be imposed on the mining of mineral resources, careful thought is needed on how investors are likely to respond to incentives, and whether unintended revenue losses may ensue. In other words, there will be trade-offs between securing revenues for public spending and a competitive tax regime for mining investors.[109] At a minimum, governments should have clear, transparent, measurable policy objectives that are subject to public consultation and regular monitoring.

Blended finance will enable the viability gap to be closed and reduce the risk for private financiers. Blended finance entails a combination of commercial debt, concessionary financing, and public borrowing. Through these mechanisms private finance can play a central role in closing the finance gap for water security and sustainable sanitation.

National or central banks provide large loans at base interest rates (below commercial) and typically with long tenure periods. They may work closely with the Ministers of Finance and line ministries on specific national flagship programmes. Advocacy is needed for greater attention to water security. Together with micro-finance institutions, it is possible to raise at least an additional US$1.5 billion a year from these sources.

Financial institutions. Water security in Africa will increasingly rely on private finance, given the insufficiency of public funds and the contribution that the private sector offers in driving water business efficiency. [110] It is estimated that, if Africa's own pension funds could be mobilised as well as other institutional investors, an additional US$10 billion a year could be mobilised for water security.

Commercial banks provide large loans at commercial rates and typically short tenure periods. Interest rates will be higher when guarantees or collateral are not available and/or other risks exist.

Bankable projects that have an appropriate risk-return profile should seek finance from the private sector and not receive government subsidies. In the case of near bankability, a blended finance mechanism could be used to attract investors. Domestic financiers do not have as wide a range of investment options as international financiers and the cost of capital will be higher, but they have a more nuanced local knowledge and connections, and thus may have alternative ways of mitigating political and legal risks.

Mutual funds, hedge funds, pension funds, and insurance companies will be potential sources of finance in some countries.

Pension funds in Africa have US$700 billion in assets under management, [111] and sovereign wealth funds have US$16.4 billion in assets under management.

The 5% Agenda, led by the New Partnership for African Development (NEPAD), is targeted at institutional investors (i.e., pension funds, sovereign wealth funds, and insurance companies) with the aim of increasing allocations of African asset owners to African infrastructure from 1.5% to 5% of their assets under management.

Businesses taking loans. The expansion of water businesses has significant potential for increasing finance to water security given the unmet needs for water and sanitation in productive and social sectors in Africa. To succeed, they must be supported by laws and regulations, given clear service areas, and their businesses developed to be able to take on greater debt financing (see Pathway 1). To attract financing, water and sanitation businesses need to be more creditworthy and financial markets need to be more developed. Several of the largest utilities in Africa have long-term credit ratings of BBB or above[112] but several smaller utilities had only a BB rating.[113]

An assessment of the creditworthiness of 21 water service providers in Kenya identified four key drivers of low creditworthiness: inefficient revenue collection and inadequate management systems; inadequate operations and maintenance cost coverage; high non-revenue water; and high levels of existing and uncertain debts. [114,115]

Microfinance. There is significant potential for microfinance to pay for investment costs of small businesses and households, especially from banks specialised in agricultural or rural loans. Microfinance institutions provide smaller loans, and they work with local communities to increase access where guarantees or collateral are less available.

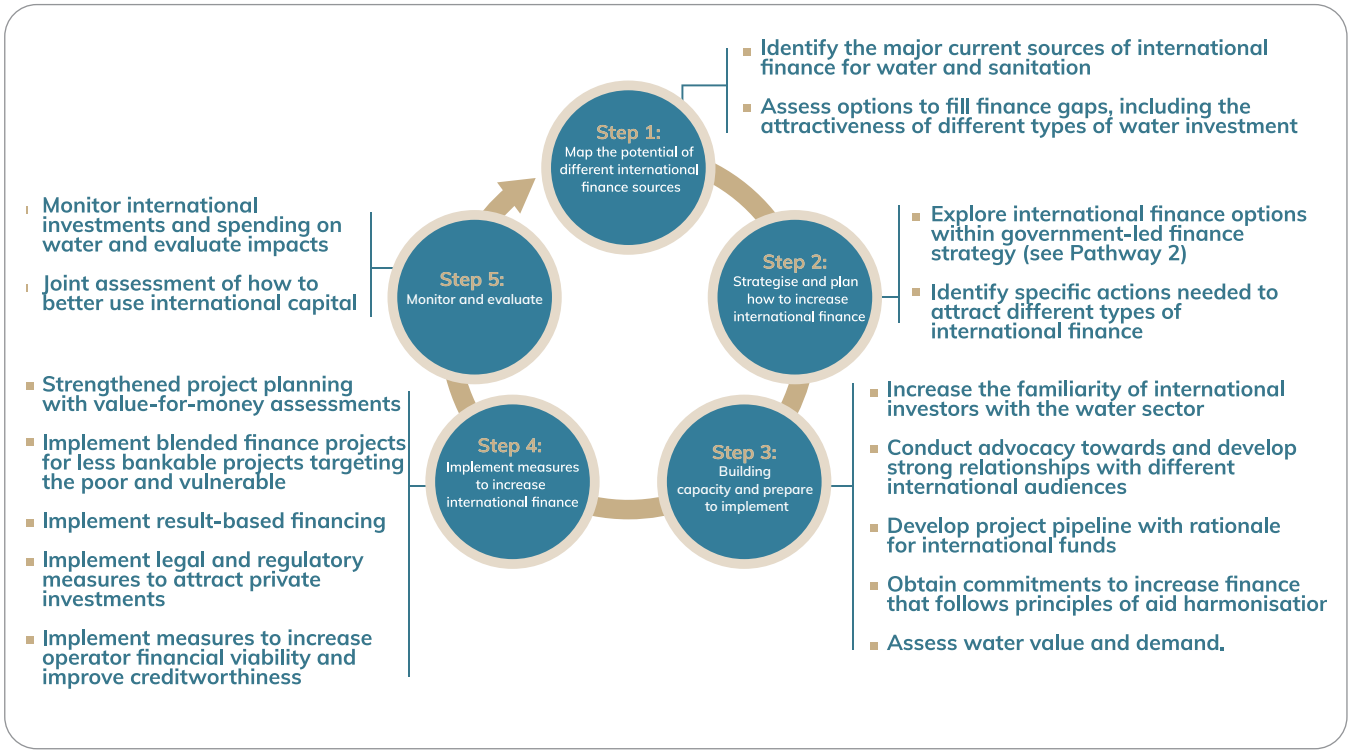
Once the different financial sources have been identified and assessed, it will be critical to consolidate these into a funding and financing strategy to achieve water security and sustainable sanitation, and to ensure the financial sustainability of the water sector. A finance strategy will estimate the finance gap to meet the sector targets within the stipulated timeframe; review the options to close the finance gap,[116] understanding the actions needed to attract different types of financiers; and formulate a coherent policy package that will close the finance gap.[117,118] The development of a water finance strategy should be consultative and aim to bring a broad consensus on the pathways to overcoming finance bottlenecks and achieving water security. It will help bring programmes of many development partners behind the national plan. Given the many diverse water and sanitation sub-themes, it may be more realistic to develop finance strategies for water resource management and WASH services separately, while ensuring their recommendations are cohesive.

Pathway 3: Secure global and continental finance

The main purpose of this pathway is to identify significant international finance sources that could be allocated to water security in Africa and to take measures to access those funds. African governments should combine forces to lobby and advocate for greater funding and financing for Africa, and to water security specifically.

Several constraints need to be addressed at the highest level concerning the terms under which the global financial systems make finance available to poorer developing countries. Additional funds that could be mobilised through pathway 3 are US$1.5 billion from bilateral funds, US$2 from multilateral development banks and US$3.2 billion from climate funds. The five steps for Pathway 3 are shown in Figure 20.

Figure 20. Five steps for pathway 3 to secure global and continental finance



Blended financing is dependent on grant funding and concessional financing to ensure that debt is affordable to African countries. Available international grant funding and concessional financing are listed below as possible sources to achieve blended financing where domestic public finances are constrained. These funding sources can be fragmented and not aligned to sector or regional needs. Options for pooled funding arrangements in relation to water security or regional investments could be considered.

Overseas Development Assistance (ODA). The percentage of total aid commitments for water and sanitation has declined from 4.6% in 2018 and 2019 to 3.6% in 2020;[119] in value from US$9.6 billion in 2018 to US$8.7 billion in 2020.[120] This trend could be reversed with the right type of political support and recognition of the central role of water security in national economic development and climate risk mitigation. Donors can be more impactful by following principles of sustainable finance,[121] and can leverage more funds to water by providing guarantees for investors, systems strengthening and technical assistance to match borrowers with lenders.

Climate Funds. Africa will need US$2.8 trillion between 2020-2030 to implement its NDCs under the Paris Agreement - 24% of which is for adaptation, 64% mitigation and 10% has dual benefits.[122] In countries that provided sector data, 17% of adaptation needs were for water.

International donors and African governments have pledged approximately US$30 billion a year which is approximately 12% of the NDC total, leaving 88% to be sourced from other international finance sources and the domestic private sector. While the NDC sum is currently an unrealistic total, it is assumed that the water sector could close 20% of its own funding gap, totalling US$3.2 billion a year in Africa.

For the water sector to succeed in attracting climate finance it is key to produce robust project proposals that are backed by the latest evidence and allow for future uncertainties.[123] They should demonstrate evidence of cross-sectoral impacts and leveraging of finance. Co-financing is typically a condition of climate funds and hence needs to be negotiated to ensure the project's future sustainability. In addition, the role of water and sanitation in climate mitigation measures needs to be recognised and evidenced.

IMF Special Drawing Rights (SDRs). The SDR is not a currency per se but an accounting unit for IMF transactions with member countries.[124] SDRs are a stable asset which is added to a country's international reserves, and managed by the central bank to ensure that a country has the foreign currencies it needs to trade with the world. Adding SDRs to a country's international reserves makes it more resilient financially. Countries can exchange their SDRs for hard currencies with other IMF members.

Multilateral Development Banks provide a mix of grants, concessionary and commercial loans depending on a country's income level. The World Bank has a current portfolio of global water investments of almost US$30 billion, while the African Development Bank has invested an estimated US$6.2 billion in water supply and sanitation services delivery from 2010-2021. Additional grants and loans could be sourced from the Asian Infrastructure Investment Bank (AIIB) which now has 20 approved members from Africa[125] and the New Development Bank.[126]

Bilateral Development Aid provides grants and technical assistance, and in some instances loan guarantees for blended financing. The Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) members have adopted the 0.7% target for ODA set by the UN in 1970. Since then, several countries have met this target and some have sustained it, monitored under SDG 17 Indicator 17.2.1 (a)[127]. However, overall ODA was under 0.35% of Gross National Income in 2020, i.e. less than half the target [128]. In recent years, bilateral aid of DAC countries to Africa has averaged around US$1.5 billion per year to water and sanitation. The rise of BRICS countries in the ODA landscape in the past 20 years could lead to increased ODA. There have been an increasing number of loans from China[129] and India[130] on the African continent, which are not captured by the OECD Creditor Reporting System. It is estimated that a 25% increase in bilateral aid could be achieved, totalling US$0.5 billion a year.

UN agencies provide grants and technical assistance. The larger players in funding volumes for water security include UNICEF, the United Nations Development Programme (UNDP), UN-Habitat and the United Nations Environment Programme (UNEP), with most funding from bilateral agencies and a smaller proportion from private sources.

The **African Water Facility** (AWF), hosted by the African Development Bank, provides grants and expert technical assistance to implement innovative water projects and raise investment for water projects throughout Africa. From 2006 to 2021, the AWF mobilised approximately US$200 million from different funders.

The **Africa Adaptation Acceleration Program** (AAAP), a joint initiative of the African Development Bank and Global Center on Adaptation, has been endorsed by African leaders as the Africa-owned and Africa-led response to the impacts of climate change on the continent. AAAP is mobilising US$25 billion for adaptation under its four transformational pillars: food security, resilient infrastructure, youth entrepreneurship, and innovative climate adaptation finance, with water playing a central and cross-cutting role. A dedicated Upstream Financing Facility supports adaptation mainstreaming in large-scale DFI projects across the continent.[131]

International private finance will play a central role in closing the finance gap for water security and sustainable sanitation, with potentially trillions of dollars available in global markets. A strengthened enabling environment (Pathway 1) and blended finance opportunities (Pathway 2) would reduce the risk for these investors and open new avenues for investing in African water. At the same time, international investments must adopt the highest standards in water stewardship and promote innovations and knowledge transfer to achieve these standards.

Institutional investors are companies that buy, sell, and manage stocks, bonds, and other investment securities on behalf of their clients or shareholders.

Examples of institutional investors are mutual funds, hedge funds, pension funds, insurance companies, commercial banks, and endowments.[132] These investors are typically looking for higher rates of return but will adjust their portfolios based on risk. International investors have a global overview on where the investment opportunities are and have access to cheaper capital than domestic commercial financiers. On the other hand, they face exchange rate risk and are more sensitive to political risk and the strength of local legal systems.

Impact investors seek a financial return but explicitly aim to balance financial return with positive human or ecological development outcomes. The Global Impact Investing Network estimates that over 3,349 organisations currently manage US$1.164 trillion in impact investing assets under management (AUM) worldwide, 2% of which is in sub-Saharan Africa and 1% in Middle East and North Africa.[133]

Results-based financing requires proper governance and monitoring and evaluation of the outcomes of investments in addition to returns on investment.

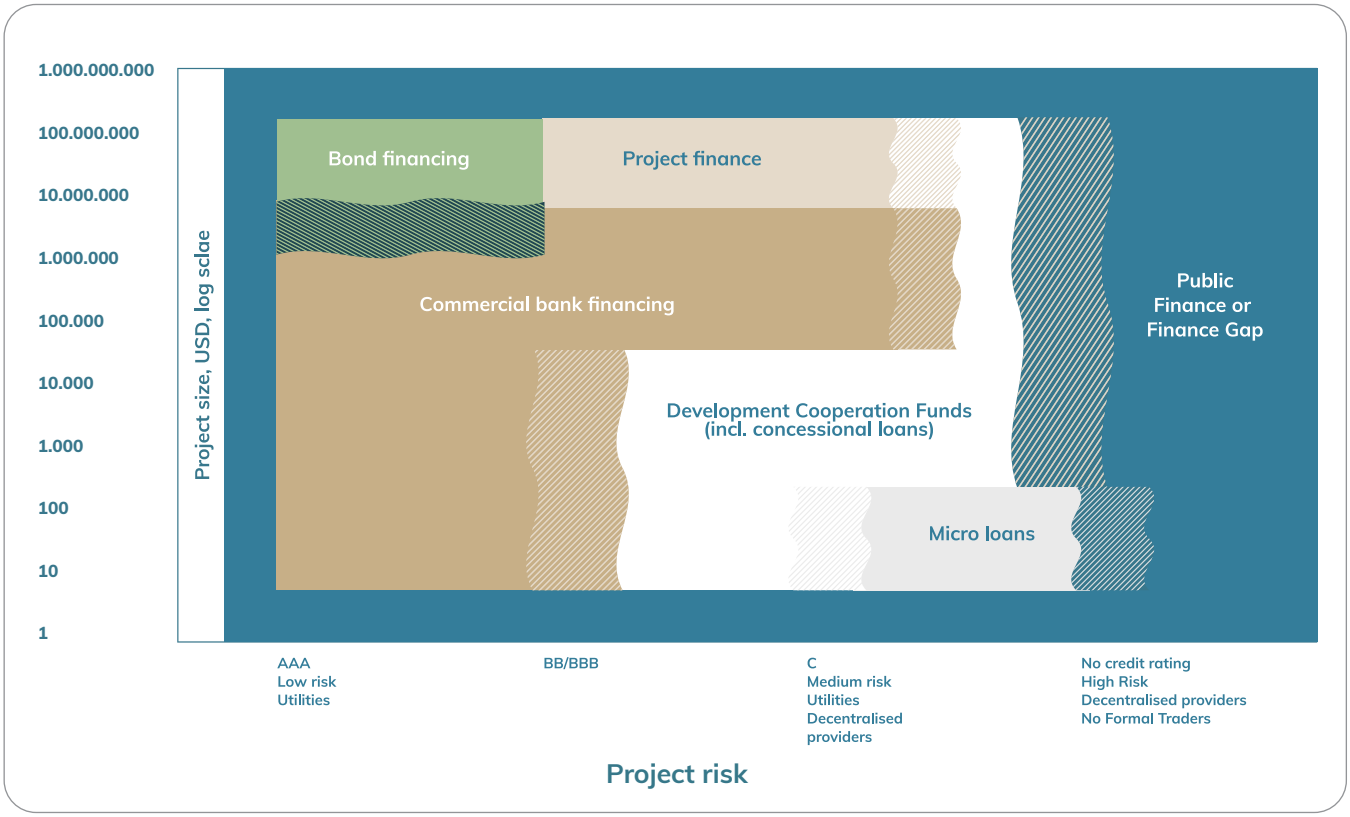
To attract more institutional investors to water security and sustainable sanitation, project preparation facilities are needed that have the capacity to apply accepted methodologies, guiding feasibility studies and risk assessments. A standard investment appraisal procedure is key for identifying and comparing different projects transparently and setting performance benchmarks which project developers and implementers integrate into project design. Projects should have a clear rationale in terms of the economic and social development objectives, value-for-money (comparison of different options based on life cycle costs, benefits over time), bankability, future sustainability, and information related to environmental and social safeguards. Data collection and reporting capacity need to be strengthened, focusing on outcomes and results.

Improved feasibility studies and risk assessments can increase the attractiveness of investments in water and wastewater infrastructure. Regional facilities can help pool resources and provide support to countries unable to set up their own facilities, including capacity development for countries to be more autonomous. For example, the African Water Facility plays an instrumental role in supporting African countries to prepare bankable projects that address the increasing need for investment to build the development and management of water resources in Africa. Also, the Programme for Infrastructure Development in Africa (PIDA Service Delivery Mechanism (SDM) can be used by African countries to support early-stage project preparation at the national and regional levels. It also provides institutional advisory services, legal advice, communications, and capacity building.[134]



The institutional and regulatory environment supporting PPPs needs to be strengthened to attract international investors. This includes public financial management, procurement and contract management support to ensure budget transparency, long term commitment of public funds and regulatory certainty (see Pathway 1). Financial instruments should be customised to facilitate transaction simplicity and lend credibility to the investment. The form of PPPs will vary, depending on context. Figure 21 shows a simplified framework, focusing on the areas of project risk and project size which are most suitable for blended finance options.[135] Initiatives such as the Institutional Investor Public Partnerships (IIPPs) of the AUDA-NEPAD Continental Business Network[136] can be built upon. An investment viability fund provides guidance on tariff-setting, metering and verification of water use and waste discharge, and it provides funds to cover viability gaps where there is limited fiscal capacity.

Figure 21. A simplified framework for discussing blended finance



Source: Gietema, van Oppenraaj and Fonseca (2017), International Water Week, Amsterdam



Chapter 5: Action Plan

A five-point action plan is outlined below to implement the three pathways, with related key actions.

1. Establish cross-sectoral political leadership at the highest level, with commitment to substantially increase public budgets and investments for water security and sustainable sanitation. Water affects all economic and social sectors. Cross-sectoral leadership is critical. Make increased water security and sustainable sanitation a national and continental priority.

Key actions for African leaders, development partners and investors:

- Establish a high level cross-sectoral inter-ministerial 'whole government' forum mandated by the President, Prime Minister or Cabinet to champion investments in water security and sustainable sanitation and oversee implementation of the national water investment roadmap for growth and development.
- Elevate the position of water security within the political leadership and ministerial structure, emphasising its cross-sectoral importance.
- Review fiscal space and the role of water security in economic growth.
- Develop comprehensive, multi-sectoral, costed water investment programmes.
- Place water investment as a priority in the lending portfolios of national development banks.

2. Track progress and enhance mutual accountability for results in the mobilisation of water investments and in peer review mechanisms at continental, regional, national, sub-national, and community levels.

Key actions for African leaders, development partners and investors:

- Implement comprehensive and regular reporting, review, and analysis of progress on water security through the Continental Africa Water Investment Programme (AIP) Scorecard, the AMCOW Water and Sanitation Sector Monitoring and Reporting System (WASSMO) and national Joint Sector Review processes.
- Recommit to previous commitments by African governments to allocate of at least 5% of national budgets for water and sanitation sector and 0.5% of GDP per annum for sanitation and hygiene programmes.[137]
- Strengthen public financial management systems to improve reporting and accountability on water, including financial auditing of government accounts.

3. Mobilise new sources of funding and innovative finance, such as institutional investors.

Key actions for African leaders, development partners and investors:

- Strengthen or set up water project development facilities meeting standards of institutional investors.
- Support matchmaking platforms to bring together the supply and demand for water finance with a special focus on climate resilient, blended finance, inclusive and gender transformative approaches.
- Conduct a comprehensive national tariff review to inform water tariff reforms that incorporate economic value of water, affordability, and social inclusion, incorporating the full cost of water in economic transformative sectors and investments.

4. Strengthen institutional regulation for water investments, create incentives and penalties for increased water efficiency across multiple industries to lead water stewardship efforts, biodiversity, and ecosystem protection.

Key actions for African leaders, development partners and investors:

- Define and implement an appropriate legal and regulatory environment for water and sanitation, including PPP legal frameworks.
- Update compliance mechanisms and fines to be imposed by regulators on water polluters, considering the economic value of water.

5. Use ODA to de-risk water investments and leverage larger funding streams. Improve implementation capacity, quality of bankable projects and strengthen international cooperation by aligning technical and financial support with regional, transboundary and national water investments programmes, strategies and plans.

Key actions for African leaders, development partners and investors:

- Develop a pipeline of bankable water projects. Establish system of formulating projects from concept stage up to technical and financial closure and ensure that a pool of viable project proposals is available at any given time. This will maximise the possibilities of attracting the much-needed resources for project implementation.

- Strengthen institutional regulation and commit to principles of sustainable finance, including (where possible): prioritising poor and vulnerable groups; utilising and strengthening government systems and capacities in financing, procurement, and monitoring.

- Consider exploring Special Drawing Rights allocations towards water, insurance and debt-for-nature swaps.



Chapter 6: Next steps

This report will inform the development of the High-Level Panel Investment action plan to guide the implementation of the pathways for the mobilisation of US$ 30 billion in climate resilient water investments by 2030. It will be vital for countries to act fast, building on the momentum of the UN 2023 Water Conference and other events being held in 2023 to build and capitalise on political support for investments.

As a matter of priority and to enable high level ongoing political leadership and oversight on implementation of concrete actions on investment mobilisation, the African Union needs to consider establishing, within its structure, a dedicated committee of Heads of States on water security and sustained sanitation like its Committee of Heads of States and Government on Climate Change (CAHOSC) with mandate to report regularly to the AU Summit on the status of water security and sanitation in Africa.

To close the water investment gap and achieve SDG water related targets, it will be critical to implement national water investment programmes with appropriate peer to peer review mechanisms, using the water investment scorecard. National leaders as well as mandated lead institutions and development partners for water and sanitation should meet regularly to review progress, and seize opportunities to take forward this vision for their country, as follows:

1. Secure commitments to move forward with implementation of an investment roadmap.

- Review overall roadmap proposal and how realistic it is for the country to implement.
- Recommend how the roadmap pathways may be customised to the country.
- Review which key actions might be committed to and propose adjustments.
- Inform development partners of the intention to move forward and seek input as needed.

2. Initiate the process of establishing and enhancing high level political commitment and leadership to champion water and sanitation both inside and outside the water sector.

- Mobilise high level political leadership and commitment to champion water investments and identify the specific areas to be addressed.
- Engage institutions and investment funds with significant potential to raise financing for water and sanitation.
- Commit to implement the investment roadmap.

3. Identify which foundational work to undertake.

- Identify available evidence and key evidence gaps for making the investment case for water and for developing a finance strategy, investment plan and project pipeline.
- Assess the timing/sequencing of studies to fill key evidence gaps and how they will fit together.
- Prioritise and sequence pipeline of projects and allocate responsibilities for project development.
- Develop an investment plan to achieve water security and sustainable sanitation.
- Initiate use of the AIP scorecard, identify and fill data gaps, and link it with national instruments and processes.

4. Plan how to implement the proposals for sector strengthening and ways to attract public funds and investor financing from both national and international sources.

- Identify which aspects of the enabling environment are weakest and have greatest potential for boosting finance or increasing efficiency, equity, or sustainability.
- Review which initiatives cited in this report are relevant for the country and have most potential.

5. Engage in regional and transboundary initiatives to strengthen roadmap implementation.

- Make national commitments to implement elements of the roadmap, on both national and regional and transboundary platforms.
- Seek input from and share experience of good practice with other countries.

• Implement regular peer-to-peer reviews and monitoring progress against key targets, commitments through the AIP-PIDA Water Investment Scorecard.

In addition, international finance institutions and investors should review how they plan to increase the quality and quantity of finance to support African countries to achieve water security and sustainable sanitation for all.



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[123] Addressing uncertainty calls for more attention to blended design approaches to enhance flexibility and robustness. For example, water infrastructure is often inflexible and designed to be fail-safe using static future predictions. An alternative can be a safe-to-fail design approach combining grey infrastructure with nature-based solutions where infrastructure systems remain adaptable and are designed to lose function in a limited manner to avoid catastrophic failure.

[124] https://www.imf.org/en/Topics/special-drawing-right/seven-things-you-need-to-know-about-sdr-allocations

[125] https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html

[126] https://www.ndb.int/ - set up by BRICS countries, currently loans are only for South Africa within Africa.

[127] https://data.oecd.org/oda/net-oda.htm#indicator-chart and https://w3.unece.org/SDG/en/Indicator?id=72 https://data.oecd.org/oda/net-oda.htm#indicator-chart and https://w3.unece.org/SDG/en/Indicator?id=72

[128] https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/official-development-assistance.htm

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