

Programme document




















































Danish Support to the African Water Facility

Improving access to climate resilient safe water supply and sanitation services in the Sahel and Horn of Africa (2021-2025)

Ministry of Foreign Affairs of Denmark

June 2021

Improving access to climate resilient safe water supply and sanitation services in the Sahel and Horn of Africa

<p>Key results:</p> <ul style="list-style-type: none"> - 5 bankable projects ready for financing that will lead to improved water supply and sanitation services for 500,000 people. - 5 immediate intervention projects implemented that will provide improved water supply and sanitation services for 300,000 people - 5 WASH sector climate vulnerability assessments carried out and approved by the national authorities - 5 capacity development events on project preparation completed <p>Justification for support:</p> <ul style="list-style-type: none"> - Access to safe, reliable and affordable water and sanitation services is a fundamental human right, and critical element in assisting conflict-affected countries overcome the fragility trap and reduce sources of conflict. - Improving access to water in Africa is a central priority in the Danish Government's long-term Strategy for Global Climate Action. - Provision of safe water and sanitation is a critical tool for protecting human health during all infectious disease outbreaks, including COVID-19. - Bringing higher quantities of reliable water to households will enhance the quality of life by reducing the time and effort to collect water through improvements in human health, child education and economic productivity. - The programme will build the resilience of the beneficiary communities to climate change and enhance the sustainability of the water systems through infrastructure and watershed measures. <p>Major risks and challenges:</p> <ul style="list-style-type: none"> - The threat of insecurity from violent extremist groups in the Sahel and Horn of Africa - Weak capacity of project executing agencies, which may slow down programme implementation - Financing not made available for the projects prepared - Operation and maintenance and hygiene behaviour change not taking place post project. 	File No.	F2 2020-42915																						
	Country	Mali, Niger, Burkina Faso, Ethiopia and Somalia																						
	Responsible Unit	Green Diplomacy and Climate (GDK)																						
	Sector	Water																						
	Partner	AWF/AfDB																						
	DKK mill.	2021	2022	2023	2024	2025	Tot.																	
	Commitment	149.5																						
	Projected ann. disb.	30.0	46.0	48.0	35.0	1.5	149.5																	
	Duration	Q3 2021-Q3 2025 (4 years)																						
	Previous grants	Euro 5.4 million (2004-2006)																						
	Finance Act code	06.34.01.40																						
	Head of unit	Signe Skovbakke Winding Albjerg																						
	Desk officer	Tobias von Platen-Hallermund																						
Reviewed by CFO	Christina Hedegård Hyttel																							
Relevant SDGs	<table border="1"> <tr> <td> No Poverty</td> <td> No Hunger</td> <td> Good Health, Wellbeing</td> <td> Quality Education</td> <td> Gender Equality</td> <td> Clean Water, Sanitation</td> </tr> <tr> <td> Affordable Clean Energy</td> <td> Decent Jobs, Econ. Growth</td> <td> Industry, Innovation, Infrastructure</td> <td> Reduced Inequalities</td> <td> Sustainable Cities, Communities</td> <td> Responsible Consumption & Production</td> </tr> <tr> <td> Climate Action</td> <td> Life below Water</td> <td> Life on Land</td> <td> Peace & Justice, strong Inst.</td> <td> Partnerships for Goals</td> <td></td> </tr> </table>						 No Poverty	 No Hunger	 Good Health, Wellbeing	 Quality Education	 Gender Equality	 Clean Water, Sanitation	 Affordable Clean Energy	 Decent Jobs, Econ. Growth	 Industry, Innovation, Infrastructure	 Reduced Inequalities	 Sustainable Cities, Communities	 Responsible Consumption & Production	 Climate Action	 Life below Water	 Life on Land	 Peace & Justice, strong Inst.	 Partnerships for Goals	
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Strategic objectives:

A better quality of life for people in five countries (Mali, Niger, Burkina Faso, Ethiopia and Somalia) from improved access to water supply and sanitation services and enhanced climate resilience through WASH Sector interventions.

Justification for choice of partner:

AWF is a demand-driven African-led fund through which development partners and the AfDB can leverage expertise, convening power and resources for financing water and sanitation programs in Africa. It has the power to convene and mobilize multiple stakeholders and to utilize the experience gained from work from the wider African Development Bank processes on water management and development.

Summary:

A dual strategy is adopted by supporting long-term programmatic improvements through developing bankable projects and an immediate programme of improvements of existing systems. Together, this will lead to enhanced climate resilience, improved water and sanitation services for 800,000 people in some of the poorest and most climate affected countries in the world.

Budget (DKK million):

Outcome 1 project preparation capacity and long-term improvement of services	38.60
Outcome 2 Immediate operational improvements in services	103.45
Programme management	7.45
Total	149.50

List of Acronyms and Abbreviations

AFD	Agence Française de Développement (French Development Agency)
AfDB	African Development Bank
AHWS	Water Development and Sanitation Department
AMCOW	African Ministers' Council on Water
AWF	African Water Facility
DKK	Danish Kroner
EM-DAT	Emergency Events Database
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GWP	Global Water Partnership
MFA	Ministry of Foreign Affairs of Denmark
NDF	Nordic Development Fund
SDG	Sustainable Development Goals
ToC	Theory of Change
UN	United Nations
UNICEF	United Nations Children's Fund
US\$	United States Dollars
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WB	The World Bank
WHO	The World Health Organization

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1. Introduction

This document presents a 4-year programme to support the African Water Facility (AWF) in improving climate resilient water and sanitation service. The programme is part of the AWF work plan for 2021 and its objective is to improve access to domestic water supply and sanitation services, support COVID-19 prevention and recovery efforts, and enhance climate resilience through the WASH sector. The programme will take place in both rural and urban communities in five countries in the Sahel and Horn of Africa: Mali, Niger, Burkina Faso, Ethiopia and Somalia.

The programme will use a build-back-better and greener, climate-resilient approach to implement immediate operational improvements, prepare longer-term investments in water supply and sanitation, as well as improvement of integrated water resource management. Activities will specifically target poor and vulnerable communities with no or very limited access to safe and reliable water and the programme will thereby contribute to reduce poverty levels and improve health conditions. The Danish support through a combination of longer term and immediate measures is expected to improve hygiene and access to water and sanitation for an estimated 800,000 people. The programme is in line with the ambition of the Danish Government's long-term Strategy for Global Climate Action to strengthen Denmark's engagement in climate change adaptation. It will also contribute to the objective of improved access to clean water for 5.8 million people in Africa announced by the Danish Minister for Development Cooperation in 2020.

The programme was developed by the AWF and the African Development Bank (AfDB) and is supported jointly by Denmark and the Nordic Development Fund (NDF). The program will be implemented by the AWF, which is a Special Fund established in 2004 by the African Water Ministers' Council on Water (AMCOW) and hosted and administered by the African Development Bank (AfDB). Denmark was one of the founding members of AWF and has provided Euro 5.4 million of support since 2005.

2. Brief summary of issues to be addressed and institutional context

The issue to be addressed is the low access to water, sanitation and hygiene across the Sahel and the Horn of Africa. Access to adequate safe water and improved sanitation in the five target countries of this program remains a significant challenge in both rural and urban areas despite considerable progress towards meeting the SDG 6 targets. The average service access level in the five countries based on data from 2017¹ stands at 57.3% for at least basic water supply; 6.7% for safely managed water supply; 14.8% for at least basic sanitation; 3.2% for safely managed sanitation facilities; and 22.4% for handwashing facility with soap and water at household level. This leaves a population of approximately 119 million in the five countries without access to at least basic water supply; 188 million without access to at least basic sanitation facilities; and 200 million without access to handwashing facilities.

The provision of safe WASH services is essential for preventing infections and protecting human health during all infectious disease outbreaks, including of COVID-19. Regular handwashing with soap and water is a critical first line of defence against the virus. Access to improved WASH is essential not only during an epidemic, but even in the post-epidemic period as shown by experiences during the Ebola epidemic in West Africa. The programme will support the recovery of the five target countries from the COVID-19 pandemic by improving existing water supply and sanitation services and leveraging new investments in water and sanitation infrastructure in the countries.

The institutional situation in the five countries is fragile and affected by conflict. The five target countries of the programme are affected by hunger, malnutrition, economic stagnation, human displacement and migration exacerbated by rapid population expansion, environmental degradation and climate change. Economic and environmental fragility of the countries is compounded by conflict and violence arising from political disgruntlement, presence of jihadist groups and weak state authority. The five countries are poor with low adaptive capacities.

¹ Joint Monitoring Programme (JMP). JMP is jointly managed by WHO and UNICEF and monitors WASH access at the household level and also in schools and health care facilities.

3. Strategic Considerations and Justification

3.1 Context and relevance

The five countries in the Sahel and Horn of Africa: Mali, Niger, Burkina Faso, Ethiopia and Somalia are among the world's poorest countries. The five countries have a combined population of 258.5 million, with 44 % of their population living below the poverty line and with an average per capita Gross Domestic product of USD 1,570. In 2020, global progress towards meeting SDG6 has been jeopardized by COVID-19 pandemic, which has also had severe impacts on WASH services in Africa. The pandemic threatens to roll back years of hard-won development progress towards delivering on SDG6 and water-related SDGs. Provision of safe water and sanitation is a critical tool for protecting human health during all infectious disease outbreaks, including COVID-19. The Sahel and Horn of Africa are among the most affected areas in Africa from the impacts from climate change. The region is characterized by strong climatic variability, irregular rainfall and persistent drought. Water scarcity is a significant limiting factor for development in the Sahel and Horn of Africa. Annex 1 provides more details on the context.

The five countries are on the list of priority countries for Danish development cooperation thereby providing opportunities for strengthening coherence between multilateral and bilateral engagement based on the specific country context. The programme is aligned with Denmark's strategy for engagement with the AfDB and priority areas for Denmark's support under this strategy include strengthening AfDB's role in promoting stability in fragile situations; supporting the AfDB's activities geared at attainment of inclusive green growth championed by the private sector and deepening gender mainstreaming in development work.

The programme objective of improving access to domestic water supply and sanitation services, supporting COVID-19 prevention and recovery efforts, and enhancing climate resilience of the WASH sector is important and relevant for the following reasons:

- Access to safe, affordable and reliable water and sanitation services is a fundamental human right, and critical element in assisting conflict-affected countries overcome the fragility trap.
- Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks. The targeted communities have no or limited access to safe drinking water due to multiple factors.
- The five countries did not meet their Millennium Development Goals and are not on course to meet SDG6 targets.
- Bringing higher quantities of reliable water and promoting improved sanitation and hygiene will enhance the quality of life by reducing the time and effort to collect water - a burden that unproportionally affects women and children –through improvements in human health, child education and economic productivity.
- Improved water and sanitation facilities and promotion of hygiene at health clinics and schools will ensure that the quality of life of especially women and children is improved.
- Improved access to water implemented through a conflict sensitive approach will be a positive contribution towards minimizing the causes of conflict.
- The programme will focus on, and aim to improve hygiene and basic services for, poor populations especially those displaced by insecurity and environmental disasters. In this way, the programme will contribute to regional peace.
- The programme will build the resilience of the beneficiary communities to climate change and enhance the sustainability of the water systems through infrastructure and watershed measures. The programme will also support institutional capacity building for integrated climate water resilience into the design of new water infrastructure. The Strategic Framework for WASH Climate Resilience will guide preparation, design and implementation of projects funded under the programme.

The programme will also create new temporary and permanent jobs, thereby contributing to poverty alleviation. Sustainable water management, water infrastructure and access to a safe, reliable and affordable supply of water and adequate sanitation services will improve living standards, expand local

economies, and lead to the creation of more decent jobs and greater social inclusion. Job opportunities arising from water supply projects will be both temporary and permanent and will be around provision of labour at construction sites, supply of consumables to contractors, water kiosk attendants, laundry washers, car washing operators, etc. Ancillary jobs associated with sanitation projects will include latrine/toilet construction services, construction materials supply services, cesspool emptying and transportation services, faecal sludge drying/ treatment plant operators; organic manure distributors, etc. Jobs associated with watershed management measures include tree nursery and tree planting.

3.2 The AWF/AfDB policies, priorities and systems

The AWF is a demand-driven, African-led project preparation facility that provides grants, mobilizes investment financing, and offers expert technical assistance to support the preparation and implementation of innovative water and sanitation projects throughout Africa. The AWF assists African countries to mobilise financing and apply the funds to address WASH needs. In this way, it contributes to meeting the African Water Vision 2025 as well as water-related SDGs. The AWF's intervention areas include drinking water supply, sanitation and hygiene, integrated water resources management, transboundary water management and regional cooperation as well as agricultural irrigation and food security, hydropower and renewable energy, and knowledge management. Being housed by the AfDB allows the AWF to benefit from the Bank's in-house capacity in many areas. These include legal matters, procurement, financial management systems, monitoring and evaluation and translation. The AWF is also able to use the Bank's institutional machinery at regional and national levels to support its activities.

Recently, a decision was taken to merge two other water trust funds (the rural water supply and sanitation initiative (RWSSI²) and the multi-donor water partnership programme (MDWPP) into the AWF. Legal guidance during the merging process however highlighted that the Bank's Charter prohibits a special fund like the AWF from assuming the liabilities of either the Bank or other funds. Consequently: (i) The Bank initiated the closure of the two funds, but their outstanding projects will continue until they reach their natural close. Trust funds resources will be earmarked to cover outstanding liabilities while donors of the closing trust funds will receive a pro-rata share of the uncommitted funds. No ongoing MDWPP and RWSSI-TF activities will be transferred to the AWF; (ii) Relevant functions of the RWSSI-TF and MDWPP are reflected in the ongoing revision of the AWF Strategy (2017 – 2025). The revised AWF strategy 2017-2025 is expected to be completed by 31st July 2021. The process for termination of the two water trust funds (RWSSI and MDWPP) is expected to come to completion by 31st December 2021 and has no direct impact on the operations of the AWF. The AWF will remain fully operational during the above period and will be in position to sign financing agreements with donors.

The AWFs comparative advantage to manage the programme are the following:

- The AWF is a unique fund through which development partners and the AfDB leverage their expertise, convening power and resources for financing water and sanitation programs in Africa.
- It is the only Project Preparation Facility (PPF) operating in Africa that is exclusively focused on the water and sanitation sector. Since the AWF is demand-driven, it offers flexibility in terms of tailoring support to beneficiary needs.
- It has the power to convene and mobilize multiple stakeholders and to utilize the experience gained from work from the wider Bank processes on water management and development.
- It provides support to all stages of the project preparation continuum, from water sector planning and project identification, through to structuring and transaction advisory services.
- It is a well-recognized vehicle to mainstream climate resilience into water and sanitation infrastructure development.
- It has a broad range and depth of technical expertise that it can use to support analytical assessment of strategic and investment options as well as the design and oversight of projects.

² Denmark has supported RWSSI with Euro 30.8 million in the period of 2005-2010.

- It has a transparent and accountable business delivery system that enjoys the full complement of the AfDB's fiduciary and operational instruments and procedures, including extensive safeguards, human resources, and network of regional and country offices.
- It has demonstrated efficient use of donor funding, with reasonable administration costs.
- The African Ministers' Council on Water (AMCOW) provides leadership to AWF's governance, and enables member countries to set the strategic directions of the AWF in ways that align with their domestic needs and priorities thereby giving the Facility legitimacy.
- The AWF is under the AfDB which is recognised as one of the most effective organisations for operating in fragile and conflict affected situations and is one of the original reasons for working with the AWF in the Sahel /Horn of Africa. The AfDB strategy and approach in these areas will be integral to the project.
- The AWF and AfDB have long working relationships with the ministries, agencies and other entities involved in water supply, sanitation and hygiene promotion in the five countries. The AfDB through its multi-sector operations and policy dialogue also have insight and entry points for ensuring that all activities are conflict sensitive and contribute to reducing fragility.

An evaluation of the AWF's operations since its inception in 2005 was carried out by the Bank's Independent Evaluation Department in 2019-2020. The evaluation established that the AWF had found its niche as the primary instrument for mobilizing resources to bridge the huge infrastructure gap in the African water sector. The Facility was noted to have prepared many bankable projects with the potential to deliver significant impacts with respect to providing access to water and sanitation, renewable energy, food, and multipurpose water storage capacity, among other impacts. The evaluation, however, also revealed areas that need further improvement, including incorporating cross-cutting issues especially gender in the design of projects; improving operational efficiency for optimal delivery on its mandates; and strengthening results reporting and communication about AWF operations and achievement/results. In addition, the evaluation found weak technical capacity due to diminishing staff resources, and weak long-term project sustainability due to governance, policy and macro-economic conditions prevailing in the Regional Member Countries.

The Leadership of the AWF and the AfDB have taken steps to address the weaknesses. In 2019-2020, five vacant positions in the AWF were filled to strengthen technical capacity. Under this Programme, the issue of long-term project sustainability will be addressed through a multipronged approach that includes selection of high priority national projects with government counterpart funding and opportunities for future government support and private finance; strengthening capacity of Project Executing Agencies during programme implementation; and strengthening the enabling environment for investments through water governance interventions under the Bank's Country Strategy Papers.

The following boxes provide a summary of:

- The AfDB group policy on water (2021)
- The AfDB group draft water strategy (2021-2025)
- The AfDB group strategy for addressing fragility and building resilience in Africa (2014-2019)
- The AfDB group gender strategy (2021-2025)
- The AWF gender and social equity strategy (2010)
- The AfDB group anti-corruption measures and guidelines
- The AfDB group's Second Climate Change Action Plan (2016-2020)

THE AFRICAN DEVELOPMENT BANK GROUP POLICY ON WATER (2021)

The African Development Bank Group Policy on Water (2020) replaces the Bank's Integrated Water Resources Management Policy of 2000. The Policy presents the Bank Group's vision for water as: *an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation and the environment.*

The mission of the Bank Group in relation to water is: *to be the premier partner in achieving water security for inclusive and sustainable growth in Africa.*

The overarching objective of the Water Policy 2020 is: to enhance Africa’s water security and transform its water assets to foster sustainable, green and inclusive socio-economic growth and development. The policy outlines seven priority areas in which to focus interventions in water. These are: (a) water supply and sanitation, (b) agricultural water management, and (c) sustainable water use for energy production. Further sub-sectors of the Bank Group’s intervention include: (d) urban development, (e) transportation, (f) industry and tourism, and (g) water-related disaster risk management.

The policy is guided by four principles, two of which are that attainment of water security at household, national and regional levels should be recognised as a key outcome fundamental for inclusive growth; and that promoting sustainable and equitable access to water services is an enabler for the Sustainable Development Goals (SDGs).

The policy was presented for approval to the Bank’s Board in February 2021, and will be implemented through medium-term sector level strategies and action plans. To promote a coordinated approach to water-related interventions across sectors, and maximize the impact of the Bank’s resources, the policy proposes to establish a Policy on Water Cross-sector Coordination Committee (PoWCCC).

From the above description, the AfDB/Denmark Programme is well aligned to the priorities of the Bank Groups new Water Policy.

THE AFRICAN DEVELOPMENT BANK GROUP DRAFT WATER STRATEGY 2021 – 2025

This Water Strategy 2021-2025 is a key tool for operationalizing the Bank Group’s Water Policy (2021) and working towards achievement of the Bank Group’s ‘High 5’ goal on improving the quality of life for the people of Africa. The Strategy was presented for consideration to the Senior Management Coordination Meeting in February 2021, and is expected to be approved by the Bank’s Board in December 2021.

The Water Strategy articulates the medium-term strategic focus and priorities of the Bank Group with respect to water, and seeks to redirect the Bank’s support for Regional Member Countries (RMCs) towards attaining water security. This shift in focus is in line with the Bank Group’s Ten-Year Strategy (TYS, 2013-22) and the High 5 priorities. It is also in alignment with the Africa Water Vision 2025, the 2030 Agenda for Sustainable Development and the aspirations of the African Union’s Agenda 2063, “The Africa We Want”. Under the Strategy, the Bank has adopted the UN-Water definition of water security.

The goal of the Water Strategy is “*increased water security for Africa, where transformed water resources foster sustainable, green and inclusive socio-economic growth and development*”.

The Strategy is based on four strategic objectives (or pillars), namely

- **Pillar 1: Achieve integrated and sustainable water resources management**, through assessment of the resource and its ecosystems; as well as supporting institutions and the broader enabling environment. This pillar sets a foundation for the success of the other three pillars.
- **Pillar 2: Strengthen the delivery of water supply, sanitation, and hygiene (WASH) services** to become sustainable, resilient, and inclusive, through increased investments, institutional support, and sustainability in both urban and rural areas.
- **Pillar 3: Increase the availability of sustainable water resources for food production and improved nutrition**, including improved agricultural water management and investments which sustain fisheries and support ecosystems.
- **Pillar 4: Increase the sustainable development of water for energy in terms of hydropower potential**, thus complementing the New Deal for Africa Strategy and acknowledging the importance of energy for water security

A number of operational priorities have been defined under each pillar that describe, in greater detail, the areas of emphasis in the Bank’s actions. Under Pillar 2, five Operational Priorities have been defined as follows:

- **Pillar 2: Inclusive, Sustainable and Climate Resilient Water Supply, Sanitation and Hygiene (WASH)**
 - *OP4*: Reform and strengthen enabling environments for WASH services.
 - *OP5*: Innovative financing and partnerships including private sector participation (PSP) to increase sustainable access to water supply, sanitation, and hygiene services.

- *OP6*: Increase access to and use of improved water supply through sustainable and resilient infrastructure investments and quality delivery of services.
- *OP7*: Increase access to and use of improved sanitation services through sustainable and resilient infrastructure investments and quality delivery of services.
- *OP8*: Promote behavior change and adoption of appropriate hygiene practices.

The Water Strategy provides for investment in WASH services in public health facilities (and schools), and for integrating water-related investments in the public health sector, which underlines the link between the Water Strategy and a set of health infrastructure and skills development strategies that are under development for delivery in 2021.

The AfDB/Denmark Programme has been prepared to be responsive to OP6 to OP8 above. The Strategy lists the cross-cutting enablers for attainment of the Strategy’s objectives as partnerships, private sector participation, gender and youth empowerment, environmental and social responsibility, mitigating climate change, carrying out sector reforms and improving governance, and institutional capacity strengthening including training and knowledge management. The Strategy stresses the need for building internal and external expertise in the cross-cutting enablers to support the implementation of key actions.

BANK GROUP’S STRATEGY FOR ADDRESSING FRAGILITY AND BUILDING RESILIENCE IN AFRICA (2014-2019)

This Strategy 2014-2019 replaced the Bank Group’s Strategy on Enhanced Engagement in Fragile States of 2008. This is a Bank-Wide Strategy whose implementation is coordinated by the Bank Department of Transition Support (ORTS). In July 2020, the duration of the Strategy was extended to December 2021 to give time for development of a new Strategy.

Under the Strategy, the Bank will assist countries to address fragility and build resilience at the national level and in pockets of fragility within countries, as well as at the regional level, working through and with regional organizations. The Strategy defines fragility as “*a condition of elevated risk of institutional breakdown, societal collapse or violent conflict*” and identifies its drivers as including economic, social, political and environmental dimensions. The Strategy also recognizes that often, demands for inclusion and equity underlie the drivers for fragility.

Considering that fragility commonly transcends state boundaries, the strategy focuses on fragile situations rather than fragile states alone. Further considering that the characteristics, manifestations and threats of fragility, and the capacities and resources available to affected communities vary from country to country, the Bank’s pursues a response that is adapted to the context of each situation. Accordingly, the strategy does not prescribe a blueprint of solutions but rather focuses on key entry points for managing the underlying drivers of fragility and building resilient states and societies through effective institutions, capacity building and partnerships. The Strategy further recognizes that there is no single solution and no predefined “toolbox” for addressing fragility, which requires that the Bank engages in a process of “learning by doing”.

One of the approaches introduced under the 2014-2019 Strategy is the systematic application of a *fragility-lens* to identify, respond to, and prevent fragility, and to build resilience. Thinking “out of the box” and piloting innovative approaches is at the centre of applying the fragility-lens in the Bank’s actions. Such analysis helps the Bank to stay engaged across the spectrum of fragile situations and focus its engagement in the areas where it can have the biggest impact, in line with the Ten-Year Strategy.

The Strategy prioritizes three areas of focus, namely (a) strengthening state capacity and establishing effective institutions; (b) promoting resilient societies through inclusive and equitable access to employment, basic services and shared benefits from natural resource endowments; and (c) enhancing the Bank’s leadership role in policy dialogue, partnerships and advocacy around issues of fragility.

Recognising that gender equality and women’s empowerment plays a strategic role in peace- and state-building processes, the Strategy places emphasis on integrating a gender perspective in all the Bank’s programs and projects. The Strategy also seeks to strengthen the role of non-state actors, particularly civil society and the private sector, in the provision of key public goods and services, within a state framework. The Bank under the Strategy aims to broaden and deepen partnerships, and intends to work more closely with other development partners at country, regional, and international levels.

All available Bank instruments will be used in implementing the strategy. The Strategy requires that programming, project design, policy dialogue and Country Strategy Papers be grounded in fragility

assessments, and strategic choices be geared to effectively addressing the key drivers of fragility by identifying key entry points for building resilience.

The Bank's *Operational Guidelines for the Implementation of the Strategy for Addressing Fragility and Building Resilience in Africa and for the Transition Support Facility* was adopted in 2014 to guide the effective implementation of the Strategy. Among other things, the Guidelines outline the framework for operations in fragile conditions and describe the instruments and resources, key processing steps, implementation arrangements and review processes for putting the Strategy into practice in internal administrative arrangements, such as under the AWF

The provision of access to water supply and sanitation that is proposed under the AfDB/Denmark programme is one of the priority areas of the Bank's Strategy on Fragility and Building Resilience and therefore provides a good entry point for addressing fragility concerns under the Programme.

THE AFRICAN DEVELOPMENT BANK GROUP GENDER STRATEGY 2021 – 2025

The African Development Bank recognises that gender equality and women and girls' empowerment is not only a critical human rights issue for women and girls, but is a prerequisite for the achievement of broader development goals, effective humanitarian response and sustainable peace and security. Traditionally, the Bank has promoted gender equality and women and girl's empowerment through the following actions:

1. Gender mainstreaming in national development plans through Country Strategy Papers (csps) and the Regional Integration Strategy Papers (risps);
2. Gender mainstreaming in the Bank's operations along the project lifecycle
3. Building the capacity of its staff and putting in place the relevant support for gender mainstreaming
4. Production of knowledge on gender such as Country Gender Profiles (cgps) and sectoral gender profiles, among others; and
5. Investing in special initiatives to support gender equality and women and girl's empowerment such as the Affirmative Finance Action for Women in Africa (AFAWA) and the Transition Support Facility (TSF).

Data from African countries shows that although women make up about 50% of the African population, access to resources, opportunities, and decision-making are still heavily tilted towards men, in all sectors. The Bank's Gender Strategy 2021-2025 is the latest in a series of strategies the Bank has been implementing from 2014 to address this challenge. Through this strategy, the Bank seeks to continue promoting transformative gender equality and women and girl's empowerment, accelerating economic and social development in regional member countries (RMCs).

The Strategy is premised on three key pillars, namely:

- *Pillar 1- Empowering women through access to finance and markets.* This pillar focuses on improving access to finance, and technical assistance to women SMEs to transform them into productive and competitive enterprises.
- *Pillar 2- Accelerating employability and job creation for women through skills enhancement:* This pillar focuses on increasing access to relevant skills and jobs for women by taking into account the need to introduce more women to Science, Technology, Engineering and Mathematics (STEM) fields, while leveraging technology to enhance access to skills and information.
- *Pillar 3- Increasing women's access to social services through infrastructure.* Through this pillar, the Bank aims to influence gender-responsive quality infrastructure development to guarantee women have adequate access and positively benefit from infrastructure projects as stakeholders, workers and end-users.

Implementation of the Strategy is expected to be monitored through sex disaggregated indicators in the Bank's Results Monitoring Framework. The implication for the programme is to have gender-disaggregated indicators to facilitate integration in the Bank's reporting system.

The AfDB/Denmark Programme will make the greatest contribution to Pillar 3 by mainstreaming gender in the planning and implementation of WASH measures. There is also potential to contribute to Pillars 1 and 2 through improving opportunities for training of women SMEs, and employing women groups in delivery of project components.

THE AWF GENDER AND SOCIAL EQUITY STRATEGY (2010)

The AWF's GSE Strategy is an operational level strategic framework to guide the analysis of gender perspectives in relation to the context-specific areas of AWF intervention. While older than the Bank's latest Gender Strategy, the AWF Strategy is meant to be a tool for implementation of the Bank's Gender Strategy.

The document is targeted at AWF Project Task Managers, and provides them with a set of tools, comprising checklists and monitoring and evaluation (M&E) indicators, to mainstream gender and social equity considerations into the operational activities of the AWF.

The Strategy document provides a brief account of the main gender and social equity issues within the water and sanitation sector in Africa. This is followed by an overview of how the AfDB addresses gender and social inequalities within the sector. The Strategy then addresses the Facility's vision in terms of gender and social equity and provides a detailed plan on how GSE issues would be mainstreamed into AWF operations.

AfDB GROUP ANTI-CORRUPTION MEASURES AND GUIDELINES

The African Development Bank Group views corruption, fraud and other sanctionable practices as highly detrimental to the achievement of its mandate, and exercises zero-tolerance for such practices. The Bank pursues a multipronged approach to combating these harmful practices, which includes (a) proactive prevention through risk assessments, sensitization programmes, due diligence, and other activities; (b) investigations, sanctions and other deterrence measures; (c) mainstreaming integrity issues into Bank Group operations and activities; (d) providing technical support to regional member countries in integrity issues and enhancing accountability; and (e) participation in international and regional integrity initiatives.

The Bank does not have an Integrity and Anti-corruption Policy or Strategy but has a Bank Group *Policy on Good Governance* (1999) and Bank Group *Guidelines for Preventing and Combating Corruption and Fraud in Bank Group Operations* (2004). The purpose of the latter is to describe where and how corruption and fraud may occur in Bank operations, outline modalities for its prevention, and delineate procedures on how Bank staff and other employees of Bank-supported activities should respond to incidents of corruption and/or fraud in Bank operations. The Bank also has a *Code of Conduct for Staff Members* and a separate *Code of Conduct for Executive Directors*. These codes serve to outline basic principles of professional ethics expected from Bank Group staff, and is intended to provide guidance to Bank personnel to avoid situations of real or apparent conflict between their private interests and their public duties. The Bank further has a *Whistle Blowing and Complaints Handling Policy* (2007) which aims to provide an avenue for raising concerns related to fraud, corruption or any other misconduct and ensure that persons who disclose such information are protected from retaliation.

In 2010, as part of the initiative to restructure the Bank, the Integrity and Anti-Corruption function, formerly part of the Office of the Auditor General, was upgraded to a full and independent department. The Integrity and Anti-Corruption Department (IACD) does not make sanction decisions. Rather, on receiving allegations of sanctionable practices, the Department carries out investigations and forwards its report to the relevant authority under the Bank's sanctions process. Where the allegations relate to fraud, corruption and misconduct by Bank Group staff, and involve administrative budgets and misuse of Bank resources, the report is transmitted to the President. In other cases, the report is sent to the Sanctions Commissioner for appropriate sanctions.

The African Development Bank Group's Second Climate Change Action Plan (2016-2020)

The Bank Group's second Climate Change Action Plan (CCAP2) sets out the Bank's climate change programme for the period 2016-2020, providing a clear framework of action while highlighting opportunities for collaboration with the Bank's partners. The action plan is aligned with the Bank's "High 5s", the African Union Agenda 2063, and Nationally Determined Contributions (NDCs) of the Regional Member Countries (RMCs), and is guided by the vision of "an African continent that is less vulnerable to climate change and develops in a low carbon manner". The Bank works towards the attainment of this vision by supporting African countries in implementing their NDCs and scaling up levels of climate finance accessed and channelled to African countries from both public and private sources. The activities under the CCAP2 are organised along four main pillars (focus areas) aligned with Paris Agreement priorities: (1) adaptation and climate-resilient development; (2) mitigation and low carbon development; (3) financial resource mobilisation; and (4) enabling environments addressing cross-cutting issues, including: policies and institutional reforms, capacity development, technology

development and transfer, and creation of partnerships and networks. Climate related activities under the AfDB/Denmark Programme fall under Pillars 2 and 4.

The Bank is in the process of developing a new strategic framework on climate change and green growth. The Framework, which will comprise of a policy, strategy and action plan, responds to the Bank Group's commitment to contribute to attainment of the goals of the Paris Agreement, and support African countries transition to low-carbon climate-resilient development. The Framework is expected to be completed by November 2021.

3.3 Relation to other partners and actors

The AfDB has long experience of program delivery and collaborative partnerships with recipient countries and a continent-wide operational platform. As part of the programme Denmark, NDF and the AfDB will engage with other partners and stakeholders dealing with water and sanitation issues, fragile regions, peace and security and building climate resilience. The stakeholders will include the following: (i) International Finance Institutions agencies and developing partners including: World Bank, AFD, GIZ, USAID (ii) UN agencies engaged in the water and sanitation sector including WHO, UNICEF, (iii) Continental actors like the Global Water Partnership, International Union for Conservation of Nature, African Net Basin Organisation and AMCOW and (iv) River Basin Organizations, Regional Economic Communities and Member states. In each country, the choice of programme partners will be dependent on the partners that are active in the water sector, on partners that share the objectives of the programme with respect to water and sanitation, and partners that will potential make a mutually beneficial contribution to the Denmark/AfDB programme. The support from Denmark will focus on both rural and urban areas, the support from NDF will focus on urban areas (more specifically on the capital cities of the 5 countries). More details are provided in annex 2 and a separate project document for the NDF support is available.

AfDB and the World Bank through the then Water and Sanitation Program (WSP), and now Global Water Practice, have over the last decade collaborated to improve the state of water and sanitation services in Africa with focus on coherence and collective action. At the country and regional levels, cooperation has increased greatly, including growing coordination of country support strategies, joint analytical work and increased co-financing. Institutional interaction has deepened as managers and operational staff engage in cross-consultations and sharing of knowledge.

More specifically, collaboration has increased in both lending and non-lending services, across a wide range of countries, and in a variety of approaches, including support for Poverty Reduction Strategy Papers (PRSPs), Country Portfolio Performance Reviews and Country Assistance Evaluations. The AfDB and the World Bank continue to co-finance large scale, multi-donor operations in the water sector (the most recent being the Ethiopia One WASH National Program³), where AfDB's experience with multinational lending has brought important value for example through the Rural Water Supply and Sanitation Initiative and the AWF. Where it is relevant the projects to be financed will be linked to funding from the Green Climate Fund and other potential sources to ensure that the scale effects necessary to contribute to climate change resilience are created. Other successes include (i) the shift from financing isolated investment projects in the same sector in the same country to collaboration under coherent economic or sector programs (ii) capacity building, information exchange, and (iii) policy and strategy development.

The collaboration now focuses on: (i) intensifying operational cooperation and joint work in additional African countries, including fragile and post-conflict countries; (ii) continuing to share information and to participate in capacity-building activities, with emphasis on training in operational contexts; and (iii) intensifying joint work in water supply, and particularly sanitation and hygiene. The above scope will inform collaboration, under this AfDB/AWF/Denmark partnership particularly in the areas of resource mobilization, co-financing, capacity building, harmonization of corporate policies and instruments, and supporting clients to meet sector objectives.

³ The Danish Finance Act for 2021 includes planned support of DKK 130 million to the ONE WASH programme in Ethiopia.

3.4 Strategic consideration and Danish interests

The proposed programme is aligned with the current Danish Strategy for Development Cooperation and Humanitarian Action ‘The World 2030’. One of the strategic pillars of this strategy is inclusive, sustainable growth and development focusing on for example water and the strategy also identifies SDG 6 on clean water and sanitation as one of the five overall SDG priorities. The programme will also directly support the achievement of two additional SDG priorities, namely SDG 8 on Decent Jobs as well as SDG 13 on Climate Action. The programme is also expected to be aligned with the new Danish Strategy for Development Cooperation to be launched in 2021 where climate change adaptation and water are expected to have a strong focus. In addition to this, the Danish Government’s long-term strategy for global climate action ‘A Green and Sustainable World’ (2020) specifically calls for Denmark’s development cooperation to have a special focus on ensuring access to clean water in Africa. The programme is consistent with the Danish Government’s green recovery plan that pursues a build-back-better and greener approach and integrates climate change in the emergency response to COVID-19. The AfDB/AWF approach to the water sector is also fully aligned with the experiences of the Danish support to water sector, climate and peace/stabilisation e.g. in promotion of sanitation and hygiene and on building resilience among state and non-state actors (see box 3.1). The programme, being jointly developed with NDF, emphasizes the strong Nordic cooperation around build-back-better and greener and provides an opportunity to show case concrete measures taken at programme-level.

Box 3.1 Danish experience in water, climate and peace and stabilisation

The Danish experience of the water sector stretches over many decades. In the period from the 1970s there was a strong emphasis on community led approaches, gender and integration of water and sanitation. Especially in the period from 1990 to 2010 there was an increasing emphasis on sector wide approaches, on cost recovery and on supporting national systems from within including development of monitoring and evaluation, enhancement of decentralisation and the importance of hygiene promotion. Since 2010 the support to sector programmes has reduced as other sectors were favoured but water and sanitation have been integrated into climate and peace and stabilisation programmes. There has also been a continuation of support provided at the multi-lateral level for example to the Global Water Partnership. Currently in the Sahel and Horn of Africa, there is only a thematic programme for water in Burkina Faso but there is also significant Danish engagement in the water sector in Mali and Niger and several projects are under formulation in Ethiopia (see also page 11)

The Danish experiences in water, sanitation and hygiene have been integrated into the AfDB water policies and strategies and there are no significant lessons learnt from the Danish experience which are not already taken into account in the state of the art work developed by the AfDB. The AfDB takes the lessons further in the sense of alignment to the SDGs.

The programme is complementary and supportive to the strategy for *Denmark’s engagement with the African Development Bank (2020-2024)* where it is noted that “the main priorities for Danish support to AfDB Group are: 1) inclusive development and decent jobs for youth, 2) climate change and green growth, 3) fragility, and 4) gender equality, with the cross-cutting issue of countering the development impact of COVID-19 in Africa”. In terms of strategic consideration for AfDB and AWF, the programme is relevant because it is well aligned to: i) The AfDB’s Ten-Year Strategy (2013-2022), that promotes inclusive economic growth and the transition towards green growth and expanding access to clean water and basic sanitation services in line with SDG 6 commitments: ii) The AfDB *Strategic Priority Areas* (the High 5s) particularly 5 on improvement of quality of life for the people of Africa; iii) The Bank Group’s draft *New Policy on Water* (2020), which seeks to improve Africa’s water security and transform its water assets to foster sustainable green and inclusive growth (; iv) The AfDB’s *Country Strategy Papers* for the five countries, which all prioritize interventions in water supply and sanitation; v) AfDBs Gender Strategy 2021-2025 (2020) on Investing in Africa’s women to accelerate inclusive growth and; vi) The AWF’s strategic priorities (*AWF 2017-2025 Strategy*) relating to fostering catalytic investments with priority on fragile states and building climate resilience (this strategy is being updated following the merger with other trust funds).

The Danida development policy papers in the five selected countries is focussed on poverty reduction, green economic growth and good governance. In the more fragile states the policy also highlights peace and stability and security, and on preventing refugee flows and irregular migration. The thematic programmes include in Burkina Faso -Human Rights and Stability -Water and Sanitation and - Economic Growth in the Agricultural Sector. Ethiopia -Agricultural Commercialisation Clusters, - Coherence between humanitarian responses and development cooperation, -Climate resilient forest livelihoods and - Governance and human rights. Mali -peaceful co-existence, stability and security, - Democratic and inclusive governance and - inclusive and sustainable economic growth. Niger: - Strengthen stability and peace, -Enhance access to basic rights for ordinary people and - Reduce extreme poverty with focus on resilience. Somalia -Promote stability and security, state-building and human rights, -Strengthen resilience and support Somalia’s handling of internally displaced persons and returned citizens and -Combat poverty through inclusive growth and sustainable jobs. Important to point out is that, for Burkina Faso, Water and Sanitation is a thematic priority area. This includes three engagements -Water resources management, -Equitable access to drinking water and -Hygiene and sanitation promotion.

Denmark has a long history of support to the water sector in Mali with a mix of rural and urban and smaller and larger scale projects. Under the bilateral development programme, a new drinking water programme is currently under design and will take a predominantly urban focus in the Sikasso and Kayes regions of Mali. It is estimated that the programme will provide access to clean drinking water to 250,000-350,000 Malians. Among the beneficiaries are displaced people seeking refuge in urban areas. The current budget of the programme is DKK 120 million for an implementation period of two years 2022-23. If additional funding becomes available it is envisaged to enlarge the programme with hygiene/sanitation and rural water components. A part from the new water programme, a range of on-going programmes and projects have access to water activities included, such as the decentralisation and local development programme (target of 100.000 gaining access to water), the MINUSMA Peace Dividend Fund (55.000) and a partnership with the PATRIP Foundation (75.000).

In Niger, Denmark support water and sanitation project through a trust fund jointly administered with Luxembourg (budget is DKK 195million). Under the new strategic framework for cooperation between Burkina Faso and Denmark for the period 2021-2025, there are the following engagements in the water sector:

1. Equal access to public water supply services and improved sanitation in rural areas with specific focus on internally displaced people (expected budget is DKK 215million).
2. As an addition to the current country program, in 2020 the embassy developed a Hum-Dev nexus project in water, sanitation and hygiene with a focus on IDPs and host communities with the aim of reducing the risk of disease outbreaks incl. COVID-19, as well as strengthening resilience in relation to climate change (budget is DKK 30 million over 2 years).

3.5 Summary of justification

A justification of the programme design against five quality criteria is given in the table below:

Criteria	Justification
Relevance	<p>The programme is relevant because: i) it contributes directly to SDG6 (water and sanitation) and also indirectly to SDG 3 (health) through the health benefits of improved water, sanitation and hygiene practice and SDG 13 on climate through improving the capacities for climate change adaptation. There will also be temporary employment effects through construction of infrastructure and carrying out of sanitation and hygiene promotion campaigns and potentially some limited effects on longer term employment through operation of infrastructure.</p> <p><u>Choice of partner</u>: the AfDB/AWF is relevant especially for outcome 1 as it corresponds to their core mandate.</p> <p><u>Support modalities</u>: the funds are provided as a grant through a trust fund which is relevant for the preparation of projects (outcome 1) and also for the immediate works (outcome 2)</p> <p><u>Capacity and technical assistance</u>: No external capacity development or technical assistance is provided as part of the project as the AfDB/AWF has the required skills and also benefits</p>

	from secondment of experts from other donors. The programme will enable AfDB/AWF to build capacity at the country level especially for preparation of projects (outcome 1)
Impact	<p>The programme design is justified because it is expected to have an impact on improved quality of life due to health benefits and protection against disease including Covid-19. There will also be benefits in gender equality, jobs, and a reduction in climate fragility and sources of conflict. The AWF will use the AfDB approach on working in fragile and conflict affected situations. This includes the systematic application of a <i>fragility-lens</i> to identify, respond to, and prevent fragility, and to build resilience.</p> <p>The AfDB Strategy prioritizes three areas of focus, namely (a) strengthening state capacity and establishing effective institutions; (b) promoting resilient societies through inclusive and equitable access to employment, basic services and shared benefits from natural resource endowments; and (c) enhancing the Bank’s leadership role in policy dialogue, partnerships and advocacy around issues of fragility. This programme will especially contribute on item b) the programme design and the AfDB strategy recognizes that gender equality and women’s empowerment play a strategic role in peace- and state-building processes. The Strategy places emphasis on integrating a gender perspective in all the Bank’s programs and projects. The Strategy also seeks to strengthen the role of non-state actors, particularly civil society and the private sector, in the provision of key public goods and services, within a state framework.</p>
Effectiveness	The programme design is justified because it makes use of a long track record of AWF in preparing projects (choice of partner). By supporting the preparation of projects the AWF will via this project help to mobilize much greater financing through future investments/loans and thus create a greater scale of impact. Through improving the capacity of the five governments through technical assistance offered by the AWF to prepare projects a more permanent effect at national level will be created (capacity and technical assistance).
Efficiency	The programme design is justified because it minimizes the transaction costs of providing support to five countries by channelling resources through the AfDB/AWF, which already has active operations in all the countries (choice of partners). The grant financing via the trust fund arrangement is also efficient as it is already operational and subject to the internal procedures and controls of the AfDB (support modalities).
Sustainability	The programme design is justified from the view point of sustainability because the development of capacity in preparing projects will enable the countries to replicate and better under take future project preparation. By focusing on watershed management and climate change adaptation the interventions will be environmentally sustainable also and climate resilient as well as contributing to wider resilience. By ensuring that a conflict sensitive approach is used a do no harm approach will be adopted and there will be a positive contribution towards minimizing conflict and the causes of conflict.

4. Preliminary theory of change

The theory of change is summarized in figure 4.1 and below using the standard questions in the Danida Guidelines.

What are the changes we want to contribute to? The programme will contribute to creating a change in both longer term and immediate access to water and sanitation services as well as the climate resilience of underserved population groups in the five countries. By providing basic services it will increase the capacity, authority and legitimacy of state bodies, which in turn will reduce conflict and the causes of conflict. These changes will in turn lead to an improved quality of life due to health benefits and protection against disease including Covid-19. There will also be benefits in gender equality, jobs, reduced youth out migration and a reduction in climate fragility and sources of conflict.

How do we think change will happen in the specific contexts? The longer-term change in access to services will occur because sound climate resilient projects will be developed ready for financing and then financed and implemented. At the same time greater capacity to prepare bankable and climate

resilient projects in the future will be developed at national level. The immediate change in access will occur as a result of number interventions to improve the performance and service area of existing projects including the implementation of watershed management measures where relevant. Improved and extended services will increase the climate resilience of the populations affected and all facilities provided will themselves be climate proofed and able to withstand drought and floods. All actions will be guided by the AfDB conflict sensitivity strategies which will ensure that no harm is done as well as take the opportunities for reducing the causes of conflict where relevant.

What is AWF's role in the change process? AWF's role will be to engage with the relevant country authorities to support the preparation of bankable projects and develop the national capacity for future project preparation by making available highly experienced project development teams. For the immediate measures, the AWF will finance and support the setting up of project implementation units that working under national entities, and will identify the most cost-effective immediate measures. The project implementation units using finance and guided by the AWF and the relevant national entities will manage contracts for the physical improvements in hardware as well as software interventions related to hygiene and operation and maintenance. For both longer term and immediate measures the AWF will support the carrying out of climate vulnerability assessments and will introduce and help tailor new methodologies based on the WASH Climate Resilience and tool-set. For both the longer term and immediate measures, the AWF will bring to bear its long experience, and lesson learning from previous interventions, to ensure efficiency and effectiveness of interventions.

Who are the key partners that need to be engaged for this change to happen? The key partners are the national entities who have the lead responsibility for the WASH sector in each country. This will normally involve the Ministries of water and sanitation or equivalent as well as the Ministry of Finance. Local governments, utilities and water user groups as well as service providers such as contractors, consultants and NGOs are also relevant.

What are the conditions that must be realized before the result is achieved? In terms of the five bankable projects, a pre-condition is the availability of financing to complete these projects. Apart from that, there are no specific pre-conditions. The process to prepare a first long list of potential suitable projects and interventions has started and is described in Annex 9. The AfDB and AWF have ongoing engagement in the WASH sector in all the five countries, which will allow a rapid deployment both for preparation of bankable projects but also the immediate improvements.

What is within and beyond the influence of the key programme partners and what assumptions are relevant for the change to happen? The key assumptions are presented in detail in Annex 9. The key assumptions include: i) a stable political environment; continuing improvements in the sector policy and reforms including aspects such as cost recovery, hygiene and cooperation across institutions; ii) Covid-19 is kept under control; iii) potential financiers respond positively to the projects prepared; iv) there is sufficient national capacity to manage the program with the support of project implementation unit; and v) implementation capacity to physically carry out the works is available in the time scale allowed.

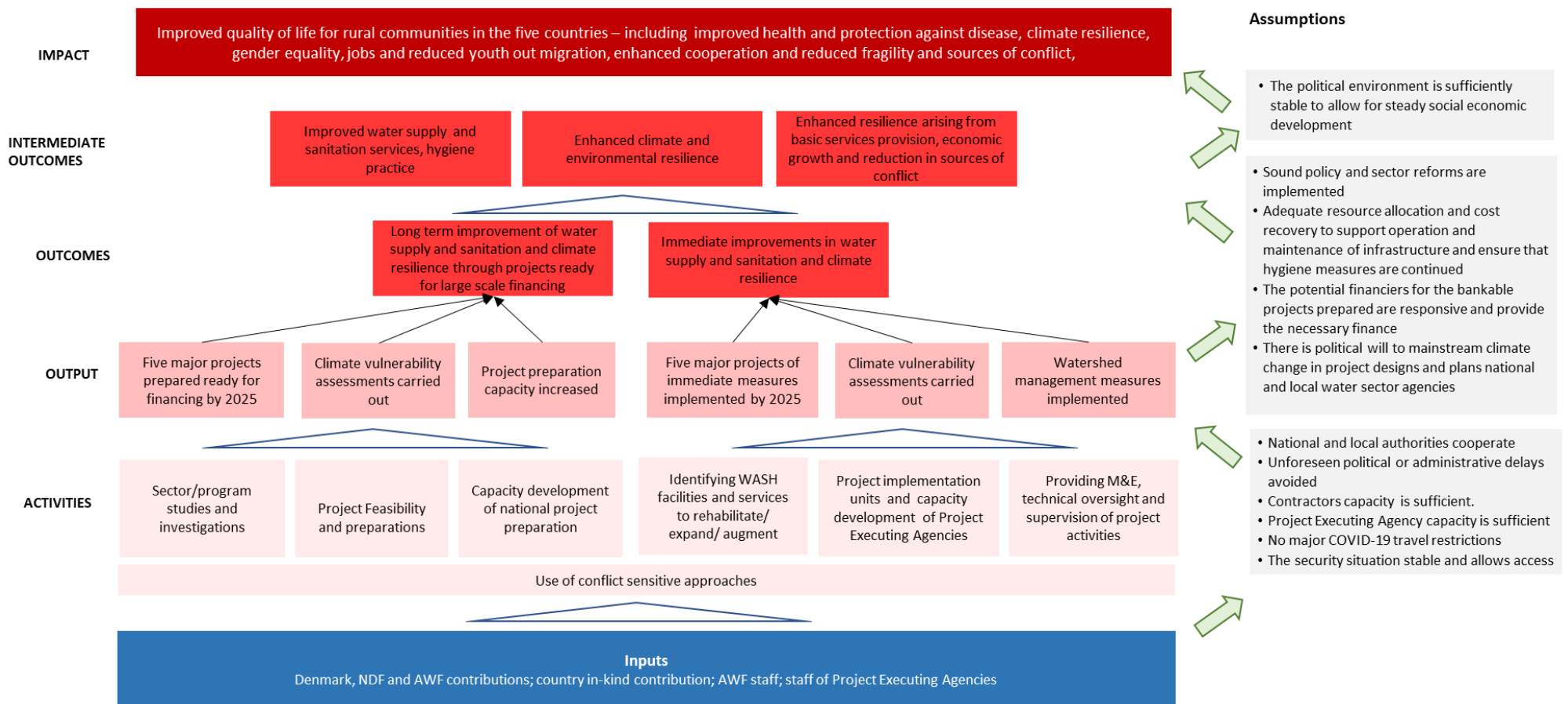


Figure 4.1 Theory of change

Note: The AWF will use Strategic Framework for WASH Climate Resilience and tool-set to prepare the detailed design of intervention measures. This preparation will ensure that the entire hydrological cycle is part of all interventions. Moreover, the framework will enhance adaptation and contribute to building climate resilience of the target communities. The Strategic Framework has four elements: i) Assess and rank climate-related risks to WASH infrastructure and services; ii) Prioritize technical options for WASH infrastructure and services; iii) Integrate climate resilience into project interventions and in plans and services of urban authorities, utilities and national water sector agencies and; iv) Monitoring and evaluation framework for climate-resilient WASH measures and applying the framework at project completion evaluation.

5. Programme Objective and Summary of Results Frame

5.1. Programme objective and outcomes

The programme objective is: a better quality of life for people in five countries (Mali, Niger, Burkina Faso, Ethiopia and Somalia) by improving access to water supply and sanitation services and enhancing climate resilience through WASH sector interventions. The programme design is based on an adaptive management approach and combines two types of interventions:

Outcome 1 - Longer term improvement of water and sanitation services and climate resilience whereby bankable projects will be developed ready for leveraged finance through the AfDB or other partner lending operations. The preparation process will include sector and programme wide studies where necessary as well as project level feasibility studies. This outcome will also strengthen national capacity to prepare bankable projects. Five projects will be prepared, one in each of the five countries. The number of people that the facilities and associated water access, hygiene and sanitation promotion will serve will depend on the final selection, feasibility considerations and financing available for each project. However, it is estimated that on average the 5 projects will serve between 50,000 and 125,000 people. The total estimated number of people to be served is 500,000 with a range of +/- twenty five percent i.e. between 375,000 and 625,000. The projects identified under outcome 1 could either be in one of the five countries or the wider Sahel and Horn of Africa regions.

Outcome 2 - Immediate operational improvements in water and sanitation services and climate resilience, which involve short term measures to improve services through expansion of production, water storage, water transmission capacity or rehabilitation of already existing water supply systems; extension of services to new areas in existing water and sanitation systems; selection of projects where a significant part of funding is already covered by other partners, and provision of rolling funds for private toilet construction. Activities will include: hygiene and sanitation promotion, strengthening capacity of water utilities and carrying out watershed management activities for source and ecosystem protection. Five immediate operational projects will be implemented, one in each of the five countries. The number of people that the facilities and associated water access, hygiene and sanitation promotion will serve will depend on the final selection, feasibility considerations and financing available for each project. However, it is estimated that on average the 5 projects will serve between 30,000 and 50,000 people. The total estimated number of people to be served is 300,000 with a range of +/- twenty-five percent i.e. between 225,000 and 375,000. Furthermore, and as it is planned for from the NDF contribution, the AWF will by default prepare one project addressing both Outcomes 1 and 2 per recipient country. These components could be in the same geographical location, or in different locations.

An overview of the outcomes and outputs is given below:

Outcomes	Outputs
1) Longer term improvement of water and sanitation services and climate resilience	1.1 Five major projects prepared ready for financing by 2025 that lead to facilities for an estimated 500,000 people served by improved water and sanitation 1.2 Five WASH sector climate vulnerability assessments carried out 1.3 Five capacity development events related to project preparation completed.
2) Immediate operational improvements in water and sanitation services and climate resilience	2.1 Five immediate improvement interventions implemented that lead to facilities for at least 300,000 people served by improved water and sanitation by end 2025 2.2 WASH sector climate vulnerability assessments carried out 2.3 Watershed management measures implemented

All water supply and sanitation systems supported through the programme will have climate risks integrated in their design and rehabilitation and be combined with catchment protection measures to strengthen the ability of the systems to operate under a changing climate. The AWF will use the strategic framework for WASH Climate Resilience and tool-set to prepare the detailed design of intervention measures (see annex 9).

The AWF uses various approaches to identify and select projects. These include (i) on-demand approach which is the main approach; (ii) proactive project identification whereby AWF engages with AMCOW, national governments, development partners, and others to identify high potential projects (this is the primary method planned for the Program) ; (iii) Call for Proposals; and, (iv) programmatic approach. For this programme, the proactive project identification approach will be used. The criteria used for selection of beneficiary communities include: i) current access levels of safe water and improved sanitation – including the service level of health clinics and schools; ii) level of water stress; iii) size of displaced population; iv) proportion of poor people; v) readiness of the projects (availability of masterplans or technical studies); vi) vulnerability of communities to climate change. For implementation, the criteria are clear service delivery model; reasonable per capita investment cost (less than US\$150 per capita) with the opportunity to leverage economies of scale (cluster approach) and availability of moderately strong water sector agency to serve as project executing agency. Selected projects will be included in the annual work plan and progress reports indorsed by the Governing Council.

A pipeline of projects is being prepared by AWF / AfDB, Annex 9 - Preliminary pipeline of projects has a record of engagements with authorities in the five project countries discussing potential projects for inclusion into the pipeline. Annex 10 - Project Description format shows the format for short project description that will be used for the pipeline. It is expected that the final selection and appraisal of projects for both outcome 1 and 2 will be made within the first 12 months of the programme.

5.2 Capacity development and cross-cutting issues

The scope of institutional capacity development interventions will include a mix of on-the-job training, introduction of tools and systems and support to institutional changes and reforms being undertaken by other wider initiatives. This may include: i) training on tools for climate resilience and gender and social equity mainstreaming in project preparation; ii) improving environmental and social safeguards; iii) training on water safety planning; iv) training on increasing employment creation under water sector investment projects; v) strengthening multi-stakeholder participation processes; vi) strengthening cross-sectoral coordination mechanisms; vii) creating enabling environment for private sector involvement in WASH sector; and viii) modernizing water sector information and monitoring and evaluation systems. The specific interventions under each project will be determined on a case-by-case basis.

A Human Rights Based Approach (HRBA) will be employed in the provision of water and sanitation service under the programme. The HRBA is a conceptual framework based on internationally recognized human rights that is directed at promoting and protecting these rights in practice. Accordingly, strong emphasis and priority will be given under the programme to identifying and serving the poor, vulnerable, marginalized and discriminated groups as a way of redressing the injustice imposed on them. In addition, support will be provided to government institutions to strengthen their capacities to fulfil their human rights obligations.

Gender will be supported through working with, and where necessary, enhancing the national WASH gender strategies and by applying the AfDB gender strategy (see chapter 3.2). This will ensure that the projects prepared and the immediate measures implemented are sensitive to the needs of women and children and lead to equal access and benefits. A conflict sensitive approach, guided by the AfDB strategies in this area (see chapter 3.2), will be adopted to ensure that the projects do not inadvertently created discord and are seen as fair and just. Projects will take advantage of the opportunity to enhance cooperation among community groups, utilities and local government. Environment and climate concerns will be an important feature of the programme and the AfDB guidelines as well as the WASH Climate Resilience and tool-set will be followed.

6. Budget

The total Danish contribution is DKK 149.5 million (equivalent to Euro 20.1 million) covering a period of four years (2021-2025)⁴. The NDF has already confirmed and disbursed their contribution to the programme of 7.5 million Euro and AfDB/AWF will also contribute. Their contribution is estimated at Euro 2 million. The NDF grant will have a specific focus on the capital cities in the five countries. Other potential donors include the UK, Germany, USAID and UNICEF, who are expected, but not confirmed, to contribute to the programme to increase scope and coverage.

Table 6.1 summarises the budget across different budget lines and against the different contributing parties. These budgets are not fixed and could be revised and any adjustments submitted for approval as part of annual work plans and budgets.

Table 6.1a Budget: Danish contribution

Budget item (Euro million)	Denmark
Outcome 1 Project preparation capacity and long term improvement of services	5.190
Outcome 2 Immediate operational improvements in services	13.910
Programme management	1.000
Total	20.100

Note: For the Danish contribution the price and physical contingencies are integrated into the outcome budget lines

Table 6.1b Budget: NDF contribution (see NDF programme document)

Budget item (Euro million)	NDF
Outcome 1 Project preparation capacity and long term improvement of services	4.125
Outcome 2 Immediate operational improvements in services	2.300
Programme management	0.700
Price, physical contingencies and administration	0.375
Total	7.500

Table 6.1c Budget: AWF contribution

Budget item (Euro million)	AfDB/AWF
Outcome 1 Project preparation capacity and long term improvement of services	0.750
Outcome 2 Immediate operational improvements in services	0.750
Programme management	0.500
Total	2.000

Note: AfDB/AWF inputs will serve both rural and urban areas.

⁴ Note: For the AWF, unlike for other trust funds, the Bank does not levy the 5% administration fee.

The programme management budget line will finance coordination activities. Activities will include coordination, planning, monitoring and evaluation, reporting, and supervision of the programme; training of project executing agencies; and carrying out communications, knowledge management and learning activities.

Since its operationalization in 2006, the AWF has developed a grant portfolio of 125 projects in 52 countries, including the most vulnerable countries. It has mobilised Euro 176 million over a 14-year period from 2006 to 2020. This averages out at over Euro 12 million per year compared to the Danish contribution of Euro 5 million per year. The AWF budget going forward, relative to the Danish contribution, is subject to ongoing mobilization and confirmation of new commitments.

7. Institutional and Management Arrangements

AWF is responsible for and will lead the programme. The AWF has a dual governance structure comprising the AWF Governing Council and the Bank. The Governing Council is made up of UN-Water Africa, the AU through the New Partnership for Africa's Development (NEPAD) and the African Ministers' Council on Water (AMCOW), AWF's key donors (who include Denmark), and the AfDB. The Governing Council provides policy guidance and direction to AWF's work, and endorses all strategies, work plans, budgets, progress reports, audit reports, proposals, etc. before they can be submitted to AfDB's Board of Directors for policy guidance and approval. The AfDB's Water Development and Sanitation Department (AHWS), the Oversight Committee (OSC) and the Board of Directors provide the second layer of governance for the AWF. The Bank's Board of Directors approves all operational procedures, control systems, work plans, budgets, reports, programmes, and strategies. AfDB have a developed set of anti-corruption strategies and procedures (see chapter 3.2).

The AWF will set up a consultative forum for consulting on the NDF/Denmark programme outside of the annual Governing Council meetings. Such an exchange could take place mid-year, and its participation potentially expanded to include all the donors to the AWF Trust Fund. The discussions should be of technical/operational nature, mainly focusing on reviewing progress on the active AWF portfolio, risk management, implementation of the Strategy 2021-25 and devising strategies for removing operational bottlenecks. The "Mid-year Portfolio Review Meeting", as these consultations could be called, needs to be an informal process whose proceedings could be documented and recommendations acted upon.

AfDB has decentralized its operations and established five business delivery units in the south, north, east, central and west of the continent in addition to 34 country offices. The Bank's teams working on water, health, nutrition, gender and population in the regional and national offices are expected to support the preparation and the implementation of the AfDB/Denmark projects. The AfDB has national offices in four of the five countries (Burkina Faso, Mali, Niger and Ethiopia). The staff of these national offices will be at the frontline of delivery of the programme in partnership with national governments and other development partners. In Somalia where there is no national AfDB office, implementation will be through a third party Implementing Agency, with the AfDB providing implementation support and support from AfDB's East Africa Regional Centre in Kenya. The AWF will designate a Task Manager to follow-up the implementation of the programme and provide technical backstopping to national implementing agencies. The Bank headquarters provides strategic technical support to the regions and country offices and deals with complex projects and non-sovereign operations. For sovereign operations, the support to countries is channelled through sector ministries as the executing agencies.

For all the projects, with the exception of the catalytic investments under outcome 2, the recipient of the Denmark/AfDB grant through the AWF will be the Ministry responsible for water supply and sanitation in the beneficiary country (or the Ministry of Finance). The water Ministry will have multiple roles in programme implementation including identification of suitable projects to be funded under the programme; identification of a suitable agency at national, municipal or local levels to serve as project implementing agency; setting up and participating in national governance structures for the project; ensuring participation of relevant national stakeholders in project activities and national governance

structures; integrating activities of the Denmark/AfDB/ programme in national programming processes; mobilizing government and community cash and in-kind contributions to the project.

One criterion that will be applied in project selection under the programme is high national priority, and alignment to national water sector plans in order to ensure country ownership. Thus, the Denmark/AfDB programme will be making a contribution to implementation of the national water sector plans of the beneficiary countries.

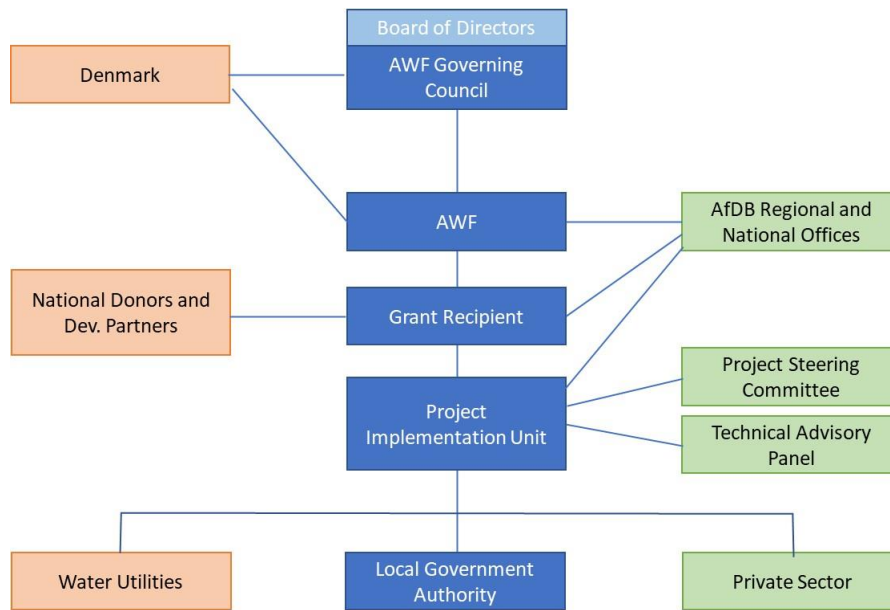
Within each country, an agency – a water utility, ministry department or local government authority – will be identified to execute the project. For rural water supply and sanitation projects, a third party a local government unit, such as a district, commune, province or water board, will be the implementing agency. In the case of catalytic investment projects, the executing agency, which will be a public agency like a Ministry Department, Municipal Authority, Local Government Authority or Water Utility, may solicit the services of a private sector agency or non-governmental organization under a contractual arrangement to support the delivery of project activities.

A project governance structure comprising of a Project Implementation Unit (PIU), Technical Advisory Panel (TAP) and Project Steering Committee (PSC) will be set up by the water ministry in each country to deliver the project.

The executing agencies for the Denmark/AFDB projects have not yet been named but key national institutions expected to be involved or consulted in implementation of the national projects include the following:

- *Ethiopia*: Federal Ministry of Water, Irrigation and Energy (MoWIE); Ministry of Finance and Economic Cooperation; Addis Ababa Water and Sewerage Authority (AAWSA); National WASH Coordination Office (NWCO)
- *Somalia*: Ministry of Energy and Water Resources of the Somali Federal Government (MoEWR); Ministry of Finance; Ministry of Humanitarian Affairs and Disaster Management (MoHADMD); Ministry of Public Works and Reconstruction (MPWR);
- *Burkina Faso*: Ministry of Water and Sanitation (Ministère de l'Eau et l'Assainissement - MEA); Ministry of Economy and Finance (Ministère de l'Economie et des Finances); the national water utility (Office National de l'Eau et de l'Assainissement - ONEA); General Directorate for Wastewater Sanitation and Human Excreta (Direction Générale de l'Assainissement des Eaux Usées et Excrétas – DGAEUE); and General Directorate of Water Resources (Direction Générale des Ressources en Eau – DGRE)
- *Mali*: Ministry of Energy and Water (Ministère de l'Energie et de l'Eau – MEE); ; Ministry of Economy and Finance (Ministère de l'Economie et des Finances); Ministry of the Environment and Sanitation (Ministère de l'Environnement et de l'Assainissement – MEA); National Directorate of Water Resources (Direction Nationale de l'Hydraulique – DNH); National Agency for the Management of Wastewater Treatment Plants in Mali (Agence Nationale de Gestion des Stations d'Épuration au Mali - ANGESEM); National Directorate of Sanitation and Pollution and Nuisance Control (Direction Nationale de l'Assainissement et du Contrôle des Pollutions et Nuisances – DNACPN).
- *Niger*: Ministry of Public Health (Ministère de la Santé Publique - MSP); Ministry of Water, the Environment and Desertification Control (Ministère de l'Eau, de l'Environnement et de la Lutte Contre la Désertification – MEE/LCD); Ministry of Finance (Ministère des Finances du Niger); National Water and Sanitation Commission (Commission Nationale de l'Eau et de l'Assainissement - CNEA); Directorate of Basic Sanitation (Direction de l'Assainissement de Base - DAB); Directorate of Public Hygiene and Health Education (Direction de l'Hygiène Publique et de l'Éducation pour la Santé - DHPES); and Directorate of Water Resources (Direction des Ressources en Eau – DRE)); Operating company for water utilities in Niger (Société d'Exploitation des Eaux du Niger - SEEN); and Asset-holding company for water utilities in Niger (Société de Patrimoine des Eaux du Niger – SPEN).

Figure 7.1: Management arrangements for national projects.



The implementation will require strong partnerships between AfDB/AWF and other agencies active in the sector. These include UNICEF, Red Cross, CARE International, International Organisation for Migration and other international water NGOs. Furthermore, the Bank will leverage its partnership with other donors like the World Bank, GIZ and USAID, to ensure coordination, and synchronization with their respective programs/projects for greater impact and sustainability. Specific roles expected of the other partners include participation in identification and prioritization of projects based on their expert knowledge of the situation in the water sector of the five countries; possible co-funding of the national projects; monitoring and evaluation of the programme; and as executing agencies or implementing entities where local institutional capacity is critically weak. Participation of partners will mainly be through national-level steering mechanisms set up for the projects.

The results will be communicated as outlined in annex 7. AWF will take responsibility for communicating the results using their normal range of communication measures. This will include the routine annual programme reporting but will also include case studies and potentially beneficiary stories where appropriate – the AWF web portal has a large outreach and is an ideal medium for such communication. The AWF is committed to learning and where lessons have been learnt that could be of use elsewhere they will be summarized and communicated through AfDB and other learning channels.

8. Financial Management, Planning and Reporting

8.1. Financial management

The programme will have a joint co-financing arrangement under which the Danish Government will transfer the entire grant in five instalments to AfDB/AWF through a new financing agreement. The AfDB/AWF will subsequently be responsible for administering the grant. The AWF, with backstopping from the AfDB, has the capacity to ensure programme financial management functions, which comprise budgeting, accounting, internal control, funds flow and financial reporting, in line with Bank procedures. Disbursement will comply with the AfDB’s disbursement handbook. National monitoring and reporting will be carried out directly by the Project Implementation Units (PIUs) or similar structure. Any unspent funds will, at the end of the programme period, be returned to the MFA.

Procurement will be carried out by the Executing Agencies in the beneficiary countries following the AfDB’s policies and guidelines. The AWF will ensure compliance with AfDB’s environment, social and climate safeguards. Procurement opportunities will be advertised locally, published on the AfDB

and UNDB websites and shared with Government of Denmark for publication on the Danida webpage and circulation through its mailing list.

8.2. Planning, reporting, and monitoring and evaluation

AWF prepares annual work plans that are approved by the AWF governing council. These work plans will specify the proposed programme and project level activities for the year ahead and may suggest for budget changes between outcomes if justified.

Monitoring and reporting at the programme level will be carried out by the AWF using AWF's Chief Program and Coordination Officer and the M&E Specialist. AWF's semi-annual and annual progress reports to the governing council and donors will also address the reporting requirements of the programme.

For the Government of Denmark's reporting purposes, the key results indicators in annex 3 have been selected to document progress. Additional indicators such as new employment opportunities created will be considered during the first year of the programme. The AWF is in the process of revising the structure of its Annual Report (and where necessary the underlying operational guidelines) and will reintroduce a template for reporting on its project portfolio (as an annex to the Annual Report). This Annex will include all relevant indicators in the Denmark/NDF Programme results frameworks, in line with Annex 3 of this Programme document.

The annual and semi-annual progress reports will be reviewed by the AWF governing council and donors (including Denmark) before submission to the AfDB Board of Directors. Progress monitoring on outcome and output indicators included in Annex 3, will be integrated into the implementation of individual projects and become responsibility of implementing agencies.

The AWF M&E Specialist will oversee and quality control the monitoring taking place and make an overview at the level of detail defined in the Danida Programme Result Framework. This will be included as an annex to the annual AWF report to the governing Council.

A Task Manager will be assigned for each project from the staff of AWF/AHWS, to provide implementation support and oversight consistent with applicable AfDB policies and procedures.

Considering that Denmark has not carried out any review of the AWF since 2009, but relied on the joint mechanism for reviews and evaluations (the last being the 2019-evaluation) and has not been able to physically visit AWF/AfDB during the project formulation phase, an Inception Review possibly done jointly with NDF, will be conducted as soon as COVID-19 travel restrictions allows, preferably in the fall of 2021.

The Danish MFA requests annual financial statements specified at outcome level to be submitted by AWF. The AWF will provide within 6 months of the completion of the programme a Project Completion Report consistent with AfDB and Danida requirements. In second half of 2023, Danida, possibly jointly with NDF, will carry out a mid-term review to assess progress.

9. Risk Management

An analysis of risks has been performed and is attached as Annex 5. The highest risks to the programme arise from the external environment of the programme (contextual risks) and relate to the threat of insecurity from violent extremist groups in the Sahel and Horn of Africa, and risk of worsening situation with respect to the COVID-19 diseases. Considerable risk is also associated with the weak capacity of project executing agencies, which may slow down programme implementation. There is a risk of downstream financing not being made available for the projects prepared. There is also a risk that operation and maintenance and hygiene behaviour change will not take place post project thereby seriously threatening the sustainability of program results. Appropriate mitigation measures have been proposed for all identified risks and are described in Annex 5. An improved risk management matrix will be included in future annual work plans. Management and monitoring of risks will also be discussed during the Mid-year Portfolio Review Meeting.

Annex 1 - Context

Access to water, sanitation and hygiene is a human right, yet hundreds of millions of people in Africa are have no access to even the most basic of services. Access to adequate safe water and improved sanitation in the five target countries of this program remains a significant challenge especially in the rural areas despite considerable progress made in meeting the SDG6 targets.

Figure annex 1.1 Countries to benefit from the Danish support to AWF



The average service access level in the five countries based on data from 2017⁵ stands at 57.3% for at least basic water supply; 6.7% for safely managed water supply; 14.8% for at least basic sanitation; 3.2% for safely managed sanitation facilities; and 22.4% for handwashing facility with soap and water at household level. This leaves a population of approximately 119 million in the five countries without access to at least basic water supply; 188 million without access to at least basic sanitation facilities; and 200 million without access to handwashing facilities.

⁵ Joint Monitoring Programme (JMP). JMP is jointly managed by WHO and UNICEF and monitors WASH access at the household level and also in schools and health care facilities.

Figure annex 1.1 Access to Water and Sanitation Services JMP 2017

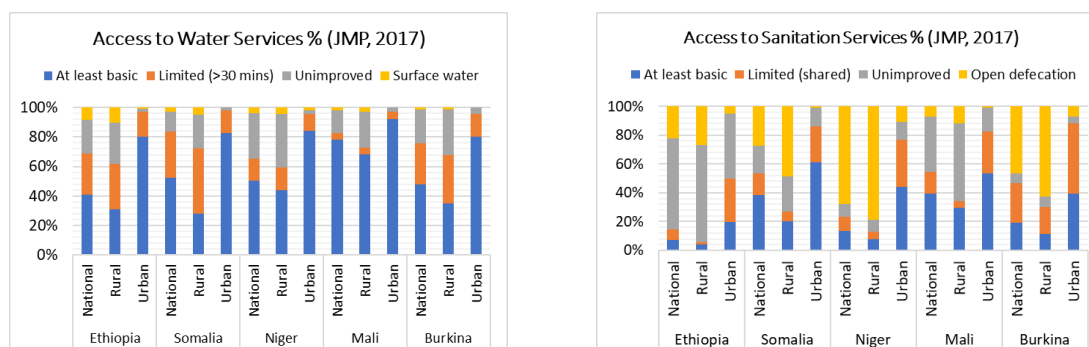


Table annex 1.1 Populations served (JMP 2017)		
Country	Population served by at least basic water supply services (JMP 2017)	Population served by safely managed water supply services (JMP 2017)
Mali	9,191,351	
Niger	60,303,693	12,012,141
Burkina Faso	14,511,107	
Ethiopia	10,797,321	
Somalia	7,730,417	
Total	102,533,890	12,012,141
Country	Population depending on at least basic sanitation facilities (JMP 2017)	Population depending on safely managed sanitation facilities (JMP 2017)
Mali	3,723,917	
Niger	7,679,036	
Burkina Faso	3,824,472	3,469,094
Ethiopia	2,942,185	2,062,861
Somalia	7,863,212	
Total	26,032,822	5,531,955

The proposed programme will contribute to several indicators under Sustainable Development Goal (SDG) 6 on clean water and sanitation and will seek to address the above challenges through investments in WASH services in selected rural areas in the five countries. This will enhance the quality of life by reducing the time and effort to collect water - a task that women and children are primarily responsible for; increase climate resilient of the targeted communities, reduce the incidence of virus and waterborne diseases; and reducing absenteeism from work and school and the associated lost income (from healthcare costs) and opportunities.

The world is currently facing an unprecedented health and economic crisis stemming from the outbreak of the COVID-19 disease, declared a global pandemic in March 2020 by the WHO. As of 17 November, 2020⁶ Africa had 1.657 million confirmed cases, 36,747 deaths and 1,410,936 (85.1%) recoveries. Health experts warn that public health systems in Africa could become overwhelmed if the virus were to spread rapidly. For this reason, there is need to slow the spread of the disease and support recovery efforts.

The COVID-19 crisis has exposed the large inequalities of access to water across the globe and highlighted the critical need for water to not only prevent the spread of the disease, but also to revitalize economies, employment opportunities, health outcomes, and the environment. This year starkly demonstrated the tremendous gaps in access to water supply, sanitation, and hygiene services, which

⁶ WHO 2020: COVID-19 in the WHO Africa Region. Situation as of 12/17/2020. Viewed on 18 Dec 2020 at <https://who.maps.arcgis.com/apps/opsdashboard/index.html#/0c9b3a8b68d0437a8cf28581e9c063a9>.

are particularly evident in COVID-19 hotspots, health care facilities, informal settlements, and fragile and conflict-affected states. As such, the crisis has put more urgency to the importance of access to clean water and handwashing facilities as well as WASH services in health care facilities.

The provision of safe WASH services is essential for preventing infections and protecting human health during all infectious disease outbreaks, including of COVID-19. Regular handwashing with soap and water is a critical first line of defense against the virus. Access to improved WASH is essential not only during an epidemic, but even in the post-epidemic period as shown by experiences during the Ebola epidemic in West Africa. The proposed programme will support the recovery of the five target countries from the COVID-19 pandemic by improving existing water supply and sanitation services and leveraging new investments in water and sanitation infrastructure in the countries.

The region's water resources is unevenly distributed, is poorly accessible due to undeveloped hydraulic supply systems, and crosses national boundaries, creating significant management challenges. Floods and droughts are a common occurrence in the region and affect millions of people every year. Water is the primary medium through which climate change effects manifest in the form of drought, water scarcity, and flooding. In the water supply and sanitation sector there is already an 'adaptation deficit' in relation to current climate variability, and challenges will intensify and evolve in many parts of Africa as climate change progresses.

Unchecked, global environmental emergencies such as climate change could cause social and economic damages far larger than those caused by COVID-19. To avoid this, measures including water and sanitation systems are designed to build back better and greener. This means doing more than getting economies and livelihoods quickly back on their feet. The Strategic Framework for WASH Climate Resilience⁷ developed by GWP and UNICEF will inform the interventions under the programme. The framework will guide adaptation measures and contribute to building climate resilience of the target communities in the five countries. The AWF will draw on past experience relating to application of climate change screening of project proposals under the NDF Programme, and applying tools for climate change mainstreaming in AWF projects, in working with the new GWP/UNICEF framework.

In addition to the burden of COVID-19, the five target countries of the programme are affected by famine, malnutrition, economic stagnation, human displacement and migration exacerbated by rapid population expansion, environmental degradation and climate change. Economic and environmental fragility of the countries is compounded by conflict and violence arising from political disgruntlement, presence of jihadist groups and weak state authority. The five countries have a combined population of 258.5 million, with an estimated 44% living below the poverty line. The average GDP per capita stands at US\$1,570, which compares unfavourably with the global average of US\$11,312.

⁷ Global Water Partnership/UNICEF: Strategic Framework for WASH Climate Resilient Development. Vol 1-6. 2017.

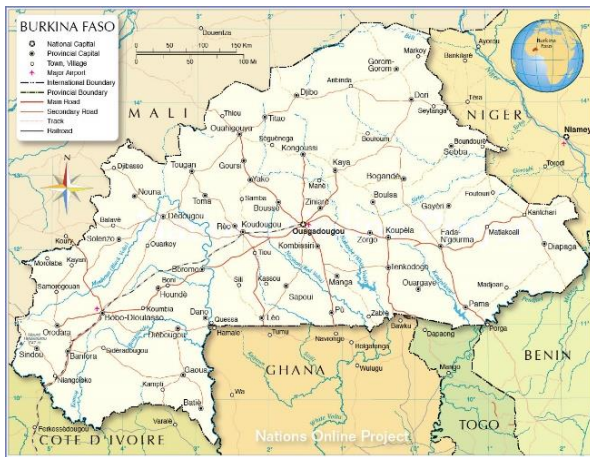
Table A.1 AfDB Country Strategy Papers (CSP) Pillars in the five countries

WASH is a component of at least one of the two CSPs pillars for all five countries

Country	Sectoral share of portfolio						CSP Pillars		CSP Period	No. and Volume of WASH projects in active portfolio
	Agriculture	Transport	Power	Multi-Sector	Finance	Other	CSP Pillar 1	CSP Pillar 2		
Burkina Faso	14%	26%	24%	14%	11%	12%	Promotion of access to electricity	Agricultural development to ensure inclusive growth, incl.: (i) Agric sector reforms; (ii) dev of value chains and water mgmt. by supporting emergence of growth centres ; (iii) promotion of youth employment; (iv) access to agric sector financing ; and (v) construction of road infrastructure marketing agric produce & intra-regional trade	2017-2021	2 projects UA 44.4 million
Ethiopia	8%	35%	31%	13%	0%	13%	Infrastructure Development- main emphasis will be the transport, energy and water and sanitation	Promoting Economic Governance	2016-2020; Extension by 2 years to end-2022 approved in 09/2020	2 projects UA 120 million
Mali	23%	32%	16%	11%	3%	15%	Enhancing governance for inclusive growth	Infrastructure development to support economic recovery: road infrastructure; development of drinking water supply and sanitation infrastructure ; energy infrastructure; agriculture and food security	2015-2019; "CSP CR was approved in 05/2020. CSP 2021-2025 under preparation	2 projects UA 51.6 million
Niger	33%	17%	20%	17%	3%	9%	Promote the competitiveness of the economy to unlock its potential and foster job creation	Promote development of resilient agriculture for high sustainable and inclusive growth. Two main sub-pillars: mobilization and harnessing of water resources , and development of agro-pastoral value chains	2018 - 2022	None
Somalia	0%	58%	1%	13%	0%	29%	Support national dev. goals to revitalise infrastructure and infrastructural services, ensure availability of clean drinking water , and improve resilience and sustainable management of natural resources.	Institutional capacity building and skills development for improved governance and job creation	2017-2020; Country Brief extension to end-2021 approved in 09/2020	3 projects UA 16.6 million; another UA 7.5 million under preparation

(Water is specifically mentioned as a Pillar in 3 CSPs: Botswana, Malawi and Rwanda)

Burkina Faso Water Sector Profile



Geography

Burkina Faso is a land-locked country located in West Africa. It is bordered to the north and west by Mali; to the south by Cote d'Ivoire, Ghana and Togo; to the southeast by Benin and to the east by Niger. The country has a land area of 274,200 km² about 400 km² of which is covered by water.

The terrain of the country is characterized by mostly flat plains, with scattering of dissected, undulating plains and hilly terrain especially in the west and southeast of the country. The country occupies an extensive plateau covered by savanna vegetation that is grassy in the north and gradually gives way to sparse forests in the south. Mean elevation is 297 m amsl.

Climate

The country has three main climatic zones: a hot tropical savanna with a short rainy season in the southern half, a tropical hot semi-arid steppe climate typical of the Sahel region in the northern half, and small area of hot desert in the very north of the country bordering the Sahara Desert. Burkina Faso experiences high temperatures and variable rainfall. Annual rainfall (which mainly falls from June to September) ranges from over 1100 mm in the southwestern part of the country to below 400 mm in the northernmost tip of the country. The average annual rainfall for the country is 748 mm. The dry season is influenced by the harmattans (dry, easterly winds that bring hot air from March to May). Mean annual temperature is 28.22°C (1901-2016). Extremes in temperatures are occurring with monthly high temperature averages now regularly exceeding the previous maximums of 35°C, particularly in the north.

Demography

Burkina Faso has an estimated population of 21.3 million that is growing at a rate of 2.58% annually. The country has a young age structure, with close to 65% of the population under the age of 25.

Most of the population is located in the center and southern parts of the country. Nearly one-third (30.6%) of the population lives in cities while the rest (69.4%) resides in rural areas. The capital and largest city is Ouagadougou, with a population of 2.5 million. Other major cities include Bobo-Dioulasso, Koudougou, Banfora, Ouahigouya, Kaya and Dedougou.

Administratively, Burkina Faso is divided into thirteen regions (Boucle du Mouhoun, Cascades, Centre, Centre-Est, Centre-Nord, Centre-Ouest, Centre-Sud, Est, Hauts-Bassins, Nord, Plateau-Central, Sahel and Sud-Ouest), forty-five provinces, and 351 Departments (communes or municipalities).

Economy

Burkina Faso is a poor, landlocked Sahelian country with a weak economy that is heavily dependent on adequate rainfall. Irregular patterns of rainfall, poor soil, and inadequate public infrastructure combine to make the country's economy highly vulnerable to external shocks. About 80% of the population is engaged in subsistence farming and cotton is the main cash crop. Agriculture is the second largest contributor to GDP after services. The country has few natural resources and a weak industrial base. Cotton and gold are Burkina Faso's key exports

The national GDP is US\$ 15.991 billion (2019 est. current US\$) and per capita GDP is US\$ 786.90. The average GDP growth rate for the period 2000 to 2019 was 2.54%.

Burkina Faso is among the poorest countries of the world. The country's Human Development Index in 2020 is 0.452 ranking it 183 out of 189 countries. An estimated 40.1% of the population lives below the national poverty line.

Fragility

Burkina Faso faces a worsening fragility situation. Growing insecurity, particularly in the north, close to the border with Mali and Niger, has displaced thousands of people and led to school closures. In January 2019, fewer than 50,000 people were internally displaced in the country but by August 2020, this number had grown to over 1 million. One in 20 people is now

internally displaced in Burkina Faso. Over the same period, violence spread from the northern regions to the east of the country. While most of the attacks were attributed to Islamist groups such as Islamic State in the Greater Sahara (ISGS), Ansarul Islam, and Jama'at Nusrat al Islam wal Muslimeen (JNIM), self-defence militias have started to proliferate.

Conflict over natural resources, including water, are not uncommon and are heightened by the increasing numbers of internally displaced people (IDPs). Most of the internally displaced persons are concentrated in the Sahel region, which is the most water stressed region.

Water Resources Situation

Burkina Faso is a water stressed country. Water availability varies greatly between regions and seasons, as well as from year to year. The country has five major river basins (Comoé, Mouhoun, Nakambé, Nazinon and Niger) belonging to three transboundary river basins (Volta, Niger and Comoé). The only rivers in the country that flow all year round are the Mouhoun River (Black Volta) and the Nakambé River (White Volta), the rest of the rivers are seasonal. Most of the rivers are dammed to store water for the dry season. The country has 136 dams with more than 1 million m³ of storage capacity.

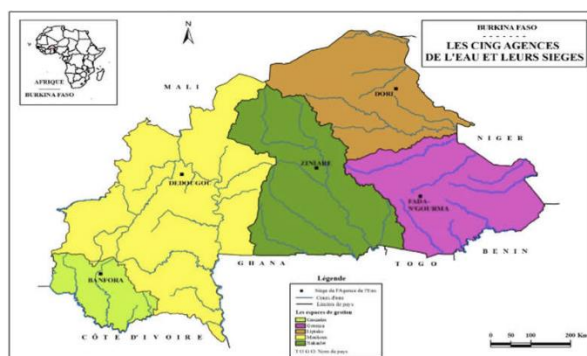


Figure 1: The five river basins of Burkina Faso (source: AfDB, 2020).

With regard to groundwater sources, approximately 82 percent of the country is underlain by crystalline basement rock, which typically does not contain thick, continuous and productive aquifers. Groundwater is unevenly distributed and occurs only in rock fissures, fractures and weathered zones, with low drilling success rates and insufficient yields to supply large settlements or for medium to large scale irrigation. The quality of groundwater is good, making it suitable for human consumption. Naturally occurring arsenic has been identified as a problem in some areas, particularly associated with zones of gold mineralisation in Birimian volcano-sedimentary rocks. Pollution from nitrate is also common in shallow groundwater sources, especially in areas with high housing density.

Agriculture is the largest water user, accounting for 51% of consumptive water use closely followed by municipalities (drinking water supply and sanitation), which account for 46% of consumptive water use. Industry only accounts for 3% of consumptive water use.

Climate risk overview

The Notre Dame Global Adaptation Index (ND-GAIN), which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to enhance resilience, is used here to provide an indication of the level of climate risk in Burkina Faso. The ND-GAIN Index is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change - by considering six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions - by considering three components: economic readiness, governance readiness and social readiness.

The ND-GAIN Index ranks Burkina Faso in 19th position out of 181 countries evaluated with respect to both vulnerability and readiness i.e. Mali is the 23rd most vulnerable country in the world to impacts of climate change.

Burkina Faso is at risk to several natural hazards, including droughts, floods, epidemics, heat waves, wind storms and insect infestations. With sporadic rains and poor water retention in soils, Burkina Faso has been experiencing 'quasi-drought' conditions since the early 1970s. These conditions are most pronounced between November and December, and in the north where rain only comes during two months out of the year.

Burkina Faso's wet season is characterized by heavy and often relentless rain that can wreak havoc on the country's poorly constructed informal settlements and degraded landscape, disturb the entire water sector, and destroy or reduce infrastructure services. Over the past 30 years, severe flooding has occurred repeatedly especially in the north and center of the country. In recent decades, an increase in frequency of floods has also been observed.

The above climatic features hamper the country's development and contribute to problems such as desertification, land degradation, food insecurity, deepening poverty, migration away from the central area of the country, and impeding national development. The vulnerability to these hazards is increased by the country's high dependence on the agricultural sector.

Over the period 1990-2012, temperatures increased by 0.6°C, amplifying the effect of droughts. Temperatures across Burkina Faso are projected to increase by 1.25°C to 3.03°C in 2040-2059, and 3-4°C by 2080-2099. This represents substantially higher temperature increases than the global average. Temperature increase in the north of the country is projected to occur at a much higher rate than in the south, and more in the wet season than in the dry season. Annual precipitation is projected to change by -243.34 mm to 359.95mm in 2040-2059. An increase in extreme climate events is also predicted. These changes are expected to negatively affect agriculture, livelihoods, poverty and the national economy.

Water Governance

Water policy and legal framework

The key policy and legal instruments that guide the management of the WASH sector in Burkina Faso are the following:

- *National Water Policy (updated in 2015)*: The policy aims to promote the sustainable management and development of the country's water resources following IWRM principles. The policy outlines a number of priorities for the sector, which include: (a) providing universal access to water and sanitation with emphasis on poor and vulnerable communities and; (b) promoting the long-term sustainability of the sector through, inter alia, increased engagement of the private sector in management of water supply systems, giving priority to maintenance of existing investments, and mobilizing internal resources for the sustainable financing of the sector. The policy is being implemented through a number of subsector programs covering the period 2016-2030, including a program on Drinking Water Supply (PN-AEP) and Wastewater and Sewerage (PN-AEUE).
- *National Public Hygiene Policy (2004)*: This policy works to create the conditions necessary for life, preventing illnesses, maintaining an environment conducive to human activities and guaranteeing comfort of all. Its scope includes the management of wastewater.
- *The National Sanitation Policy (2007)*: This policy aims to improve the living conditions and environment of the population, improve their health, and protect the country's national resources thereby contributing to sustainable development. Among other things, it emphasizes the improvement of WASH practices, and ensuring sustainable financing for the sanitation sector.
- *The Environment, Water and Sanitation Sectoral Policy 2018-2027 (2018)*: This policy aims to work towards improved economic and social conditions of populations and sustainable development by 2027 by improving access to water, creating a healthy living environment and strengthening environmental governance. The policy is based on guiding principles and strategies that are in line with the National Water Policy.

The key legal and regulatory instruments that guide the management of the WASH sector in Burkina Faso include the following:

- *2001 Water Management Act*. This law presents principles for the integrated management of water resources and for the development of water to meet various water needs. This Act is the basis of all water related legislation in Burkina Faso. It covers issues regarding administration, management, conservation and use, rights, waterworks and supply. Article 2 explicitly states the right of all to water.
- *2004 Decentralization Law (Charge Générale des Collectivités Territoriales, CGCT)*. This law decentralizes public service provision, and defines responsibilities for the delivery of basic services, including water supply and sanitation, amongst public agencies at different administrative levels. The law transfers the responsibility of provision of water supply and sanitation services to local rural governments.
- *2009: 107/2009*: Law transferring state assets and resources to the communes for matters relating to drinking water supply and sanitation, (part of reorganization and decentralization).
- *2009: 58 (rules) and 290 (implementation)*: relate to the parafiscal tax (water user fees) for the abstraction, works and/or pollution of water. Currently, there is no implementation of the polluter-pays principle.
- *2019: 228/2019 and 320/2019*: This defines water quality, water access and sanitation criteria so as to create a standardized way of classifying and evaluating water services.

WASH Institutional Framework

The institutional framework for water has undergone a number of changes over the past two decades both at national and local levels a part of general government decentralization of services and reforms introduced by adoption of IWRM policies. The water sector over the past decade has alternated between falling under two ministries and falling under a single ministry. In

the transitional government of 2014-2015, water management functions were combined under a single ministry but in the years that followed they were assigned to two separate ministries.

The key water sector institutions in Burkina Faso are the following:

- *Ministry of Water and Sanitation (Ministère de l'Eau et l'Assainissement, MEA)*: This ministry, which was created 2016, is responsible for setting priorities, policies and standards for water development; regulating water and sanitation services and; managing and regulating water resources. Among its directorates, there is the General Directorate for Drinking Water (DGEP), the General Directorate for Sanitation (DGA), General Directorate for Wastewater and Disposal (DG), and the General Directorate for Water Resources (DGRE). It is also the ministry in charge of the decentralization for Water and Sanitation (establishing and operating Regional Water and Sanitation Directorates - DREA) and operating a Permanent Secretariat for IWRM (SP/PAGIRE). The Directorate for Drinking Water (DGEP) is responsible for providing technical assistance to rural and semi-urban areas on water supply and sanitation management and development. DGEP also oversees the National Office for Water and Sanitation (ONEA), which provides drinking water supply and sanitation services to urban areas.
- *National Office for Water and Sanitation (Office National de l'Eau et de l'Assainissement, ONEA)*: This is an autonomous publicly owned utility that is responsible for the provision of water supply, on-site sanitation, and sewerage services in 57 urban centers in Burkina Faso. The population served in the ONEA towns is over 100,000. ONEA is one of the better performing public water utilities in Africa. The utility employs 2.8 staff per 1,000 connections and has non-revenue water rate of 18%. Between 1990 and 2019, the utility managed to raise the improved water coverage in the urban areas under its management from 37% to over 90%. However, the urban water sector faces a major sustainability challenge related to inadequate cost recovery and rapidly increasing water demand, driven by strong urban population growth.
- *Agency for the execution of water and rural infrastructure works (AGETEER)*: Established in 2009, this parastatal serves as Project Manager for development of rural infrastructure; including water and sanitation facilities, and agricultural irrigation schemes, on behalf of central and local government authorities. Although responsibilities for management of water supply and sanitation were transferred to municipalities (communes), the local agencies did not have the capacity for these responsibilities, and uptake of the new roles has been slow.
- *Water User Associations (Associations d'usagers de l'eau AUE)*. In March 2009, the government passed a decree transferring the ownership of piped water systems in small towns outside the ONEA service area to municipalities, which in turn contract out operation and maintenance services to local private operators, NGOs or ONEA. The planning and development of major infrastructure is still undertaken by DREA. Under the reforms, boreholes equipped with hand pumps were to be managed by Water User Associations (Associations d'usagers de l'eau AUE) through a delegation agreement signed between the municipality and the WUA. Pump maintenance and repair are ensured by an operator based on a contract signed with the municipality. In some regions community service providers have formed regional umbrella organisations. An example is the *Fédération des usagers de l'eau de la région de Bobo-Dioulasso (FAUREB)*. The federation sets a standard tariff for all rural areas in the region, and administer funds for maintenance, renewal and new investments. This mechanism allows for cross-subsidies between the different small towns and villages in the Federation.
- *River Basin Organisations*. Under the Action Plan for IWRM (Plan d'Action pour la Gestion Intégrée des Ressources en Eau, PAGIRE, 2003–2015), River Basin Organisations have been created to be in charge of water resources management in the country's five river basins.

Water supply and sanitation

Service coverage levels

The water supply and sanitation situation in the country is poor, although it has been improving over the past two decades. Less than half the population (47.9%) has access to basic water supply services; close to one-fifth (19.4%) has access to basic sanitation services; close to half the population (46.7%) practices open defecation; and slightly more than one tenth (11.9%) has access to handwashing facilities with soap and water. No proportion of the population has access to safely managed drinking water services and sanitation facilities.

There is great disparity in service access levels between water and sanitation, and between rural and urban areas, with lower access to sanitation facilities, and lower access levels in rural areas, where most of the population resides, relative to urban areas as shown by the table below.

Table 1: Burkina Faso: drinking water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	National	Coverage	
		Rural	Urban
Drinking water Basic	47.9%	35.0%	79.9%

Safely managed	0.0%	0.0%	0.0%
<i>Sanitation</i>			
Open defecation	46.7%	62.5%	7.3%
Basic	19.4%	11.3	39.4
Safely managed	0.0%	0.0%	0.0%
<i>Hygiene</i>			
Hand washing facility with soap and water at home	11.9%	7.5%	22.7%

Most households in rural and urban areas that are not practicing open defecation use onsite sanitation for wastewater and fecal matter disposal. Only 5% of the urban population uses septic tanks with a large proportion of the rest of the population using pit latrines.

Despite the close-to-universal reliance on on-site sanitation facilities, sludge emptying is informal and only four sludge treatment plants exist in the country (in Ouagadougou and Bobo-Dioulasso) There is no strategy in place for sludge management. Sewerage networks only exist in the Ouagadougou business district and serve less than 1 percent of Ouagadougou's population. Thus, much of the municipal wastewater is not treated before discharge into the environment. Sanitation fees are insufficient and do not cover the cost of sewerage services.

Matters with respect to hygiene are not much better as shown in the table above.

Key WASH sector challenges

The following are among the major challenges related to WASH in Burkina Faso:

- Inadequate water infrastructure base
- Widespread water pollution from poor disposal of feces, waste water and domestic solid waste
- Weak institutional capacity of water sector agencies especially those at local government levels
- Inadequate gender mainstreaming
- Inadequate financing of WASH activities
- Water scarcity and uneven water distribution in space and time
- Low resilience of water supply systems to impacts of climate change
- Fragility from rising violence especially in the northern parts of the country.

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Ethiopia Water Sector Profile



Geography

Ethiopia is a land-locked country located in the Horn of Africa. It is bordered to the north by Eritrea, to the west by Sudan and South Sudan, to the south by Kenya, and to the east by Somalia, and to the northeast by Djibouti. The country has a land area of 1,104,300 km² making it the 10th largest country in Africa.

Ethiopia has a hilly and mountainous terrain featuring a central high plateau divided by the Great Africa Rift Valley. Mean elevation is 1,330 m amsl.

Climate

Ethiopia has a diverse climate and landscape, ranging from equatorial rainforest with high rainfall and humidity in the south and southwest, to the Afro-Alpine on the summits of the Simien and Bale Mountains, to desert-like arid conditions in the north-east, east and south-east lowlands.

Ethiopia has three rainfall seasons. The primary rainy season, Kiremt, occurs from mid-June to mid-September and accounts for 50–80% of annual rainfall. Parts of central and northern Ethiopia experience a sporadic, secondary wet-season, Belg, which often has considerably less rainfall and occurs from February to May. Southern regions of Ethiopia experience two distinct wet seasons, Belg, from February to May, and Bega occurring from October to December. Mean annual rainfall distribution exhibits considerable spatial variability due to orographic influences. Rainfall on the Ethiopian plateau ranges from 1000 to 2200 mm while the northern, eastern and southern parts of the country are arid to semi-arid and receive 250 to 800 mm/yr of rainfall. Mean annual precipitation for the country is 815.8 mm. Mean annual temperature for Ethiopia is 22.6°C, with monthly temperatures ranging between 20.9°C (December) and 23.9 °C (April).

Ethiopia frequently experiences extreme climatic events like droughts and floods, in addition to rainfall variability and rising temperature, which contribute to adverse impacts on livelihoods.

Demography

Ethiopia has an estimated population of 110.8 million, making it the second most populous country in Africa after Nigeria. The country's population is growing at an annual rate of 2.5% per year. The population is mostly young, with persons below 25 years making up close to 60% of the population.

Most of the population (78.3%) resides in rural areas, but the population in urban areas is growing at a rapid rate of 4.63% per annum. The capital city of Ethiopia is Addis Ababa. Other major cities include Dire Dawa, Mek'ele, Adama, Bahir Dar, Gondar, Desé, Hawassa, Jimma and Bishoftu.

Ethiopia is governed through an ethno-federalist structure comprising of 10 regional states (Afar, Amhara, Benishangul-Gumuz, Gambela, Harari, Oromia, Somali, Southern Nations, Nationalities, and Peoples' Region, Tigray and Sidama), two chartered cities (Addis Ababa and Dire Dawa), 68 zones, 770 woreda (districts) and several thousand kebele (wards).

Economy

Ethiopia has the fastest growing economy in Africa. The average GDP growth rate for the period 2004 to 2019 was 10.3%. This growth was driven by government investment in infrastructure, as well as sustained progress in the agricultural and service sectors. More than 70% of Ethiopia's population is still employed in the agricultural sector, but services have surpassed agriculture as the principal source of GDP.

The state is heavily engaged in the economy. Ongoing infrastructure projects include power production and distribution, roads, rails, airports and industrial parks. Key sectors are state-owned, including telecommunications, banking and insurance, and power distribution.

Despite steady growth of the economy, Ethiopia remains one of the poorest countries in the world. The national GDP is US\$ 95.91 billion (2019 est. current US\$) and per capita GDP is US\$ 855.76). The country's Human Development Index in 2020 is 0.485 ranking it 174 out of 189 countries. Close to 30% of the population lives below the national poverty line.

Fragility

Ethiopia is experiencing high fragility in multiple dimensions – economic, socio-political and environmental. Fragility in Ethiopia is mainly driven by faulty democratic structures, declining legitimacy, declining state authority and capacity, persistent isomorphic mimicry, a frail social contract, interethnic tensions, climate variability and change, and growing internal displacement. Also important to the fragility discussion are the State's inability to address ethnic and gendered inequalities, aid dependency, and low environmental resilience.

Climate variability and change are an important factor in the country's fragility situation. Climate impacts are bringing about reduced agricultural yields, reduced employment opportunities and increased natural resource and land scarcity, thereby threatening the livelihood security of the large proportion of Ethiopians who are still largely depend on rain-fed agriculture and agro-pastoralism for their livelihoods. Furthermore, competition over scarce resources between communities has the potential to exacerbate existing tensions along ethnic lines, fuel migration to urban centres, and cause resentment of the government by the citizens who feel the government is failing in its duty to ensure food security and employment.

Water Resources Situation

Ethiopia is endowed with a substantial amount of water resources but with very high hydrological variability. The country has twelve major river basins, which form four major drainage systems namely the Nile Basin, Rift Valley Basin, Juba-Shabelle Basin and North-East Coast Basin. All the basins are transboundary in nature. Ethiopia has 11 freshwater lakes and 9 saline lakes, 4 crater lakes and over 12 major wetland areas.

Most of the rivers in Ethiopia are highly seasonal, with about 70 percent of the total runoff occurring during the period June-September period. All river basins except the Nile Basin face water shortages.

The groundwater potential of the country is not known with any certainty, but is more easily available than surface water in the arid and semi-arid areas, and supplies about 80 percent of the existing drinking water sources in the country.

Agriculture is the largest water user, accounting for 91.8% of consumptive water use. This is followed by municipal sector, which accounts for 7.7% of consumptive water use, an industry accounting for 0.5% of consumptive water use.

Climate risk overview

Ethiopia is one of the most vulnerable to climate variability and climate change due to its high dependence on rain-fed agriculture and natural resources, and relatively low adaptive capacity to deal with changes introduced by climate change.

Mean annual temperature in Ethiopia has increased by 1°C since 1960, and is projected to increase by 1.8°C by the 2060's, and by 3.7°C by 2100. Higher rates of warming have been observed in the central regions and highland areas. An overall decline in rainfall has been observed in Ethiopia over the past 3-4 decades, with significant year-to-year variability. The incidence of droughts has also increased over this period, and the rains in central and northern areas that occur in February to May have become increasingly less predictable. Projected trends indicate as much as a 20% decline in spring and summer rainfall in southern and central regions of the country while the southwest, southeast and northern parts of the country are expected to experience a general increase in rainfall.

The projected warming trend over the entire country is expected to exacerbate observed declines in rainfall, leading to increased water stress. Although precipitation is expected to increase in some parts of the country, warmer temperatures will accelerate the rate of evapotranspiration, thus reducing the benefits of increased rainfall. With more frequent and severe droughts, the region is likely to experience negative impacts on water supply, biodiversity, and hydropower generation. A potential simultaneous increase in floods poses a serious water pollution threat, and could affect the health of wetland and forest ecosystems, which provide critical ecosystem services for communities in Ethiopia.

The Notre Dame Global Adaptation Index (ND-GAIN), which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to enhance resilience, is used here to provide an indication of the level of climate risk in Ethiopia. The ND-GAIN Index is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change - by considering six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions - by considering three components: economic readiness, governance readiness and social readiness.

The ND-GAIN Index ranks Ethiopia in 157th position out of 181 countries evaluated with respect to both vulnerability and readiness i.e. Ethiopia is the 25th most vulnerable country in the world to impacts of climate change. Factors that increase its vulnerability include the under-development of water resources, low health service coverage, a high population growth rate, low economic development, inadequate road infrastructure in drought prone areas, weak institutional structures, and lack of awareness on climate related risks. Primary environmental problems include soil erosion, deforestation, recurrent droughts, desertification, land degradation, and loss of biodiversity and wildlife.

Water Governance

Water policy framework

The key policy instruments in Ethiopia include the following.

- *Ethiopian Water Resources Management Policy (1999)*: This policy, together with its strategy, is the key guiding document for the water sector. The objective of the policy is to promote the efficient, equitable and optimal utilization of Ethiopia's water resources to support sustainable socio-economic development. Among other things, the policy sets the key principles and policy directions for the Ethiopian water sector.
- *Ethiopian Water Sector Strategy (2001)*: This Strategy outlines strategic actions needed to

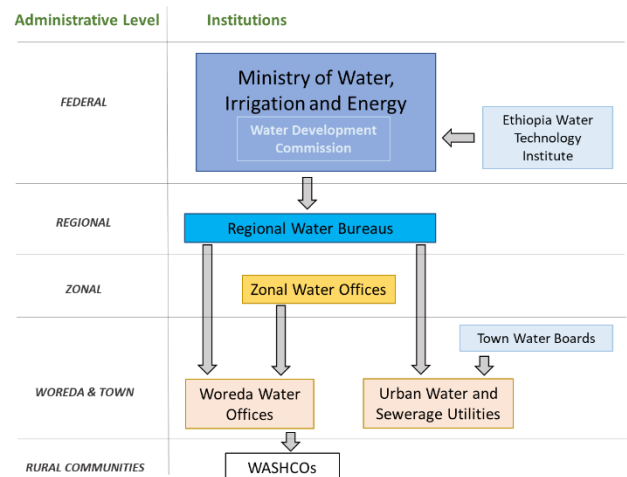
translate the National Water Resources Management Policy into action. In the area of water supply and sanitation, the policy and strategy promote decentralized management of water and sanitation, promote the involvement of all stakeholders including the private sector and re-focus government efforts towards pro-poor, low-cost measures and cost recovery, requiring urban service providers to cover investments, operation and maintenance (O&M) costs while rural providers cover O&M costs with limited cost sharing of large capital outlays.

- *WASH Implementation Framework (WIF)*: This was designed to provide guidance to the implementation of the WASH programme under the framework of the water policy.
- *Draft Urban Wastewater Strategy of the MoWIE*: The objective of this strategy is for Ethiopian towns and cities to practice a linear urban wastewater management system based on disposal, open dry beds and small size conventional treatment.
- *The National Sanitation Strategy*: (NHSS 2005, Ministry of Health) focuses on three pillars of enabling environment, improved access to hardware supplies and services, and promotion and mobilization.
- *Universal Access Plan (UAP) for Water Supply 2005*: This sets out ambitious targets for water supply and sanitation, originally for the period 2005-2012, later updated to be 2025.
- *The Growth and Transformation Plan (GTP II)*: GTP II is designed to support the government's vision of becoming a middle-income country by 2025 through, among other things, the provision of safe, sustainable and climate resilient water supply and urban waste water management with target of 25liters/c/day within 1 km distance. The GTP II targets for water service coverage in 2025 are 85% and 75% for rural and urban areas respectively.

WASH Institutional Framework

Until about two decades ago, the Ethiopian federal government was responsible for identification, planning, and implementation of water supply and sanitation projects and programs. Consistent with the government's policy on decentralization, and the National Water Resources Management Policy and Strategy (NWRMPS), many of these responsibilities have shifted to regional and local government authorities. A diagrammatic representation of key water institutions is shown below.

Figure: Water sector institutional framework



The key water sector institutions in Ethiopia as depicted above are the following:

- *Ministry of Water Irrigation and Energy (MoWIE)*: The Ministry is responsible for management of water resources, water supply and sanitation, large and medium scale irrigation, and electricity. The ministry provides technical support to regional water and energy bureaus.
- *Water Development Commission*: This is a key unit of the MoWIE that is responsible for water supply and sanitation. Its main responsibilities include to (a) formulate policy, strategy and national plans, and establish standards; (b) supervise and follow up the implementation of policy and strategy instruments and sector standards; (c) regulate and coordinate the implementation of water supply and sewerage systems; (d) coordinate and monitor water supply projects financed by Federal Government Budget and; (e) conduct capacity building activities.
- *Regional Water Bureaus (established by regional governments)*: These bureaus are responsible for: (a) implementation of federal policies, strategies and action plans through adapting them to the specific conditions of the region; (b) planning, implementing, monitoring and evaluating water supply projects; (c) approving, coordinating and monitoring projects implemented by Woredas and urban water utilities; (d) exercising regulatory duties delegated to them by the Ministry and; (e) drafting laws and regulations for Town Water Supply and Sewerage Enterprises.
- *Zonal Water Office*: These are supporting arms of the Regional Water Bureaus and operate within the zones of the regional governments. Their responsibilities include provide technical support to Woreda Water Offices and Town Water Supply Offices; and coordinating WASH activities, consolidating plans and reports of Woredas.

- *Woreda Water Office*: These units are responsible for planning, implementing and monitoring and evaluation of small water supply schemes; coordinating NGOs and conducting capacity building activities for WASHCOs.
- *Town Water Board*: The Town Boards are responsible for planning and administration of water and sanitation utilities within urban settings.
- *Town Water and Sewerage Utilities*: The utilities are responsible for operating and maintaining town water supply and sanitation systems.
- *Addis Ababa Water Supply and Sewerage Authority (AAWSA)*: The national utility that manages and operates the water supply and sewerage system of Addis Ababa city.
- *WASH Committees (WASHCOs)*: These are water-user committees with responsibility of operation and maintenance of rural water supply schemes.

Other important national institutions that have responsibilities related to WASH-are the following:

- *The Ministry of Health (MoH)*: The Ministry, through the Hygiene and Environmental Health Department (HEHD) develops and implements health policies related to sanitation & hygiene. The policies and programs of the MoH are implemented through Regional Health Bureaus, Woreda Health Offices and Primary Health Care units, and Health Extension Services organized at the Kebele level.
- *Ministry of Education (MoE)*: The Ministry is responsible for designing School WASH strategy, action plan and implementation guidelines to enhance clean and safe water supply, sanitation services and hygiene practices in schools. At the regional level, the Ministry is responsible for establishing a school latrine cleaning culture, and hand washing and menstrual hygiene management programs in all schools.
- *Ministry of Finance and Economic Cooperation (MoFEC)*: The Ministry is responsible for allocating and channeling resources for implementing WASH programmes and projects, and monitoring utilization of public funds.
- *The Ministry of Environment and Forestry (MoEF)*: Shares responsibilities with the MoH related to public health and environmental sanitation.

Water supply and sanitation

Service coverage levels

The water supply and sanitation situation in the country is poor, although it has been improving over the past two

decades. Less than half the population (41.06%) has access to at least basic water supply services; about one-tenth (10.30%) has access to at least basic sanitation services; close to one quarter (22.35%) practices open defecation; and less than one tenth (7.96%) has access to handwashing facilities with soap and water.

There is great disparity in service access levels between rural and urban areas, with the access levels in rural areas, where most of the population resides, being considerably poorer than in urban areas as shown by the table below. During the dry season, many traditional sources of water in the rural areas come under great pressure as shallow wells and other perennial sources dry-up. This situation is exacerbated by use of the remaining sources for livestock watering.

Table 1: Ethiopia: drinking water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	National	Coverage	
		Rural	Urban
<i>Drinking water</i>			
Basic	29.62%	26.50%	41.82%
Safely managed	11.44%	4.56%	38.45%
<i>Sanitation</i>			
Open defecation	22.35%	26.75%	5.09%
Basic	7.32%	0.00%	19.60%
Safely managed	2.98%	3.81%	0.00%
<i>Hygiene</i>			
Hand washing facility with soap and water at home	7.96%	4.04%	23.35%

There are over 200,000 rural water supply schemes, with about 10,000 new rural water supply schemes being constructed each year.

Key Rural WASH Challenges

- Low improved water supply service coverage levels and very low improved sanitation coverage levels.
- Weak planning, information and M&E system;
- Weak enforcement of policies, strategies and regulations.
- Lack of systematic and regular water quality monitoring
- High percentage of non-functional water supply schemes.
- Low private sector involvement
- Weak spares and supply chain
- Insufficient support to empower female WASHCO members

Important water and sanitation programs

The key water sector programs are the following:

- *One Wash National Program (OWNP)*: This is a sector wide approach (SWAp) with the immediate objective of achieving increased

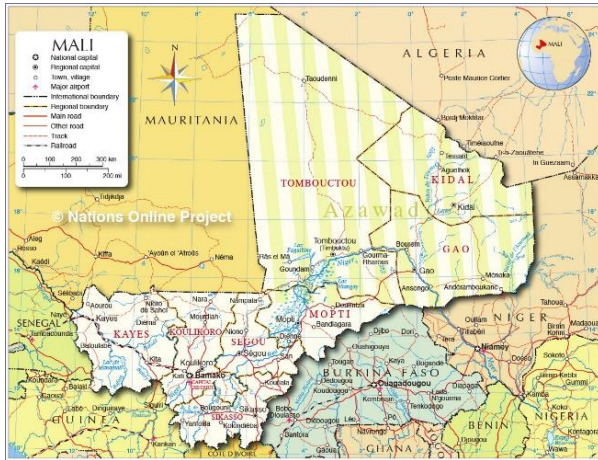
coverage of improved and sustainable water supply and sanitation services for rural and urban communities. OWNP is a national model for planning, financing, implementation and monitoring of the WASH sector. It is also a flagship Government programme supported by several development partners and NGOs, in which different actors come together and agree to address water supply, sanitation and hygiene as an integrated package aimed at achieving the national Growth and Transformation Plan (GTP) targets. The programme was launched in September 2013, with Phase I (2013–15) guided by the country's first Growth and Transformation Plan (GTP I), and the Phase II (2016–2020) guided by GTP II. The programme has four components: (1) Rural and Pastoral WASH; (2) Urban WASH; (3) Institutional WASH; and (4) Programme Management and Capacity Building. The ONWP is aligned with

the WIF in the definition of the programme components, organization, principles, programme pillars, financial management, capacity building, M&E and roles and responsibilities of major stakeholders in the WASH sector. A Memorandum of Understanding has been signed between four government ministries that outline responsibilities between them related to WASH. The four are the Ministry of Water, Irrigation and Energy; Ministry of Health; Ministry of Education; and Ministry of Finance and Economic Cooperation. The program organizational structure consists of a National WASH Steering Committee (NWSC) chaired by MoWIE; WASH Technical Team, National WASH Coordination Office and OWNP Programme Management Unit.

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Mali Water Sector Profile



Geography

Mali is a land-locked Sahelian/Sahara country located in West Africa. It is bordered to the north by Algeria; to the west by Mauritania, to the southwest by Senegal and Guinea, to the south by Côté d'Ivoire and Burkina Faso, and to the east by Niger. The country has a land area of 1,240,192 km² making it the eight largest country in Africa. About 20,002 km² of the country is covered by water.

The terrain of the country is characterized by flat to rolling landscapes occasionally interrupted by high rising plateaus. The southern part of the country mostly features flat savanna plains while the north has high plateaus (200 – 500 m amsl). There are rugged hills in the northeast, with elevations of up to 1,000 meters. Mean elevation is 343 m amsl and ranges from 23 m in the Senegal River valley to 1,155 m at the peak of the Hombori Tondo mountain.

Climate

Mali is one of the hottest countries in the world. The country has four natural zones: (1) a northern Saharan zone that reaches deep into the Sahara Desert and covers 51% of the areas of the country; (2) central semi-arid Sahelian zone that covers 26% of the country; (3) southern cultivated Sudanese zone that covers 17% of the country and; (4) a Sudano-Guinean climate zone in the southwestern tip of the country that covers 6% of the area of the country.

The Sahara Desert zone, which covers the northern half of Mali, has a hot desert climate characterized by long, extremely hot summers and scanty rainfall that decreases northwards. The southern Sahara transitions into the semi-arid Sahel zone — the domain of pastoralists. This zone has a hot semi-arid climate with very high temperatures year-round, a long, intense dry season and a brief, irregular rainy season. The southern Sudanese zone, which has the largest proportion of the country's agricultural land, has a tropical wet and dry climate, with very high temperatures year-round, a dry season and rainy season. The southernmost Sudano-Guinean zone has a wetter, more tropical climate. The average maximum temperatures in the country range from 44°C to 48°C.

Rainfall in Mali is controlled in large part by oscillation of the Intertropical Convergence Zone (ITCZ) across the northern and southern African continent, which brings rainfall to southern Mali. The rain season lasts 3 to 4 months (between June and October), with the amount of annual rainfall decreasing from south to north. The country experiences one long dry season (lasting 6-9 months) during which almost no rain falls. The Saharan Desert zone receives less than 200 mm in a year; the semi-arid Sahelian zone receives 200-600 mm; the Sudanese zone receives 600-1000 mm; and the Sudano-Guinea zone receives over 1000 mm of rainfall. The average annual rainfall for the country is 328 mm.

Variations in the latitudinal movements of the ITCZ from one year to another cause large inter-annual variability in seasonal rainfall and result in Mali experiencing frequent droughts but also floods. In 15 out of 20 years between 1996 and 2016, flooding was experienced in Mali.

Demography

Mali has an estimated population of 20.1 million that is growing at a rate of 2.97% annually. The country has a young age structure, with 66.7% of the population under the age of 25. The majority of the population lives in the southern half of the country, with the highest population density occurring along the valley of the transboundary rivers and the border with Burkina Faso.

More than two-fifths (43.9%) of the population resides in cities while the rest (56.1%) resides in rural areas. The rate of urbanization (4.86% per annum) is among the highest in the region and the capital city Bamako, which has a population of 2.6 million, is one of the fastest-growing cities in the world. Other major cities include Sikasso, Koulikoro, Ségou, Mopti, Kayes, Gao and Timbuktu.

Administratively, Mali is divided into eight regions (Gao, Kayes, Kidal, Koulikoro, Mopti, Ségou, Sikasso and Tombouctou) and one capital city (Bamako).

Economy

Mali is one of the 25 poorest countries of the world. Mali's economy is heavily dependent on gold mining and agricultural exports, with cotton and gold exports making up around 80% of export earnings. Beef is the third export product of Mali after gold and cotton. Economic activity is largely confined to Niger River valley where there is availability of water for agriculture. About 80% of the labor force is engaged in farming and fishing, and about 10% of the population is nomadic. Industrial activity is mainly focused on processing of agricultural produce.

The national GDP is US\$ 17.28 billion (2019 est. current US\$) and per capita GDP is US\$ 876.0. The average GDP growth rate for the period 2000 to 2019 was 4.86%. Agriculture accounts for slightly more than 40% of the GDP. The services sector makes a similar contribution (40%) while industry accounts for 20% of GDP. Mining is

diversifying, with a growing iron ore industry. However, the economy remains fragile, with its heavy reliance on climatic conditions and global commodity prices.

The country's Human Development Index in 2020 is 0.434 ranking it 184 out of 189 countries. An estimated 36.1% of the population lives below the national poverty line.

Fragility

Mali is a fragile country afflicted by protracted rebellion, insecurity and impacts of climate change. Starting in 2012, the country has witnessed the rebellion of northern tribes, a temporary succession of part of the north, and two military coups. The chaos associated with fighting has allowed Islamist militants to set up strong holds in the north. The fighting has displaced more than half the local population in the northern regions of Gao, Kidal and Tombouctou who have fled to the south of the country, or to neighbouring countries.

An internationally mediated peace accord was signed between the Malian Government and northern armed groups in June 2015 but the parties have made little progress in implementation of the accord, and total peace has not yet been restored to the troubled areas.

The impacts of insecurity have been exacerbated by impacts of global climate change, which has increased the displacement and north-south migration of people sparking tensions between pastoralists and sedentary communities. As of January 2021, there were 311,193 IDPs in Mali (the population is much higher when the displaced who are not living in formal IDP camps are considered).

Water Resources Situation

Hydrologically, Mali is subdivided into four basins, three of which are transboundary in nature. The basins are the Niger River Basin, which covers 47% of the country's land area; the Senegal River Basin, which covers 11% of the country; the Volta River Basin, which covers 1% of the country and; the Sahara Desert internal drainage basin, which covers 41% of the country.

The Niger River, one of Africa's longest rivers, has a total length of 4,200 km, a considerable part of which (1,700 km) lies in Mali. Its main tributaries in Mali are the Bani, Sankarani and Baoulé rivers. The Inner Niger Delta, which measures about 350 km long by 100 km wide, and covers an area of about 41,195 km² in central Mali, is an international Ramsar site and strategically important resource. The seasonal flooding of the Inner Niger Delta is the lifeline for communities, biodiversity and economy of the region. As the flood pulse moves through the delta in the winter months (September to November), the Niger River bursts its banks causing extensive flooding in the floodplains, filling controlled submergence traps, lakes and ponds for flood recession crops and pastures, and improving fish reproduction in spawning grounds.

The Senegal River is another major West African river with three tributaries in Mali (Bafing, Bakoye and Baoulé). The Volta River has only one tributary in Mali. This is the

Sourou River which flows southwards to meet with the Black Volta.

Mali's ground water resources are substantial and underutilized. They include unconsolidated aquifers, consolidated sedimentary aquifers, consolidated sedimentary aquifers (intergranular and fracture flow) and basement aquifers. Eight major aquifers have been identified. There are eight named aquifers. Groundwater accounts for only 1.7% of total consumptive water use.

Agriculture is the largest water user, accounting for 94.6% of total water withdrawals (nearly all of it is drawn from surface waters). Municipalities and communes (drinking water supply and sanitation), account for only 2.1% of consumptive water use while livestock and industry account for 1.4% and 0.1% of consumptive water use respectively.

Climate Risk Overview

The Notre Dame Global Adaptation Index (ND-GAIN), which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to enhance resilience, is used here to provide an indication of the level of climate risk in Mali. The ND-GAIN Index is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change - by considering six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions - by considering three components: economic readiness, governance readiness and social readiness.

The ND-GAIN Index ranks Mali in 169th position out of 181 countries evaluated with respect to both vulnerability and readiness i.e. Mali is the 13th most vulnerable country in the world to impacts of climate change.

Mean annual temperature has increased by 0.7°C since 1960, and is projected to increase by 1.2 to 3.6°C by the 2060's, and by 1.8 to 5.9°C by the 2090's. According to the Malian Directorate of Meteorology, rainfall has been decreasing since 2001, with a southward shift in isohyets, and marked reduction in areas receiving more than 1200 mm/annum. One of the impacts of this is significant decline in the inundated surface of the central Inner Niger Delta. Droughts due to erratic rainfall are part and parcel of the natural variability in climate across Mali but in recent years, more frequent and longer droughts have plagued Mali, exacerbating natural adaptive capacities.

Thus, climate-related changes are already being felt in Mali and have led to a steady relocation of fishing, agricultural, and livestock keeping activities southwards where the population density is much higher, increasing the conflicts between pastoralists, fishermen, and farmers.

Although spatial patterns of vulnerability vary significantly across Mali, the northern parts of the country, already at the edges of productivity, are among the most vulnerable. The

north of the country is threatened by encroaching deserts, the borderline of which gradually shifts southwards, while agricultural productivity in the intensively cultivated south is endangered by increasing pressure on natural resources. Under climate change, this situation is likely to worsen, with accelerated desertification and limited water availability in the north and more frequent torrential rains and floods in the south. Expanding agriculture, coupled with poor land management practices, particularly on the Niger River flood plain, has significantly increased erosion and sedimentation, and the propensity of some areas to experience severe flooding and associated crop loss.

Mali's physical vulnerability is accentuated by socioeconomic and environmental factors, mainly (1) the high dependence on rain fed agriculture; (2) a high poverty rate and low Human Development Index; (3) people settling in flood plains, combined with weak land use planning; and (4) environmental degradation driven by rapid population growth and climate change.

Water Governance

Water policy and legal framework

The key policy and legal instruments that guide the management of the WASH sector in Mali are the following:

- *Strategic Framework for Economic Recovery and Sustainable Development (CREDD 2019-2023)*. This is the government's overarching medium term plan for poverty reduction and national socio-economic development. It is also the primary instrument for achieving the SDGs goals and targets of AU's Agenda 2063. The strategic framework has 5 components one of which (on developing human capital) includes a target on attaining universal coverage in improved drinking water and sanitation by 2030. The strategic framework also includes provisions for increase the accountability of public spending, deepening the decentralisation process and improving the resilience of populations to natural disasters.
- *National Water Policy (PNE 2006)*: The key objective of this policy is to eliminate water-related barriers to socio-economic development. The policy has five focus areas which include meeting water needs of water using sectors; reducing impact of water-related natural disasters on people and property, and preventing water resources pollution; and reducing government's burden for WASH service provision by sharing costs between the state, local authorities and water users. The water policy is currently under review.
- *National Sanitation Policy (2007)*: This policy aims to improve access of the Malian people to public sanitation services. It has three main objectives: to increase cooperation amongst the various stakeholders in the management of wastes and stormwater; to promote public

private partnerships in service provision; and to increase sector funding. Under the policy, sanitation is to be managed at the local level in an economically and environmentally sustainable manner.

The key legal and regulatory instruments that guide the management of the WASH sector in Mali include the following:

- *2002 Water Code*. This law outlines the principles for management of water in Mali, which includes the principle that responsibility for protection, development and development of water resources rests with all parties – the state, regional and local governments and the citizens. The Code provides for regulation of water abstraction (from surface and ground sources) and wastewater discharge into the environment; defines services fees, charges and penalties; provides for wastewater management, stormwater drainage and flood control. The Code also outlines responsibilities for water supply and sanitation service provision for different actors (the state, regional governments, municipalities and local community).
- *Decentralization Laws*: A number of laws have been enacted over the years (law 1995-034; decree 0572/P-RM-2015 and law 2017-051) that have progressively transferred responsibilities for service provision, including in water supply and sanitation, from central government to local government authorities.

WASH Institutional Framework

Responsibilities for water supply and sanitation fall under two different ministries as further explained below. The institutional framework for water supply and sanitation has undergone a number of changes over the past two decades as part of the general government decentralization process mentioned above.

The key water sector institutions in Mali are the following:

- *Ministry of Mines, Energy and Water (MMEE)*: This is the ministry responsible for the water sector. Its mandate in the area of water include (i) development and monitoring of water management; (ii) development of water resources for all uses – drinking water supply, hydraulic infrastructure, mining, hydroelectricity, etc; (iii) water quality monitoring and management; (iv) development and operation of hydraulic infrastructure (except for irrigation infrastructure which are fall under the Ministry of Agriculture); and (v) regional cooperation for the management of transboundary water resources.
- *National Directorate of Water Supply (Direction Nationale de l'Hydraulique DNH)*: This is the directorate within the MMEE that is responsible for management of the water sector.

Specifically, for water supply and sanitation, the mandate of DNI includes: (1) setting policies, and ensuring the planning, control and development of the public water supply and sanitation infrastructure and services; (2) overseeing studies for, and evaluation of development projects in the water sector; (3) supervising the construction of water supply and sanitation systems and their subsequent proper operation and maintenance; (4) coordinating the actions of all stakeholders in the WASH sector; (5) leading and coordinating the investment and financing of public water utilities; (6) setting and enforcing standards and technical specifications applicable to water installations and service provision through regulations; (7) providing technical assistance to municipalities to enable them discharge their responsibilities related to water supply and sanitation services in an effective and efficient manner and; (8) coordinating and providing administrative, technical and financial assistance for the management of rural drinking water supply systems and ensure the development of rural WASH facilities. DNH has five divisions (rural water, urban water, construction of hydraulic works, database resources, and standards and regulations) some of which have been decentralized to sub-regional levels.

- *Regulatory Commission:* The commission under the MMEE is responsible for oversees the application of the tariff policy and regulating the public water supply and sanitation services in urban centers. The tariff policy defined in the Water Code required full recovery of O&M and capital costs in urban areas, and full recovery of O&M costs and partial recovery of capital costs in rural areas.
- *Water Authorities/Contracting Authorities/Facility Owners:* The Contracting Authority may be a state agency or local government authority and has ownership and ultimate responsibility for the proper functioning of water utilities. The responsibilities of the contracting authority include the engagement of a developer or operator to develop or operate the facility, and approval of investment plans for the service, and mobilization of investment capital for expansion of services. The State is the owner of the public water service in urban centers but may delegate this responsibility to a local authority within the decentralization framework. In rural and semi-urban centers, the local authorities act as project managers for the public water service either by delegation from the State or when facilities fall under their area of jurisdiction. Municipalities may form associations for the purpose of improving the management and operation and maintenance of water and sanitation utilities whose service area

spans the geographical jurisdiction of two or more municipalities.

- *Developers, Operators and Water User Associations:* within the framework of a management delegation from a Contracting Authority, are responsible for the construction and/or management and operation and maintenance of water installations. Two public water companies have been created to manage services in large urban areas. The first is the Malian Society for Drinking Water Resources (SOMAPEP), which is an asset holding authority responsible for management of water infrastructure in 92 urban centres. The second body is the Malian Society for Drinking Water Management (SOMAGEP) which is a public utility responsible for water and sanitation service delivery in 78 urban areas with a population of over 10,000 people. While water user associations are provided for in the Water Code, very few WUAs have been established, and in areas where they are in place, they do not fulfil their roles due to weak capacity.
- *National Directorate of Sanitation and Pollution and Nuisance Control (DNACPN):* This Directorate, located under the Ministry of the Environment and Sanitation (MEA) is the lead government agency for sanitation in both urban and rural areas. The DNACPN is decentralized with two-thirds of its staff working in the regional directorates.
- *The National Agency for the Management of Wastewater Treatment Plants in Mali (ANGESEM):* This is a state-owned company created to manage Bamako’s first wastewater treatment plant, which was constructed in 2006. The ANGESEM is supervised by the MEA.

Water supply and sanitation

Service coverage levels

The water supply and sanitation situation in the country is good with respect to water, and moderate with respect to sanitation. Close to four-fifths of the population (78%) has access to basic water supply services while two-fifths (40%) has access to at least basic sanitation services. No proportion of the population has access to safely managed drinking water services. Only 7% of the population practices open defecation while slightly more than one-fifth (23%) has access to handwashing facilities with soap and water at home.

There is considerable disparity in service access levels between water and sanitation, and between rural and urban areas, with lower service levels in rural areas, where most of the population resides.

Table 1: Mali: drinking water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	Coverage		
	National	Rural	Urban

<i>Drinking water</i>			
Basic	78%	68%	92%
Safely managed	0.0%	0.0%	0.0%
<i>Sanitation</i>			
Open defecation	7%	12%	16%
Basic	21%	4%	44%
Safely managed	19%	26%	9%
<i>Hygiene</i>			
Hand washing facility with soap and water at home	52%	39%	70%

On-site sanitation facilities are the most commonly used method of sanitation in both rural and urban areas in Mali. Public sewer systems are only found in the capital Bamako, and even there have very low coverage. The Bamako sewers collect 32,000 m³/d of domestic wastewater, which is discharged directly into waterways without treatment.

Key WASH sector challenges

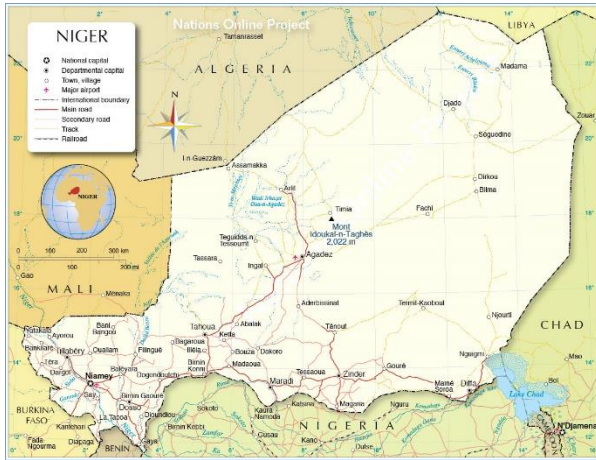
The following are among the major challenges related to WASH in Mali:

- Weak implementation of water policy and regulations.
- Slow implementation of decentralization process.
- Inadequate human resources capacity at national and regional levels.
- Inadequate financing of WASH programs
- Inadequate water storage capacity.
- Disparity in quality and affordability of water supply and sanitation services between urban and rural areas.
- Weak information management system.
- Low resilience of water supply systems to impacts of climate change.
- Fragility from rising violence especially in the northern parts of the country.

Key Sources of Information

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Niger Water Sector Profile



Geography

Niger is a land-locked Sahelian country located in West Africa. It is bordered to the north by Algeria and Libya; to the west by Mali, to the southwest by Burkina Faso and Benin, to the south by Nigeria and to the east by Chad. The country has a land area of 1,267,000 km² making it the sixth largest country in Africa. About 300 km² of the country is covered by water.

The terrain of Niger is dominated by arid highlands in the north and plains and plateaus in the south. There is a series of mountain masses running from south to north that link the southern plateaus to the Air Massif in the north. The Air is an extension of the Ahaggar (Hoggar) Mountains of Algeria. To the northeast of the country is a series of high plateaus that connect the Ahaggar Mountains to the Tibesti Mountains of Chad. Wide expanses of desert sands cover either side of Air. The south of the country alternates between flat to rolling plains and plateaus. Mean elevation is 474 m amsl and ranges from 200 m in the Niger River valley to 2,022 m at Mount Idoukal-n-Taghes (part of the Air).

Climate

Niger has a semi-arid tropical climate that is characterized by two seasons: a long dry season from October to May, and short wet season from June to September. The country has four distinct climatic zones that received different amounts of rainfall: (1) a northern arid Sahara Desert zone that covers 65% of the surface area of the country and receives less than 100 mm of rainfall per year; (2) a Sahelo-Saharan transition zone that covers 12.2% of the country, receives 100 to 300 mm/annum of rainfall and is used predominantly for livestock rearing; (3) a Sahel zone that covers 21.9% of the country, receives 300 to 600 mm/annum of rainfall and is used for crop production and livestock rearing and; (4) a Sudanian zone that covers 0.9% of the country, receives 600 to 800 mm/annum of rainfall and is used for crop production and livestock rearing.

Annual rainfall in Niger is characterized by significant spatial, temporal, and interannual variability and a general

tendency for the isohyets to shift southward over the past 30 years. The Niger suffers from frequent droughts and increasing risk of desertification, with negative impacts on agro-silvo-pastoralism in which over 80% of the population is engaged.

During the dry season, hot and dry Harmattan winds blow across the whole country from a Northeast to East direction while in the rainy season, moisture-laden cool Monsoon winds blow across the country from a southwest direction. Mean temperatures range 21.9°–36.4°C, with substantially cooler temperatures in the mountainous regions. Temperatures are very high during the dry season and exceed 45°C in the northern parts of the country.

Demography

Niger has an estimated population of 23.6 million that is growing at a rate of 3.65% annually. Niger has the highest total fertility rate (TFR) of any country in the world, averaging close to 7 children per woman in 2016. The country has a young age structure, with 70.6% of the population under the age of 25. The majority of the population lives in the southernmost parts of the country close to the border with Burkina Faso, Benin and Nigeria.

Less than one-fifth (16.6%) of the population resides in cities while the rest (83.4%) resides in rural areas. Notwithstanding, rural-urban migration fueled by frequent drought is driving urbanization at a high rate of 4.27% per annum. The capital city Niamey has close to 1 million people. The city is located along the Niger River. Other major cities of Mali include Zinder, Maradi, Tahoua and Agadez.

Administratively, Niger is divided into seven regions (Agadez, Diffa, Dosso, Maradi, Tahoua, Tillabéri and Zinder) and one capital city (Niamey). The regions are in turn subdivided into 36 departments and over 265 communes. Rural communes contain official villages and settlements, while urban communes are divided into quarters.

Economy

Niger's economy is not well diversified and centers on subsistence crops, livestock, and uranium mining. The national GDP is US\$ 12.912 billion (2019 est. current US\$) and per capita GDP is US\$ 553.9. The average GDP growth rate for the period 2000 to 2019 was 5.06%.

Agriculture contributes approximately 40% of GDP and provides livelihood for over 80% of the population. The agricultural sector is currently concentrated in the country's limited arable lands, mainly found along the Niger River. Crop failure is common and current food crop production is unable to adequately provide for local needs due to persistent threats from droughts, floods, and pest invasions. The food insecurity situation is expected to worsen under a changing climate. Services is the second largest economic sector, contributing 38.7% of GDP.

Although small and under-developed, Mali's industrial sector accounts for almost one fifth (19.5%) of the country's GDP. The main industrial activities are uranium mining, petroleum production, and manufacturing of cement, bricks, soap, textiles, food processing, chemicals and abattoirs. Following decades of prospecting, Niger began producing its first barrels of oil in 2011 and operates a refinery in Zinder for its own consumption and future export via a pipeline currently under construction. The Government of Niger plans to exploit gold, coal, and other mineral resources to sustain future growth.

Despite significant strides made by Niger over the past decade to reduce the country's poverty rate, the extreme poverty rate remained very high at 41.4% in 2019, affecting more than 9.5 million people. The number of poor has increased significantly in recent years in Dosso, Maradi, Zinder and Diffa regions. The UN ranked Niger as the least developed country in the world in 2020 due to multiple factors including food insecurity, lack of industry, high population growth, a weak educational sector, and few prospects for work outside of subsistence farming and herding.

Fragility

Niger has remained reasonably stable over several years but remains a fragile country due to the impact of three structural drivers of fragility, conflict, and violence: (1) climate vulnerability and environmental degradation, exacerbated by impacts of global climate change; (2) territorial imbalances and uneven share of mining revenues and benefit; and (3) a growing regional security threat. Youth exclusion and increasing demographic pressure are compounding the risks exerted by the above structural drivers.

Niger has, in recent years, been grappling with deteriorating security conditions, particularly in the areas bordering Nigeria, Burkina Faso and Mali, where Islamist militants have established bases and carry out repeated attacks against the security forces and civilians. A state of emergency has been in effect throughout the Diffa Region, as well as in parts of the Tahoua and Tillabéri regions, since 2017 due to the persistent threat posed by the armed groups that include Al-Qaeda in the Islamic Maghreb (AQIM) and Islamic State in Greater Sahara (ISGS). The violence has led to an influx of refugees from neighboring countries and to displacement of local populations. In January 2021, the United Nations High Commissioner for Refugees (UNHCR) reported 233,131 refugees and 298,458 displaced persons, mainly in Diffa and Maradi regions.

Water Resources Situation

There are three main hydrological basins in Niger. The first is the Niger River basin that is located in the western part of the country and covers 40% of the country's surface area. The Niger River is by far the most important river in Niger in terms of water resources potential. The Niger River traverses the western part of the country, entering from Mali and flowing in south-easterly direction where it forms the border with Benin before flowing into Nigeria. The Niger basin comprises of the Niger River and its

tributaries (Gouroual, Dargol, Sirba, Gouroubi, Diamangou, Tapoa) that originate in Burkina Faso. The basin also includes three rivers (Tarka, N'Kaba and Goulbi de Maradi) that start in the Niger and flow southwards to join the Sokoto River in Nigeria, another tributary of the Niger River. The Niger basin includes areas of desert that do not make any significant contribution to the flow of the river.

The second basin is the Lake Chad basin located in the southeastern part of the country and covering 10% of the country. The Lake Chad basin includes the Komadougou Yobé river and the Koromas River, both of which drain into Lake Chad.

The third basin is the collection of arid internal drainage basins in eastern part of the country. This basin includes the valleys of the western slope of the Air (the Telwa); valleys and koris of the Ader-Doutchi (Keita valley, Badaguichiri, Maggia); the Dallols (Bosso, Maouri and Foga); and the Goulbi (N'Maradi, Kaba, Kébi and Mai Farou). The streams in this basin are ephemeral and flow for few hours or days in a year.

Groundwater resources in Mali are abundant and comprise of renewable resources (alluvial, quaternary and terminal continental aquifers) and non-renewable resources. Renewable water resources are used for various economic activities but less than 20% of the renewable groundwater potential is used. Annual recharge of groundwater is low in Niger. Non-renewable groundwater resources are also abundant but are practically unexploited except for limited use in mining and oil exploration operations. One of the major groundwater aquifers in Niger is the Iullemeden Aquifer System (IAS) that is shared with Mali and Nigeria. This aquifer system comprises of a system of sedimentary deposits containing two large aquifers: the Continental Intermediate aquifer and Terminal aquifer. The IAS covers an area of about 500,000 km² and is the main source of drinking water for the majority of the population of Niger.

Groundwater is the main source of water for rural drinking water supplies; for piped urban water supplies in some areas, and for agriculture (livestock watering and irrigation). Agriculture (irrigation, aquaculture and livestock) is the largest water user, accounting for 66.8% of total water withdrawals. Municipalities and communes (drinking water supply and sanitation), account for 29.9% of consumptive water use while industry accounts for 13.3% of consumptive water use. Niger currently has about ten dams with a total storage capacity of about 76 million m³. The Kandadji dam, currently under construction on the Niger River in the Tillabéri region, will be the largest dam in the country.

Climate Risk Overview

The Notre Dame Global Adaptation Global Adaptation Index (ND-GAIN), which summarizes a country's vulnerability to climate change and other global challenges

in combination with its readiness to enhance resilience, is used here to provide an indication of the level of climate risk in Niger. The ND-GAIN Index is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change - by considering six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions - by considering three components: economic readiness, governance readiness and social readiness.

The ND-GAIN Index ranks Niger in 173th position out of 181 countries evaluated with respect to both vulnerability and readiness i.e. Niger is the 9th most vulnerable country in the world to impacts of climate change.

The Niger is experiencing impacts of global climate change that manifest as increase in local temperatures, increased variability of rainfall, southward migration of isohyets and increase frequency and severity of extreme weather events.

Mean annual temperature has increased by 0.6-0.8°C between 1970 and 2010, slightly higher than the global average, and is projected to increase by 3° – 6°C by the 2100. Certain characteristics of rainfall in Niger have changed: rainfall events appear to have a shorter duration with greater intensity. However, overall, Niger is seeing a return of wetter conditions, and an increase in frequency and severity of extreme rainfall events. Out of a total of 20 years between 1997 and 2017, flooding was experienced in Niger in 17 years.

Climate vulnerability is compounded by the country's high dependence on rain-fed agriculture and pastoralism to support food security and livelihoods, rapid population growth, and chronic humanitarian crises due to recurrent drought, flooding, food insecurity, epidemics, and violent conflict.

The Niger is still recovering from the food crisis brought about by the severe droughts experienced in 2005, 2008, 2010 and 2012. FAO data for SDG 2 (ending hunger) shows that in 2017, 16.5% of the population in Niger was malnourished; 83% were experiencing moderate to severe food insecurity (related to inability to regularly eat healthy, nutritious diets, and intake of insufficient quantity of food); and 42.2% of children under 5 were stunted. With substantial population growth (at a rate above 3 percent per year) and recurring challenges linked to environmental degradation, pervasive poverty and political instability, climate change in Niger will compound existing vulnerabilities trigger new conflict and forced migration, further aggravating the humanitarian situation in the country.

Water Governance

Water policy and legal framework

The key policy and legal instruments that guide the management of the WASH sector in Niger are the following:

- *Sustainable Development and Inclusive Growth Strategy (SDIGS)*. This is the national strategy for turning the country's Vision 2035 into action. It is implemented through five-year medium-term plans. The first plan is the 2017–2021 Economic and Social Development Plan (ESDP), which has 8 strategic directions and a number of goals, including a goal on guaranteeing access to water for all and ensuring food and nutrition security. Interventions to support the attainment of universal access to water supply and sanitation under the ESDP are costed at EUR 430 million; actions to develop rainfed and irrigated agriculture are costed at EUR 238 million and; actions to support the development of water for livestock is costed at EUR 40 million.
- *The IWRM National Action Plan (PANGIRE) (2017-2030)*: This plan provides a mechanism for implementing the water sector actions in the ESDP and represents a long-term plan for water management and development in Mali. The IWRMNAP includes the goals of universal access to an improved water supply and sanitation taken from the ESDP, and emphasizes the importance of rural transformation. The Plan consists of 40 actions under 4 themes: (1) improving knowledge and water resources assessments; (2) water resources development to support socio-economic development; (3) environmental protection and building climate resilience and; (4) improving of water governance.
- *National Water, Hygiene and Sanitation Sector Program (Programme Sectoriel Eau Hygiène et Assainissement (PROSEHA 2016–2030))*. Over the past decade, Niger has overhauled its policy framework for WASH, establishing new policy tools for the sector. The most recent of the new instruments is the PROSEHA, which sets the objective of attaining universal access to water supply and sanitation by 2030, and sustainable management of water supply and sanitation facilities. It builds on the 2010 Water Law, and incorporates the Operational Strategy for the Promotion of Hygiene and Basic Sanitation (SOPHAB).
- *Operational Strategy for the Promotion of Hygiene and Basic Sanitation (SOPHAB)*: SOPHAB, adopted in 2014, aims to tackle the issues of hygiene and sanitation. It is the only comprehensive document on hygiene and sanitation with an earmarked budget, accompanied by an action plan and an interdepartmental coordination framework.

The key legal and regulatory instruments that guide the management of the WASH sector in Niger include the following:

- *Niger Water Code (Ordinance No. 20210-09, 2010)*: This is the key legal instrument for the management of water resources in Niger. It defines the rules and modalities for the sustainable, equitable and coordinated management and use of water resources and is guided by the principle of Integrated Water Resources Management (IWRM), which including involvement of stakeholders, recognition of the essential role of women in the development and use of water resources, and the ‘user pays’ and ‘polluter pays’ principles. The Code enshrines the fundamental right of access to water for every citizen and defines water as an ecological, social and economic good. The code also distributes roles related to water and sanitation between the State and local governments based on the principle of subsidiarity, and assigns the greater responsibility to the local governments, including the role for regulation of WASH services. The code provides for formulation of drinking water quality and effluent discharge standards. The Code also established the National Commission for Water and Sanitation (CNEA), Regional Commissions for Water and Sanitation and the National Water and Sanitation Fund.

WASH Institutional Framework

The institutional framework for water and sanitation in Niger is complex, raising the risk for overlap and competition for scarce resources.

The key water sector institutions in Niger are the following:

- *The Ministry for Water Supply and Sanitation (Ministère de l’Hydraulique et de l’Assainissement, MHA)*: is the main state actor, but must coordinate with at least six other central ministries. MHA was formed in 2015 as part of the restructuring of the water sector in Niger. Its responsibilities include the formulation, implementation and evaluation of the national water supply and sanitation policy. The MHA also oversees the operations of the asset-holding company, Société de Patrimoine des Eaux du Niger (SPEN), which is responsible for water supply in urban areas. SPEN has signed a lease contract with the Niger Water Company (SEEN) – a private company that who operates the water service in Niamey and in 54 other towns. The Ministry also has some responsibility for sanitation through its Directorate of Basic Sanitation.
- *The Ministry of Public Health (MSP)*: is in charge of hygiene, health education, and sanitation. MSP: leads hygiene interventions, which are implemented in coordination with the

MHA. It focuses mostly on hygiene (rather than infrastructure) and is involved in the development of Community Led Total Sanitation (CLTS). Sanitation and hygiene responsibilities are entrusted to the Directorate of Public Hygiene and Health Education (DHPES), which comes under the supervision of the General Directorate of Public Health (DGSP).

- *The National Commission for Water and Sanitation (Commission Nationale de l’Eau et Assainissement (CNEA))*: This body was established under the Water Code 2010 to convene and coordinate cross-sectoral water supply and sanitation interventions. The commission comprises representatives of the ministries for MHA, regional and commune-level governments, NGOs and the private sector. One of the key roles of the CNEA is to define the overall targets and directions of the national water supply and sanitation policy. The CNEA is composed of stakeholders from the state (including representation from the agriculture, urbanization, environment, and livestock sectors), regional governments, local authorities, non-governmental organisations (NGO), sector associations, private companies, water users, national and regional specialist bodies and development partners.
- *National Water and Sanitation Fund*: The resources of the National Water and Sanitation Fund are constituted by: allocations from the general budget of the State and regional governments; financial contributions from donors; taxes instituted for the management of water resources; the proceeds of fines imposed pursuant to the Water Code; subsidies; and gifts and endowments.
- *Société d’Exploitation des Eaux du Niger (SEEN) and the Société des Patrimoine des Eaux du Niger (SPEN)*: These two parastatals were created in 2000 following the privatization of the Société Nationale des Eaux (SNE). The parastatals are responsible for management of water supply in large urban centers. The country has 55 drinking water supply areas with a combined water production capacity of 0.062 km³ per year.
- *Local authorities and communes*: In line with Niger’s political decentralization, the 2010 Water Law assigned responsibility for rural water supply to local governments. The communes are responsible for public water supply services within the confines of their territories and are the owners of water supply assets. Local authorities/ communes are supposed to act as contracting authorities for water supply facilities. However, the communes have still not fully taken on this role as the transfer of assets and resources has not yet taken

effect. Most of the 266 existing communes are grouped together within the Association of Municipalities (AMN), whose aim is to provide a link between the communes and the public authorities for all areas that come under the communes' jurisdiction.

Water supply and sanitation

Service coverage levels

The water supply and sanitation situation in the country is moderate with respect to water, and very poor with respect to sanitation. Half (50%) of the population has access to basic water supply services while less than one-fifth (14%) has access to at least basic sanitation services. No proportion of the population has access to safely managed drinking water services. Nearly 7 out of every 10 people practices open defecation while 1 in 10 has access to handwashing facilities with soap and water at home.

There is considerable disparity in service access levels between water and sanitation, and between rural and urban areas, with lower service levels encountered in rural areas, where most of the population resides.

Table 1: Niger: drinking water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	Coverage		
	National	Rural	Urban
<i>Drinking water</i>			
Basic	50%	44%	84%
Safely managed	0.0%	0.0%	0.0%
<i>Sanitation</i>			
Open defecation	68%	79%	11%
Basic	4%	1%	20%
Safely managed	10%	7%	23%
<i>Hygiene</i>			
Hand washing facility with soap and water at home	9%	5%	30%

Surface water is the main source of water for domestic and industrial use. On-site sanitation facilities are the most commonly used method of sanitation in both rural and urban areas in Niger. Public sewer systems are only found in the capital Niamey, and even there have very low coverage. Fecal sludge collected by trucks is commonly discharged on the outskirts of towns.

Key WASH sector challenges

The following are among the major challenges related to WASH in Niger:

- High fragmentation of water supply and sanitation responsibilities across sectors and institutions (see figure below), which increases risk of duplication.
- Weak implementation and enforcement of water policy and regulations.
- Slow implementation of decentralization process. The local authorities still do not have the capacity and resources to take on new

responsibilities with respect to water supply and sanitation.

- Inadequate human and institutional capacity at state and local government levels.
- Very poor performance of sanitation and wastewater management sub-sector.
- Inadequate investment in water and sanitation infrastructure.
- Inadequate water storage capacity.
- Low resilience of water supply systems to impacts of climate change.
- Pollution of groundwater from anthropogenic activities.
- Weak stakeholder involvement in the water sector.
- Large inequalities in the sector related to gender.

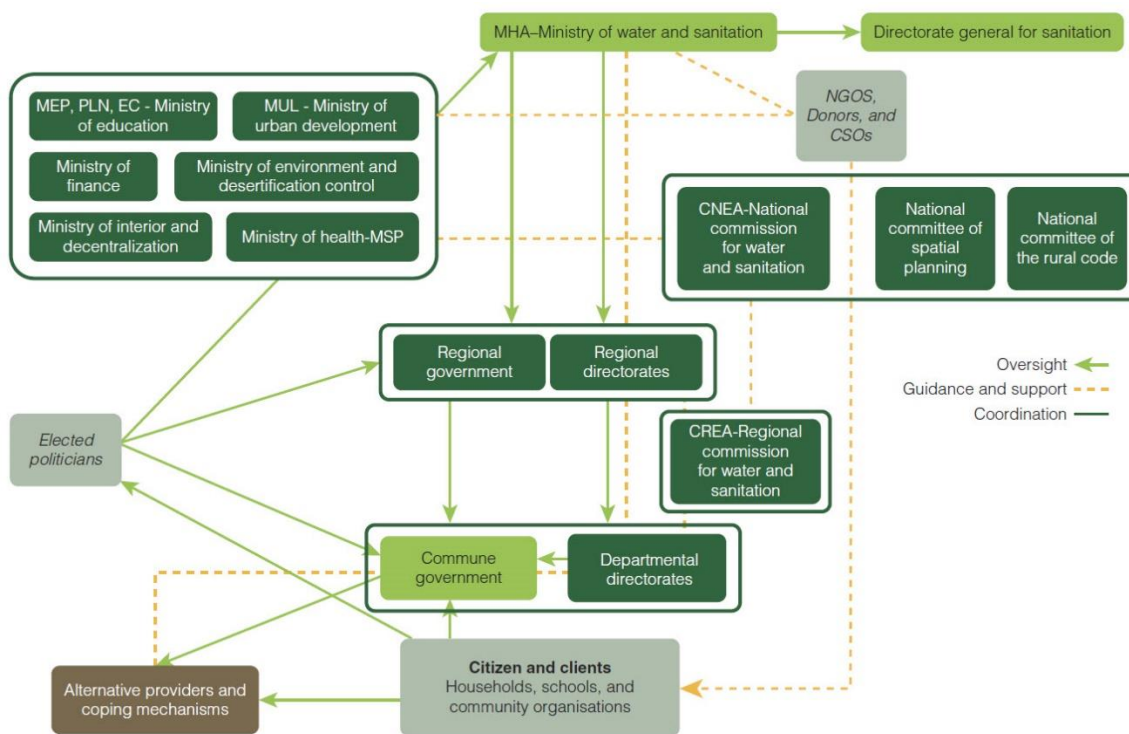


Figure 1: Main actors of the WASH Sector (Sanitation) in Niger.

Key Sources of Information

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Somalia Water Sector Profile



Geography

Somalia is a sovereign country located in the Horn of Africa at the confluence of the Gulf of Aden and Indian Ocean. This unique position has given it the longest coastline (3,025 km) on the African mainland. Somalis is bordered by three neighboring countries: Djibouti to the northwest, Ethiopia to the west, and Kenya to the southwest. The country has a land area of 637,657 km² about 10,320 km² of which is covered by water.

Somalia's terrain consists mostly of flat to undulating plateaus and plains, rising to hills and highlands in the north of the country. Mean elevation is 400 m amsl and ranges from 0 m on the coast, to 2,460 m at the peak of Mount Shimbiris.

Climate and vegetation

Somalia has an arid to semi-arid climate characterized by hot conditions prevailing year-round. The country has a bimodal annual rainfall pattern created by the movement of the Inter Tropical Convergence Zone (ITZ) across the country. Only a small part of the country – a small area in the northwest, and the Shabelle and Juba river basins in the south, receive rainfall which ranges from 400 to 600 mm/annum. The average rainfall for the country is 282 mm/annum. The major rains (known as Gu rains) are received from April to July while the minor rains (known as Deyr rains) are received from September to November. The rainy seasons are separated by two dry spells in January-March and July-September. Droughts are common

with mild to moderate ones occurring every 3-4 years and serious drought occurring every 8-10 years.

Influenced by the pattern of rainfall distribution, southern and northwestern Somalia has a relatively dense thornbush savanna, with various succulents and species of Acacia. By contrast, the high plateaus of northern Somalia have wide, grassy plains, with mainly low formations of thorny shrubs and scattered grass tussocks in the remainder of the region. Northeastern Somalia and large parts of the northern coastal plain, on the other hand, are almost devoid of vegetation.

Demography

Somalia has an estimated population of 15.4 million that is growing at a rate of 2.35% annually. The country has a young age structure, with 62.2% of the population under the age of 25.

The population distribution varies considerably across the country, with the most densely populated areas being those in and around the major cities. The capital and largest city is Mogadishu, which has a population of 2.28 million. Other major cities include Hargeysa, Burco, Marka, Borama, Baidoa, Kismayo and Beledweyne. Close to half (46.1%) of the population lives in cities while the rest (53.9%) resides in rural areas.

Somalia is a federal republic consisting of five federal states (Galmudug, Hirshabelle, Jubaland, Puntland and South West) as well as the claimed territory of Somaliland (a self-declared but unrecognized sovereign state). Somalia is further subdivided into eighteen administrative regions (gobollo), which in turn are subdivided into ninety (90) districts (degmooyin).

Economy

The Somali economy has traditionally been dominated by livestock and crop production, followed by fisheries and forestry, with these four sectors supporting over 80% of the population. Livestock alone accounts for about 40% of GDP and more than 50% of export earnings. Nomads and semi-pastoralists, who are dependent upon livestock for their livelihood, make up a large portion of the Somali population. Livestock rearing is mostly concentrated in the southern regions and the arid and semi-arid north of Somaliland and Puntland. Other major export products besides livestock are sesame, dry lemon, charcoal, fish, hides and skins. The level of agricultural production is generally far below its peak in the late 1980's.

Formalized economic growth has yet to expand outside of Mogadishu and a few regional capitals. Somalia's small industrial sector, that was based on the processing of agricultural products, was largely looted and destroyed in the years of civil war. Somalia's government has weak ability to collect domestic revenue and external debt – mostly in arrears – was estimated at about 77% of GDP in 2017.

The national GDP is estimated at US\$ 7.05 billion (2017 est. current US\$) and per capita GDP is US\$ 485.75). The economy grew at a rate of 2.9% in 2019.

Somalia is among the poorest countries of the world. The country was not been ranked in the 2020 Human Development Report but about 77% of the population lives below the poverty line, with higher incidences among displaced populations.

Fragility

Somalia is one of the poorest and most fragile countries in the world. The country descended into turmoil, factional fighting and anarchy in 1991 following the overthrow of the government of Mohamed Siad Barre who had ruled the country for 21 years. Following more than two decades of conflict, a new government – the Federal Republic of Somalia – was formed in Mogadishu in 2012 that has remained in place to the present day.

Somalia has been ranked among the top three most fragile countries of the world for 13 straight years. The incessant violence and fighting caused collapse of the state and economy, disrupted livelihoods and increased vulnerability, malnutrition and food insecurity in the country. As a consequence, poverty is widespread, and the vicious cycle of poverty and crisis has become more entrenched. The crisis is exacerbated by rising water scarcity and natural disasters (droughts, floods and locust infestations) linked to climate change, and displacement and forced migration. It is estimated that about 1 million Somalis currently reside in neighboring countries while 2.65 million are internally displaced in Somalia. The legacy of conflict in Somalia has weakened the ability of government institutions to address water security issues.

Water Resources Situation

A semi-arid to arid country, Somalia has very limited water resources and is classified as a water scarce country in absolute and relative terms. There are only two permanent rivers – the Juba and Shabelle Rivers – both located in the south. Elsewhere, all rivers are ephemeral, flowing only for hours or days.

The Juba and Shabelle rivers experience great seasonal variation in flows. High flows occur during the wet season (April-June and September–November) during which time the rivers occasionally burst their banks and flood adjacent lands. In the dry season river flow volumes are significantly reduced. About 90% of the flow of the two rivers originate in the Ethiopian highlands.

Although the Shabelle river is a tributary of the Juba river, its flow rarely reaches the Juba River. The discharge of the Shabelle River in the downstream sections has been declining over the years due to losses from seepage, evaporation, overbank spillage due to a low channel capacity and water abstractions. Often, the Shabelle completely ceases to flow in the lower reaches during the early months of the year.

Besides the Juba-Shabelle Basin, Somalia has another seven surface water basins, all of which are drained by

seasonal rivers (toga) that flow for very short periods each year. The basins are the Gulf of Aden, Daroor, Toghdeer/Nugal, Ogaden, Lag Dera, Lag Badana and Indian Ocean.

In the downstream reaches of rivers, small subsurface freshwater lenses located mainly along the river banks are recharged during periods of high flow and constitute important sources of water during the dry season. Sub-surface wells are also commonly established in the dry riverbeds of seasonal river where the water table is shallow. Surface water harvesting is also practiced in natural depressions (balle), artificial dams (waro) and man-made cisterns (berkads) for domestic and livestock use. Many of these sources retain water for a short duration only, and people cannot rely on them for year-round water supply.

Apart from the areas along the Juba and Shabelle Rivers, all areas depend on groundwater for domestic water supply, livestock and small-scale irrigation. Groundwater is the source of drinking water for 95% of the population of Somalia. Groundwater is mainly obtained from shallow hand-dug wells although a few strategic deep boreholes are used to reach deeper aquifers, which act as an important reserve during the dry season. Groundwater quality is generally poor and water is often undrinkable due to high mineral content. The FAO in 2014 mapped about 3,700 water points in Somalia, with more than 40% reported as non-functional or not permanent. Only about 500 were improved water sources protected from contamination.

Agriculture (irrigation) is the largest water user, accounting for 98.6% of consumptive water use. All other uses – livestock, municipalities and industry – account for less than one percent each of consumptive water use. The bulk (94%) of irrigation water withdrawals are from surface water.

Climate risk overview

Somalia is one of the most vulnerable to climate variability and climate change due to its high dependence on rain-fed agriculture and natural resources, and relatively low adaptive capacity to deal with changes introduced by climate change.

Droughts and floods pose the most severe hazards to the country. Agricultural crop production is mainly rain-fed and hence dependent on a stable level of precipitation and temperature. The increasing frequency of droughts (but also floods) is having devastating impacts on agricultural production and food security. Normadism, the most important economic activity, is also dependent on natural resources (water and pastures), which are sustained by rainfall, and has thus also been affected by the climate extremes. For the water sector, declining ground water levels drive up water prices and increase the likelihood of a conflict over water.

Somalia, like the rest of Sub-Saharan Africa has experienced a warming trend since the 1960s. Due to high annual rainfall variability, the historical trends related to rainfall are unclear. Mean annual temperatures are projected to increase by around 3°C across all areas of

Somalia by 2100. Precipitation projections indicate a general increase in annual rainfall by the end of the century. The increase in rainfall is expected to be accompanied by increase in the incidence of extreme precipitation events (floods and droughts).

The Notre Dame Global Adaptation Index (ND-GAIN), which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to enhance resilience, is used here to provide an indication of the level of climate risk in Somali. The ND-GAIN Index is based on two key dimensions: (1) vulnerability - a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change - by considering six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure; and (2) readiness - a country's ability to leverage investments and successfully convert them to adaptation actions - by considering three components: economic readiness, governance readiness and social readiness.

The ND-GAIN Index ranks Somalia in 179th position out of 181 countries evaluated with respect to both vulnerability and readiness i.e. Somalia is the 3rd most vulnerable country in the world to impacts of climate change.

As a result of the climatic variability, food security remains a major problem for Somalia. Projected increases in temperatures could have vast impacts on the Somali population, livestock and crop yields. Heat stress could alter livestock's feed intake, mortality, growth and production. With increasing temperatures, water consumption will increase while water availability will decrease causing additional water stress.

In most parts of Somalia, water has always been scarce. Water scarcity has been aggravated by the destruction and looting of water supply installations during the civil war, the continuing conflicts, and general lack of maintenance. They are compounded with erratic rain patterns, which produce both droughts and floods.

Water Governance

Water policy and legal framework

Somalia does not have a national water policy, but Somaliland and Puntland have water policies and strategies that are weakly implemented. The AfDB has supported the preparation of a water policy for the Federal Government of Somalia, but it has not yet been tabled for discussion in the national Parliament.

The key national policy guidelines on water are contained in the National Development Plan, which is briefly described below.

- *National Development Plan (2017-2019)*: The Government's National Development Plan (NDP) (2017-2019) gives priority to water, sanitation and hygiene (WASH). The Social and Human Capital Development Pillar of NDP aims to accelerate universal access to basic

social services, build human capabilities and uphold the dignity of all people of Somalia. As such, this pillar will contribute to the overall vision of the NDP, which is to "Enhance peace and stability, economic prosperity and national cohesion". By 2019, the country had planned through the NDP to increase drinking water coverage to 63 per cent. For sanitation, the NDP planned for 70% of the population to live in an open defecation free environment. Furthermore, Somalia is committed to eliminating open defecation by 2030 while achieving universal access to adequate and sustainable sanitation and hygiene services, including increased access to child-friendly and gender sensitive WASH facilities with menstrual hygiene management facilities to 30 per cent of primary and secondary schools by 2019.

The key legal and regulatory instrument that guides the management of the WASH sector in Somalia is the National Water Act described below:

- *National Water Act (No. 49 of 2011)*. This law sets the principles for management of water resources, defines water use priorities and provides for the conservation and development of Somalia's water resources. Among other things, the Act promotes improvement of access to water resources; development of water to meet different needs; promotion of public and private partnership and formation of Water User Associations to manage community water services. The Act also provides for water resources regulation, registration of water rights; settlement of disputes related to water rights; drinking water quality standards, groundwater protection and water pollution control.

The AfDB has supported the preparation of a water act for Jubaland and Southwest Federal Member States, but they have not been debated and passed by the state governments.

WASH Institutional Framework

The institutional framework for water has undergone a number of changes over the past two decades alongside the many transitions in governments. The present institutional framework was introduced in 2012 when a new constitution was adopted and the Transitional Federal Government (TFG) was replaced by the present Federal Government of Somalia (FGS).

Before the civil war, the central government was responsible for planning, development and operation and maintenance of water supply services through one of its ministries. In most parts of the country, people depended on groundwater as the main source of water for drinking, cooking, washing, and other needs. The high dependence on groundwater led to overexploitation and increasing water shortages. With the onset of civil war, most of the water infrastructures that were managed by the previous government became out-of-order and people began to migrate to urban areas to access better services. This rural-

urban migration increased the pressure on the already poorly operated water supply infrastructure in the towns and cities. UNICEF, with the help of the European Union, introduced public private partnerships (PPP) to manage water supply services in the pacified towns, and this led to considerable improvement in service provision. In general, the WASH sector is mainly supported by international donors, with public institutions at State level serving as facilitators.

The key water sector institutions in Somalia, from the above overview, are the following:

- *The Ministry of Energy and Water Resources (MoEWR):* The Ministry of Energy and Water Resources was established in 2014 with overall responsibility for two sectors: water resources and energy. The Ministry’s functions include the exploration, development and distribution on an equitable basis of water and energy resources and services to the Somali society. The role also includes policy making, setting standard operating procedures, national planning, regulation, monitoring, and technical support of regional states in relation to energy and water resources management and development.

The MoEWR has a department in charge of regulation, which licenses and supervises the water supply service providers in the regions, enforcing some reasonable rules and regulations, and overseeing the tariff-setting process in regions (not setting tariffs). Tariffs are set in negotiating sessions between the investors and the communities being served and takes into consideration the ability of households to pay for water and the need for a reasonable return to the investors (who are usually notable members of the same community).

- *Ministry of Health.* The Ministry of Health shares responsibilities for sanitation with Federal Member States.
- *Regional Member States:* The five Regional Member States (Galmudug, Hirshabelle, Jubaland, Puntland and South West) make laws and regulations to aid proper functioning of the WASH sector within their respective territories.
- *Water Corporations:* Several FMS have created water corporations and mandated them with provision of water services in the regions.
- *Private Operators and Public-Private Partnerships (PPP):* The Somaliland and Puntland regions have replaced community managed water supply systems with local water supply service providers (Private Operators, POs) and Public Private Partnerships (PPPs) under long term concessions. The POs and PPPs are responsible for provision of water and sanitation services to urban and rural areas. Under the arrangement, the state’s own the

infrastructure, and the Private Operators and PPPs run the water supply systems. Regulation of the service providers is exercised by the State authorities with limited oversight from the MoEWR.

Water supply and sanitation

Service coverage levels

The water supply and sanitation situation in the country is poor, although it has been improving over the past two decades. Slightly more than half (52%) of the population has access to basic water supply services; close to two-fifths (38%) has access to basic sanitation services; close to three tenths (28%) practices open defecation; and just one tenth (10%) has access to handwashing facilities with soap and water at home. No proportion of the population has access to safely managed drinking water services and sanitation facilities.

There is great disparity in service access levels between rural and urban areas, with lower access levels in rural areas, where a slightly larger proportion of the population resides.

The water supply infrastructure in Somalis comprises of 25 surface water dams, 300 springs, 600 boreholes and 2000 shallow wells. The functionality rate of water facilities is low, with an estimated 40% of existing facilities said to be non-functional. The average water consumption rate is estimated at 10 l/c/d which is lower than the WHO recommended level of 20 l/c/d.

Table 1: Somalia: drinking water, sanitation and hygiene service levels in 2017 (source: JMP)

Indicator	Coverage		
	National	Rural	Urban
<i>Drinking water</i>			
Basic	42.0%	28.0%	83%
Safely managed	0.0%	0.0%	0.0%
<i>Sanitation</i>			
Open defecation	28.0%	49.0%	1.0%
Basic	38.0%	20.0%	61.0%
Safely managed	0.0%	0.0%	0.0%
<i>Hygiene</i>			
Hand washing facility with soap and water at home	10.0%	8.0%	12.0%

During the dry season, most parts of the country experiences water scarcity as many surface and subsurface water sources dry up. This puts extra pressure on existing water sources and leads to a hike in water prices. To ease human suffering during periods of water scarcity, UNICEF with the help of donors periodically provides emergency water supply through water trucking/vouchers to affected populations. Water trucking costs vary during different seasons, with lower costs during the rainy season and very high costs during the extended dry seasons. The cost of water trucking services are high ranging from US\$ 10 to US\$25/m³, which is unaffordable for most of the people.

Latrines are the most common sanitation facility in Somalia. Fecal sludge in urban centers is indiscriminately disposed of without adequate treatment.

Community Led Total Sanitation approaches introduced in the country in 2012 are showing promise but weak government engagement, widespread displacement and recurrent emergencies have made scaling up of the approaches a challenge.

Matters with respect to hygiene are not any much better. There have been a number of interventions to support sanitation promotion and hygiene education programs, but these have tended to be ad hoc, uncoordinated and isolated. In addition to inadequate sanitation systems, the urban areas in Somalia suffer from poor solid, municipal and industrial waste management.

Key WASH sector challenges

The following are among the major challenges related to WASH in Somalia:

- Water scarcity
- Overexploitation of groundwater sources
- Pollution of groundwater sources and poor groundwater quality
- Weak enforcement of regulations and maintenance of service standards
- Lack of a national water policy and a coordinated, strategic water development plan over the last 20 years.
- In Somaliland and Puntland where there are regional water policies, there is little capacity to enforce them.
- Limited institutional capacity to prioritize, manage and deliver planned investment opportunities.
- High operational and maintenance costs low tariff rates and lack of spare parts supply chain
- Technical limitation of service providers.
- Inadequate sector financing.

Key Sources of Information

1. CIA World Factbook
2. World Bank and OECD National Accounts Data
3. JMP Water and Sanitation Statistics, 2017.
4. UNDP 2020. Human Development Report 2020: The next frontier - Human development and the Anthropocene
5. AfDB 2020. Country Water Sector Profile – Somalia: Snapshot On Water Security. July 2020. 55 pp.
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Annex 2 - Partners

1. Summary of stakeholder analysis

The Denmark/AfDB programme focuses on water, sanitation and hygiene (WASH) service provision in fragile countries of the Sahel and Horn of Africa. The programme will also make an indirect contribution to peace and security, irregular migration and building climate resilience. The focus on WASH, fragility and other issues above has ensured a large number of well-known donors and development agencies to partner with as these are high priority development issues on the international development agenda. Many of the identified partners have long-term commitments in the beneficiary countries and have high interest in participating in a program that could complement and consolidate their own inputs to the water sector. Many of the partners also have considerable influence within the water sector in the beneficiary countries.

2. Criteria for selecting programme partners

The partners selected are those that (1) are active in the WASH sector in the beneficiary sectors; (2) share the objectives of the programme; (3) have potential to make a mutually beneficial contribution to the Denmark/AfDB programme and; (4) can contribute to increasing climate resilience and prevention of conflict.

3. Brief presentation of partners

The key partners are listed below.

Group	Partner	Justification for selection	Role and potential synergies
Multilateral Financial Institutions	World Bank	Long-term partner of the AfDB; long experience on WASH on the continent; strong presence in the beneficiary countries; large portfolio of WASH projects in the beneficiary countries	Co-funding WASH projects; investment financing of bankable WASH projects prepared under the programme
Development cooperation agencies	AFD	Long-term partner of the AfDB; long experience on WASH on the continent; strong presence in the beneficiary countries; large portfolio of WASH projects in the beneficiary countries	Co-funding WASH projects; investment financing of bankable WASH projects prepared under the programme
	KfW/GIZ	Long-term partner of the AfDB; long experience on WASH on the continent; strong presence in the beneficiary countries; large portfolio of WASH projects in the beneficiary countries	Co-funding WASH projects; investment financing of bankable WASH projects prepared under the programme
	USAID	Long-term partner of the AfDB; long experience on WASH on the continent; strong presence in the beneficiary countries; large portfolio of WASH projects in the beneficiary countries	Co-funding WASH projects; investment financing of bankable WASH projects prepared under the programme
	Danida/Burkina Faso	At the bilateral level Denmark has a water programme in Burkina Faso	Co-funding WASH projects; investment financing of bankable WASH projects prepared under the programme
UN agencies	WHO	Long experience in WASH; involvement in management of SDG6 data through the JMP program	Identification of projects; capacity building in application of the GWP/UNICEF framework for climate resilience
	UNICEF	Long experience in WASH; involvement in management of SDG6 data through the JMP program	Identification of projects; capacity building in application of the GWP/UNICEF framework for climate resilience
	IOM	Long experience in the WASH Sector in Somalia, as an implementation Agency, and in emergency WASH. IOM has successfully implemented	Project Implementing Agency in Somalia and will assist the Ministry of Energy and Water Resources in project identification.

Group	Partner	Justification for selection	Role and potential synergies
		several WASH Projects (both humanitarian and development) in Somalia.	
International non-governmental organizations	GWP	Local presence in the countries; knowledge of water sector issues in the countries; has resources for the climate-resilience framework	Identification of projects; capacity building in application of the GWP/UNICEF framework for climate resilience
Country based Stakeholders	AMCOW Representatives (Minister of Water and AMCOW-TAC member)	AMCOW is the initiator and owner of the AWF. The Minister of Water of each country, and AMCOW TAC member will represent the AWF governance in each country.	Mobilization of national political support for the Denmark/AfDB Program.
	Ministries of Water / Sanitation	Is the Grant Recipient in each country; will provide country contribution (cash and in-kind).	Will support project identification; and will oversee project implementation within each country and establish national project implementation structures including appointing and supervise implementing agency
	Ministry of Finance	Will sign financing agreement on behalf of the beneficiary country; and sign lending agreements for downstream financing of prepared bankable projects; will prioritize prepared projects in national programming.	Resource mobilization for investment projects
	Water utilities	In project areas where there are utilities in operation, they will be responsible for project implementation	Project implementation
	Entities relevant for conflict prevention	Depending the location, local government, civil society bodies and others will be relevant for ensuring that the projects are conflict sensitive and work closely with wider efforts to reduce conflict and the causes of conflict.	These entities will in partnership with others ensure that the opportunities for preventing and minimizing conflict are maximized
	Contractors (commercial companies or NGOs)	Will be contracted to provide services to deliver project outputs	Feasibility and design studies, civil works to improve existing water supply and sanitation systems, capacity building of national agencies, hygiene education, climate change vulnerability assessment, etc.
	Consumer and community groups	The main beneficiaries and users of the facilities delivered	To co-finance where relevant, support cost recovery and operation and maintenance where relevant, promote hygiene behavior change

4. Summary of key partner features

The key partner and grant recipient in each of the five countries is awaiting final confirmation. A generic summary of the role and features is given below:

Partner name What is the name of the partner?	Core business What is the main business, interest and goal of the partner?	Importance How important is the programme for the partner's	Influence How much influence does the partner have over the programme	Contribution What will be the partner's main contribution?	Capacity What are the main issues emerging from the assessment of the	Exit strategy What is the strategy for exiting the partnership?

		activity-level (Low, medium high)?	(low, medium, high)?		partner's capacity?	
Ministries of Water / Sanitation	Lead agency for the sector providing policy and coordination for other involved parties such as local government and utilities	High – as the programme is central to the partner's mandate	Medium – there will have a high policy and influence and a medium level of influence over downstream actors such as utilities and local government	The partners will co-finance the programme and provide overall policy and institutional support	The capacity varies in each country – details are awaiting confirmation	The exit strategy will be the finalization of the bankable proposals and the handover of the immediate improvement facilities to the relevant operational entities.

Annex 3 - Results Framework

This results framework and reporting have been developed based on AWF systems and procedures. It takes into account the demands from the Danish MFA as well as the practices of other donors to whom AWF also reports. A number of different versions of the results framework and levels of ambition in terms of measuring the contribution towards higher and lower outcomes and outputs were considered at concept and programme document level. The version presented here is based on these discussions and also takes into account AWF's desire to commit to indicators that provide measurable and achievable means to report on the expected results. It also takes into account the recommendations of the Danish programme committee which pointed to the need for adaptive management and flexible target setting and thus a range is provided for key indicators. The AfDB is developing a job creation and measurement tool kit that is currently under testing that can be applied at a project level. Once this tool is complete (expected second half of 2021) then a new indicator on employment creation will be defined. In the meantime, as an interim measure and to reflect the intention to contribute to employment a target of 1000 direct jobs and 1500 indirect jobs is proposed. This is not yet formally integrated into the results framework and it will be adjusted and placed in the results framework once the job creation tool is ready and the basis for job measurement is in place. The rationale for the interim target is given in the box below.

The management structure of the programme (described above in Chapter 4) will enable monitoring and feedback to be integrated into the programme planning and could enable changes to be made to the programme. This is especially relevant given the transition nature of some of the countries being supported and the presence of fragile and conflict affected situations in which the programme will be working. Overall reporting will follow the AWF 6 monthly reporting system, and it is important that the programme does not distort or impose additional burden on this system. Nevertheless, there are programme specific indicators and results which will need to be reported on. Some of these will feature and will be traceable in the semi-annual and annual reporting and to the extent that they do not they will be presented either in an annex dedicated to the programme or presented as a separate note. As for all projects a project completion report will be developed and at this stage the final value of indicators against targets will be presented.

Rationale for setting of the interim employment target

The "rough rule" for infrastructure expenditure across a range of sectors and environments is 1 billion USD = 100,000 jobs full time equivalent. So for the just below USD 25m in this project one could expect 2500 full time equivalent jobs (that is using a wide definition).

A highly efficient utility has 2 employees per 1000 connections (a highly inefficient one has 12). That would make the 800,000 target group with say 160,000 connections (equivalent) yield a direct industry employment of 320- 1920 jobs – lets go near in the middle and say 1000. (In reality the best projects often aim to reduce employment).

Based on the above an interim target is 1000 direct jobs and a further 1500 indirect/induced jobs. This target is highly sensitive to measurement methodology and will need to be updated and revised once the AfDB job creation tool is operational.

(Denmark-financed component of the programme)

Programme	Danish Support to the African Water Facility: Improving access to climate resilient safe water supply and sanitation services in Sahel and Horn of Africa
Programme Objective	A better quality of life for people in five countries (Mali, Niger, Burkina Faso, Ethiopia and Somalia) by improving access to water supply and sanitation services and enhancing climate resilience through WASH sector interventions

Impact Indicator		Reduction in mortality rate attributed to exposure to unsafe WASH services (per 100 000 population) (SDG 3.9.2) ⁸		
Baseline	Year	2016 (WHO ⁹)	Country	Mortality rate attributed to exposure to unsafe WASH services (per 100 000 population) (SDG 3.9.2)
			Mali	70.72
			Niger	70.81
			Burkina Faso	49.64
			Ethiopia	43.66
			Somalia	86.58
Target	Year	2025	5% reduction in mortality rate attributed to exposure to unsafe WASH services	

Outcome 1		Longer term improvement of water and sanitation services and climate resilience in the Sahel and horn of Africa		
Outcome indicator		Additional population served by safely managed water supply and sanitation services arising from implementation of 5 bankable projects prepared with support from the programme ¹⁰		
Baseline	Year	2021	Zero (see annex 1 for JMP 2017 estimates of coverage by country)	
Target	Year	2025	500,000 people will be served by safely managed water and sanitation through the implementation of bankable projects (likely to be by 2029) with at least 50% women served. ¹¹	
Output 1.1		Five major projects prepared ready for financing by 2025 that lead to facilities for at least 500,000 people served by improved water and sanitation ¹²		
Output indicator		Number of feasibility/ design reports and bidding documents for climate resilient WASH infrastructure ^{13,14}		
Baseline	Year	2021	none	
Target	Year	2023	3 sets of draft feasibility/ design reports and bidding documents for climate resilient WASH infrastructure prepared	
Target	Year	2025	Total of 5 sets of feasibility/ design reports and bidding documents for climate resilient WASH infrastructure prepared	
Output 1.2		Five climate vulnerability assessments carried out		
Output indicator		Number of WASH sector climate assessments approved by relevant national authority ¹⁵		
Baseline	Year	2021	None	
Target	Year	2023	3 WASH sector climate vulnerability assessments carried out and subsequently approved by the national authority	
Target	Year	2025	Total of 5 WASH sector climate vulnerability assessments carried out and subsequently approved by the national authority	
Output 1.3		Project preparation capacity increased		
Output indicator		Five capacity development events completed ¹⁶		
Baseline	Year	2021	Capacity varies in each country will be determined through assessment	

⁸ Means of verification: examination of WHO data or substitute if not available. Reported by: AWF

⁹ <https://www.sdg6data.org/country-or-area>. During project implementation, updated WHO data will be sought to establish a 2020 baseline.

¹⁰ The population served will only be reached once the bankable projects are implemented, this is likely to take 3 to 5 years after the end of the programme. The programme will deliberately over-programme the preparation of bankable projects by at least 30% in term of population numbers to be served in order to take account and reduce the risk that some projects or not financed or fully financed.

¹¹ Although the target is 500,000, the actual projects have not yet been defined and to support an adaptive management approach a range of between 375,000 to 625,000 people is considered acceptable. The people reached by water and sanitation (including hygiene promotion) will be reported on separately. Means of verification: examination of the feasibility studies and project preparation documents. Reported by: AWF

¹² The seven projects are programmed as one each of the country (5) and then an additional 2 where demand and need is highest.

¹³ It is assumed here that the projects will be developed for financing with AfDB as the lead financier; where other financing institutions take the lead, the projects might not be developed to the stage of bidding documents as this will often be taken over by the relevant financing institution using their own systems. Means of verification: examination of the feasibility studies and project preparation documents. Reported by: AWF

¹⁴ The project designs will incorporate watershed management interventions as appropriate. They will also incorporate conflict sensitivity analysis as well as identifying partners and actions that can be taken to enhance the conflict reduction and prevention effect of the projects.

¹⁵ Means of verification: Copies of the sector climate assessments provided by national authorities. Reported by: AWF

¹⁶ A one-off training under the Programme will not result in the trained staff preparing project designs – to get this outcome requires continuous support over a longer period (in addition to the countries having the funds and commitment for project preparation) – which is best done by development partners active in the water sector at national level. This lower level indicator is the number of capacity development events completed – this will not require that the Ministries involved have funds for conducting the feasibility studies during the project period. Means of verification: presence of project documents ready for financing that have been found eligible after AWF due diligence on technical and climate grounds Reported by: AWF:

Target	Year	2025	Each country has developed either fully or partially at least one set of feasibility/ design reports and bidding documents for climate resilient WASH infrastructure in addition to those developed through the programme support
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Outcome 2	Immediate operational improvements in water and sanitation services and climate resilience in the Sahel and horn of Africa		
Outcome indicator	Population served by safely managed water supply sanitation services arising from implementation of 5 immediate improvement intervention projects ¹⁷		
Baseline	Year	2021	Not yet known will be reported on once the projects have been selected
Target	Year	2025	300,000 people served by safely managed water and sanitation through the implementation of improvement measures with at least 50% women served.
Output 2.1	Five immediate improvement interventions implemented that lead to facilities for at least 300,000 people served by safely managed water and sanitation through the implementation of improvement measures with at least 50% women served ¹⁸		
Output indicator	Number of immediate improvement interventions ¹⁹		
Baseline	Year	2021	none
Target	Year	2023	3 projects identified with 2 project contracts ready for implementation
Target	Year	2025	A total of 5 projects completed with facilities serving at least the targeted population numbers
Output 2.2	Five project-specific WASH sector climate vulnerability assessments carried out ²⁰		
Output indicator	Number of WASH sector climate assessments approved by relevant national authority related to the immediate improvement projects ²¹		
Baseline	Year	2021	None
Target	Year	2023	3 WASH sector climate vulnerability assessments carried out and subsequently approved by the national authority
Target	Year	2025	Total of 5 WASH sector climate vulnerability assessments carried out and subsequently approved by the national authority
Output 2.3	Five watershed management measures implemented ²²		
Output indicator	Number of watershed management measures implemented as part of the immediate improvement projects		
Baseline	Year	2021	None
Target	Year	2023	3 watershed management measures identified with 2 ready for implementation
Target	Year	2025	Total of 5 water shed management measures implemented

¹⁷ The population served will be reached by the end of the programme and will represent the number of people who have benefitted from moving from very level service levels (basic or below) to safely managed service levels for water and sanitation separately. In some cases this will be effected by ensuring a more regular and climate resilient service level. Means of verification: The country offices of AfDB and the project executing agencies will project by project report to AWF on the identification and finalization of investment ready project preparation documents as well as confirming the number of people served in practice by both water and sanitation. The people reached by water and sanitation (including hygiene promotion) will be reported on separately. AWF as part of normal project supervision will verify the figures. This reporting requirement will feature in the contractual agreements with the recipient entities. Reported by: AWF

¹⁸ The seven projects are programmed as one each of the country (5) and then an additional 2 where demand and need is highest.

¹⁹ Means of verification: The projects will, following AfDB strategies, incorporate conflict sensitivity analysis as well as identifying partners and actions that can be taken to enhance the conflict reduction and prevention effect of the projects. The country offices of AfDB and the project executing agencies will project by project report to AWF on the identification and finalization of investment ready project preparation documents Reported by: AWF

²⁰ These WASH sector climate assessments are specific to the five immediate improvement projects and intended to ensure that the projects are climate proofed and also maximise the opportunity to enhance resilience against weather effects (climate variability and/or change)

²¹ Means of verification: The presence of project documents ready for financing that have been found eligible after AWF due diligence on technical and climate grounds Reported by: AWF

²² Means of verification: The presence of project documents ready for financing that have been found eligible after AWF due diligence on technical and climate grounds including watershed management aspects. Physical inspection and reporting by the project executing agencies verified by AWF site visits of contract compliance with relevant watershed management measures included in the project design. Reported by: AWF

Annex 4 - Budget details

Budget item (Euro million)	Denmark							
Outcome 1 project preparation capacity and long term improvement of services	5.190							
Outcome 2 Immediate operational improvements in services	13.910							
Programme management	1.000							
Total	20.100							
Budget item (Euro million)	mid 2021	2022	2023	2024	mid 2025	Total	DKK	
Outcome 1 project preparation capacity and long term improvement of services	0.75	2.1	2.09	0.25		5.19	38.60	
Outcome 2 Immediate operational improvements in services	2.4	3.1	4.11	4.2	0.1	13.91	103.46	
Programme management	0.15	0.25	0.25	0.25	0.1	1	7.44	
Total	3.3	5.45	6.45	4.7	0.2	20.1	149.50	
DKK	24.5	40.5	48.0	35.0	1.5	149.5		
Notes								
1 Project preparation costs: approximately Euro 0.75m per project								
2 Immediate operational improvements will vary considerably from project to project and also on the extent to which they involve hardware or software. The average per capita cost is estimated at Euro 25 million per water or sanitation intervention								
3 1 Euro =								
	7.438	dkk						

Annex 5 - Risk Management Matrix

Contextual risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Escalation of armed conflict in the countries	Moderate	High	<p>Locating projects in areas that are/have been relatively safe.</p> <p>Monitoring security situation closely and adjusting travel and work plans based on security advisories provided by the national and local security agencies.</p>	Short-term risks are reduced substantially due to selection of safe areas. However general risk remains, but can be acted upon by working closely with security agencies.	There is a security crisis in the Sahel and Horn of Africa that is worsening due to political disgruntlement, presence of violent extremist and armed groups, weak state authority, flow of illegal firearms, and destitution brought about by environmental degradation and impacts of climate change. Denmark is playing a role at the international level in addressing the above security concerns through its integrated peace and stabilisation engagement programme.
Disgruntlement in the community due to corruption and misappropriation of project funds	Low	High	<p>Training of Project Executing Agencies in financial risk management</p> <p>Regular supervision of projects by Task Managers</p> <p>Strict enforcement of the Banks financial management and procurement regulations</p> <p>Mid-term and end of project audit</p> <p>Use of third-party implementing agencies</p>	Residual risk remains, but mitigation measures will substantially decrease risk of occurrence of corruption	Risk of corruption exist in the countries due to weak state control systems.
Possible upsurge in COVID-19 cases that could make working in the five rural areas difficult	Moderate	High	Introducing COVID-19 control measures for all workers connected with project implementation	Residual risk remains but mitigation measures could reduce risk of infections amongst project workers.	The world is under the COVID-19 epidemic, and vaccines have only just been developed. Most African countries were in the process of re-opening after lockdowns in the second and third quarters of 2020.

Programmatic risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Inadequate budgetary allocation and policy measures to the WASH sector to sustain impacts (especially operation and maintenance and hygiene)	Likely	Moderate	<p>Selecting high priority projects recommended by the national and local authorities</p> <p>Consultation with national authorities to maintain projects on the high priority list</p>	Residual risk will be reduced through the active engagement of national authorities, but some level of risk remains due to inadequate budget allocation to the water sector in the beneficial countries.	There is a large and growing gap between the level of financing required to attain the SDGs, and the financing available to the water sector in Africa. This is largely due to the weak economies of the region.

			Coordination with health ministries and agencies		
Weak ability of Executing Agencies to implement projects smoothly.	Likely	High	Including capacity building for Executing Agencies in the scope of national projects Use of third-party agencies including secondment of executing agency staff for on-job training and skill transfer	Short-term risks are reduced substantially due to capacity building.	Institutional capacity in the water sector in the countries is weak leading to poor quality of service delivery. The risk is greater for local level institutions which have difficulty in attracting and retaining qualified personnel.
The need for swift implementation leads to short cuts on community involvement, hygiene promotion and following operation and maintenance policies	Moderate	High	Ensure that national policies are followed on community aspects and operation and maintenance and cost recovery systems .	Residual risk will be reduced by AfDB supervising that the national systems and policies are being followed	AfDB follow the national systems and policies but pressure on delivery by contractors and agents might lead to short cuts being taken
Slow start-up and progression of national projects	Likely	High	Strong monitoring of project activities by AWF Task Managers Discussion in the “Mid-year Portfolio Review Meeting	Short-term risks are reduced substantially due to mitigation measure.	Approval and decision process are typically slow in the water sector institutions due to the generally weak capacity of the sector. AWF had delays in 10 out of 27 projects corresponding to 37% as against 10% target.
Conflict sensitivity leads to the project being involved in the conflict and seen as partnering with one side	Low	Moderate	Careful management of communities’ expectations from start-up of project and using AfDB approach to working in fragile and conflict affected situations	Residual risk reduced by AWF supervision activities	The region is affected by local conflicts and projects runs the risk of being part of the conflict rather than solving the conflict.
Weak projects attracting large part of budgets	Low	Moderate	Solid project preparation including management of expectations. Careful monitoring and timely adjustment of targets	Residual risks managed through AWF supervision	Weak projects can attract additional funds from the overall budget in an attempt to salvage the project thereby reducing budget allocation for strong projects

Institutional risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Risk to personal safety of AWF staff from insecurity and COVID-19 diseases during supervision missions	Moderate	High	Closely following AfDB travel advisories and conducting virtual supervision missions when level of risk is assessed to be high.	Residual risk will be reduced through close monitoring of security and health advisories.	There are violent extremist groups operating in the Sahel and Somalia, and political unease prevailing in the Ethiopia. The COVID-19 pandemic continues to affect all aspect of development work.
Financial loss and risk of institutional liability for loss/failure resulting from	Low	High	Strong integration of projects in the national systems where there are checks and control.	The risk will be substantially diminished by application of the Bank’s strong financial management, audit and	Risk of corruption exist in the countries due to weak state control systems.

corruption or financial mismanagement			Application of the Bank's fiduciary risk management measures to complement national systems	procurement management systems.	
Damage to Danida and AfDB's reputation from failure to successfully complete projects or ensure follow up financing for projects prepared	Low	High	Close monitoring of the programme on day-to-day level at AfDB/AWF and through the AWF governance bodies including the Oversight Committee, Governing Council and Board of Directors.	Reputational risks substantially reduced as plans are in place for close monitoring and prompt reaction to ensure successful project completion and delivery of development impacts.	Development projects in Sub-Saharan Africa occasionally get cancelled due to multiple challenges including rate of budget utilisation, and change in political priorities.
Instability in AWF staffing, staff turn over and delays in recruitment	Moderate	High	AfDB and AWF planning in advance. Use of experienced staff from AfDB and consultants to fill in when required.	The risk will be substantially diminished by the actions noted – however even temporary filling in of posts will lead to some discontinuity.	There has been quite a high staff turnover, mainly due to fluctuating levels of donor support.

Annex 6 - List of supplementary materials

#	Document / Material
1	African Water Facility Progress Report (January to September 2020), November 2020
2	African Water Facility 2021 work plan and budget, November 2020
3	African Water Facility Annual Report 2019, September 2020
4	A Green and Sustainable World: The Danish Government's long-term strategy for global climate action, September 2020
5	Nordic Development Fund Final Consideration_C128 COVID-19 Recovery through Climate-resilient Water Supply and Sanitation, November 2020
6	MFA, Organisational Strategy for the AfDB 2020-20124
7	AfDB, draft Integration study 03 December 2020
8	GWP, WASH climate resilient development,2017
9	AWF, Strategy 2017-2025
10	Universalia Independent evaluation of AWF 2005-2018, 2020
11	AfDB group policy on water (2021)
12	AfDB group draft water strategy (2021-2025)
13	AfDB group strategy for addressing fragility and building resilience in Africa (2014-2019)
14	AfDB group gender strategy (2021-2025)
15	AWF gender and social equity strategy (2010)
16	AfDB group anti-corruption measures and guidelines
17	AfDB group's Second Climate Change Action Plan (2016-2020)

Annex 7 - Communication Plan

What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
1. General information about the programme: its objectives, beneficial countries, expected outputs	Immediately before, at, and after project launch.	<ul style="list-style-type: none"> Website posts Press release Project flyers Social media platforms PowerPoint presentations 	<ul style="list-style-type: none"> Key water sector institutions in beneficiary countries (primary) Target beneficiaries in urban and rural areas (primary) General Public (secondary) Danish private enterprises in the water sector. The annual Stockholm World Water Week held in August 	AWF/PIU MFA (secondary responsibility)
2. Progress made by the Programme	Annually (end of year)	<ul style="list-style-type: none"> Programme and project progress reports 	<ul style="list-style-type: none"> AfDB and Denmark (primary) Other Programme partners (primary) AWF Governance Council (primary) Key water sector institutions in beneficiary countries (primary) Target beneficiaries in urban and rural areas (primary) General Public (secondary) General Danish audience through an up-ed in a Danish newspaper 	AWF/PIU MFA (secondary responsibility)
3. The results and impacts of the programme; lessons learnt from implementation of the programme.	End of programme	<ul style="list-style-type: none"> Project Completion Report Project policy briefs Short video documentary for TV and YouTube Short podcast Social media platform posts Press release 	<ul style="list-style-type: none"> AfDB and Denmark (primary) Other Programme partners (primary) AWF Governance Council (primary) Key water sector institutions in beneficiary countries (primary) Target beneficiaries in urban and rural areas (primary) General Public (secondary) International Development community (secondary) 	AWF/PIU MFA (secondary responsibility)

Note: the mechanism represent potential channels which can be used as appropriate, not all will necessarily be used.

Annex 8 - Process Action Plan

Action/product	Deadlines
Prepare concept note	May-December 2020
Confirm agenda item for Programme Committee	Early November
Internal MFA consultation incl. embassies on the draft concept note	Early December
Submit concept note to Danida Programme Committee including public consultation	January 12, 2021
Danida Programme Committee	February 4
Prepare programme documents including annexes	February 8 – March 19
Appraisal	March 22 – May 31
Confirm agenda item for Council for Development Policy	May 19
Incorporate recommendations from appraisal into programme documentation	May 24 – June 3
Submit programme documentation for GDK management review and approval	June 4 - 8
Finalize programme documentation	June 8 - 11
Submit programme documentation including annexes to Council for Development Policy	June 11
Council for Development Policy meeting	June 30
Approval of the programme by the minister	Early July
Prepare “aktstykke”	July-August
Meeting in the Finance Committee	Late August / early September
Signing of agreement	September
First disbursement	October 1

Annex 9 - Preliminary pipeline of projects

The pipeline of projects has been prepared, but the sections below describe the contacts made with the countries as part of the process to obtain the pipeline of projects.

ENGAGEMENT WITH COUNTRIES ON THE AfDB/DENMARK PROGRAMME

Niger

Mali

Burkina Faso

Ethiopia

The engagement of Ethiopia has been done by Mr. Menkir Teferi, Senior Water and Sanitation Officer in the Bank's Water Development and Sanitation Department (AHWS.2). The officer is based in Addis Ababa, Ethiopia.

Mr. Teferi request for, and held a virtual meeting with Ethiopia's State Minister of Water. The meeting took place on Tuesday 9th March 2021 starting 11.00 am. In the meeting, Mr. Teferi briefed the Minister and other ministry officials on the AfDB/Denmark WASH Programme for the Sahel and Horn of Africa. This brief covered the importance and justification for the programme, the programme components, target beneficiaries, and requirement for an indicative list of potential projects to be supported (3-5 projects for project preparation and 3-4 projects for extension of existing services). The Honourable Minister requested to be provided with the Project Concept Note and template for projects, which the officer provided by email after the virtual meeting.

The officer had communicated a deadline of Friday 12th March 2021 for receipt of the project profiles. The project profiles have not been received yet, but the officer remains hopeful of a positive response from Ethiopia, and the country's participation in the Programme.

Somalia

The engagement of the Federal Government of Somalia (FGS) has been carried out by Eng. Ntege-Wasswa Maureen, Senior Water and Sanitation Engineer in AWF/AHWS, based in Nairobi, Kenya.

Eng. Ntege-Wasswa request for and held a virtual meeting with FSG officials on Monday 8th March 2021. The meeting took place from 14:00 – 15:20 hrs. Three FGS officials participated in the virtual meeting, namely:

- Cabdiwaxid Ibraahim Axmed, Director General, Ministry of Energy and Water Resources, Federal Government of Somalia
- Omar Shuuriye Senior Adviser Ministry of Energy and Water Resources, Federal Government of Somalia
- Omar Khayre- Project Director, International Organisation for Migration (IOM)

The AWF Officer introduced the AfDB/Denmark Programme to the meeting, highlighting its importance in addressing WASH and water scarcity issues in the Sahel and Horn of Africa, which challenge had been exacerbated by climate change and become more urgent in the face of COVID-19. In her brief, Eng. Ntege-Wasswa explained that AfDB and Denmark were in the process of programme formulation and, for this purpose, required some information from the FGS.

The FGS team thanked the AfDB for reaching out to the FGS to discuss the potential funding opportunity, and highlighted the immense WASH needs in the country. The FGS team stated that their top priority in the area of WASH remains the filling of the funding gap of US\$ 11.5 million under the Kismayo/Baidoa Urban Water Supply and Sanitation Project, and requested that this need be prioritized in the AfDB/Denmark Programme given the high number of Internally Displaced Persons (IDP) and returnees in the two towns. The population of the two towns, the FGS team explained, continue to pay a high price for water (consumers in Kismayo/Baidoa pay US\$6.5 for a cubic metre of water), despite being poor and vulnerable.

At the conclusion of the meeting, it was agreed that the Somalia Federal Ministry of Energy and Water Resources (MoEWR) would propose 3-5 potential projects for project preparation. The importance of project preparation activities in ensuring a pipeline of bankable projects was explained to them and understood. The meeting also agreed that MoEWR would propose the Kismayo-Baidoa Project, and 1-2 other small rural water projects to benefit under Outcome 2 (extension of existing services). A submission date of Friday 12th March 2021 was agreed in the meeting. After the virtual meeting, the AWF Officer emailed the Project Concept and project template to the FGS team.

Post Meeting Note: The Ministry of Energy and Water Resources has submitted a WASH proposal for Hirshabelle in Rural Somalia. Funding has been secured for the financing gap on the Kismayo Baidoa Project, and therefore it falls off this list.

Annex 10 - Project Description format

Project description for Outcome 1 - Project Preparation ideas

Project Name			
Country			
Budget estimate			
Project owner / applicant		Executing Agency	
<p>Primary Focus Area:</p> <p>URBAN / RURAL</p> <p>WASH result areas (Water supply, Sanitation, ODF, WASH in schools and clinics)</p>			
<p>Objective of Project and Summary:</p>			
<p>Potential Downstream Impacts:</p>			
<p>Stage of project Development</p> <p>Where is the project now – loose idea, - in country planning, - recommended by sector coordination group</p> <p>What will be done to make the idea investment ready</p> <p>Project formulation,</p> <p>Appraisal,</p> <p>Feasibility Studies,</p> <p>Detailed design</p> <p>EIS,</p> <p>-</p> <p>-</p>			
<p>Comment</p> <p>Why is this project suitable for the Danida / AWF programme</p>			

Project description for Outcome 2 - Project Implementation ideas

Project Name			
Country			
Budget estimate			
Project owner / applicant		Executing Agency	
Primary Focus Area: URBAN / RURAL WASH result areas (Water supply, Sanitation, ODF, WASH in schools and clinics)			
Objective of Project and Summary:			
Potential Downstream Impacts:			
Stage of project Development The project is assumed to be ready to fund. Is it <ul style="list-style-type: none"> - Funding a new initiative that ready to present for example to the AfDB board for funding Support to an ongoing programme by <ul style="list-style-type: none"> - Filling a funding gap in ongoing project - Expanding a successful project 			
COMMENTS Why is this project suitable for the Danida / AWF programme			

Annex 11 - Summary of recommendations of the appraisal

Title of Programme/Project	Danish Support to the African Water Facility (Special Fund): Improving access to climate resilient safe water supply and sanitation services in the Sahel and Horn of Africa (2021-2025)
File number/F2 reference	F2 file no.: 2020-42915
Appraisal report date	31.05.2021
Council for Development Policy meeting date	30.06.2021
Summary of possible recommendations not followed	
<p>The only recommendation, which have not been followed is the developing of an output-based budget included as one of four items under recommendation no. 8 (revisit the budget presentation). Discussions with AWF were held regarding this recommendation. It is not found useful for this programme to present an output budget as the outputs on climate and watershed are contractually connected to the main physical and study outputs.</p>	
Overall conclusion of the appraisal	
<p>The programme is relevant for pursuing both Danish as well as African priorities for improved access to water and sanitation in Africa. The objectives of the program is well aligned with Danish strategic priorities as well as to the priorities of the African Water Vision 2025, the African Development Bank’s policy on water, and the African Water Facility’s Strategy 2017 – 2025. The selection of the five focus countries (Mali, Niger, Burkina Faso, Ethiopia, and Somalia) is well justified based on several parameters, including that they are among the African countries most affected by climate change and there is a funding need to assist the countries to further push for reaching their SDG6 targets.</p> <p>Recognising that regular handwashing with soap and water is a critical first line of defence against viruses causing pandemics as COVID-19, it is noted that the programme is well designed to address the challenges that a lack of access to clean water and sanitation is a reality for the large part of the African population living in slums and rural areas. The implementation of the programme through the already established trust fund mechanism, African Water Facility, entails that administrative and management practices are in place; this will facilitate speedy off-set of the programme and timely execution of the programme.</p> <p>It is assessed that the preparation phase has been adequate and informed by a good dialogue with African Water Facility management and staff as well as with the relevant key partner Nordic Development Fund.</p> <p>The key reservations of the appraisal relates to the results matrix where its suggested that for Outcome 1 it might be more appropriate and flexible to earmark funds at the regional level of the Horn and Sahel rather than at country level, and for the Outcome 2 where it is suggested to include targets for 2022. Further reservations relates to the programme document itself which was found to the less operational to functions as ‘a full-fledged description in the form of a programme or a project document, based on which the partner(s) and the responsible MFA unit can carry out their respective functions in the management of the project/programme’ as outlined in the Guidelines.</p> <p>Overall, the programme is recommended for approval and the programme documentation be finalised, giving due considerations to the recommendations from the appraisal.</p>	

Recommendations by the appraisal team	Follow up by the responsible unit
Programme Level:	
Follow-up to the recommendations of the Danida Programme Committee	
<p># 1: <i>Update the program document to address the Danish experience from the water sector, the monitoring of possible synergies with the bilateral interventions and periodic reviews by MFA.</i></p>	<p>The programme document already notes: “<i>The AfDB/AWF approach to the water sector is fully aligned to the experiences of the Danish support to water sector, climate and peace/stabilisation e.g.in promotion of sanitation and hygiene and on building resilience among state and non-state actors</i>”. The document also in section 3.4 notes the current water activities in Niger and Mali and Burkina faso.</p> <p>The document now includes some of the main Danish experiences in the water sector (box 3.1) e.g. cost recovery/gender/participative approach/institutional governance and reforms/M&E/sector wide approach etc. and mentions the countries (from the Sahel / Horn) where Danida has had Water programmes: Burkina Faso, Niger with some lighter inputs in Mali.</p> <p>The periodic/mid-term review (2023) is already mentioned. Synergies are listed in annex 2 – synergies with the Danida programmes are implicit but have been made explicit in the table and the point noted in the main text.</p>
Design	
<p># 2: <i>Denmark to discuss and agree with AWF on a realistic timeline for the selection of projects to be supported under the Danish funds – this eventual in cooperation with NDF.</i></p>	<p>A timeline of 12 months from the start of the program for selection of projects has been agreed with AWF and have been stated in the document in section 5.1.</p>
<p># 4: <i>A draft copy of the revised AWF strategy be requested and reviewed and the programme document to be updated such that the focus in the main text is on the AWF Strategic framework with the additional information on AfDB strategies be included as an annex.</i></p>	<p>AWF will update and share the strategy when it is ready, which is unlikely to be before the programme start. The strategy will feature as a discussion point in the consultative group (with NDF as well) as described under section 7 (Institutional and Management Arrangements).</p>
Budget	
<p># 8: <i>Revisit the budget presentation and:</i></p> <ul style="list-style-type: none"> • <i>Set a level for how much can be levied as administrative cost on the Danish funds; a</i> 	<p>Unlike most other trust funds of the AfDB, the AWF does not levy an administrative charge and this has been added along with a note clarifying that a maximum of 5% margin can be levied as administrative cost on the Danish funds.</p> <p>Discussions with AWF were held. The outcome budget distributed over the 4 years is already presented in annex 5. It is not found useful for this programme to present an output budget as the outputs</p>

<p><i>5% margin is suggested, similar to the margin set by NDF.</i></p> <ul style="list-style-type: none"> • <i>Discuss and agree with AWF on the budget allocations broken down to output level for each outcome area</i> • <i>Reflect clearly that the AfDB contribution is an in-kind contribution and omit AWF as a contributor to the programme</i> • <i>Redistribute the contingency budget to outcomes/outputs</i> 	<p>on climate and watershed are contractually connected to the main physical and study outputs. AWF has stated that an output-based budget will be more of an academic exercise than design guidance.</p> <p>Separate budget showing AfDB and donor contributions are now presented.</p> <p>Contingency has been distributed to outcome.</p>
<p>Management and administrative arrangement</p>	
<p><i># 7: The Programme Document to be updated to better reflect the management and administrative arrangements, including:</i></p> <ul style="list-style-type: none"> • <i>how project selection will be done,</i> • <i>the program budget vs. the AWF's total budget</i> • <i>the monitoring and reporting arrangement</i> 	<p>Criteria for selecting project partners and project beneficiaries are already given in chapter 5 and annex 2. This has now been supplemented based on clarification from AWF.</p> <p>The program budget compared to the AWF's total budget has been included.</p> <p>More details have been included regarding the monitoring and reporting requirements.</p>
<p>Reporting</p>	
<p><i># 9: Revisit the text regarding the reporting requirements and include text clearly setting out the reporting requirements for the programme.</i></p>	<p>More details have been included regarding the reporting requirements.</p>
<p>Dialogue and donor coordination</p>	
<p><i># 5: Denmark – together with NDF – to request a dialogue with AWF on the Strategy 2021 – 2025 aiming at ensuring sufficient compatibility between the Danish-NDF financed activities and the overall AWF plan, and that the AWF results measurement framework includes relevant and measurable targets.</i></p>	<p>AWF will update and share the strategy when it is ready, which is unlikely to be before the programme start. The strategy will feature as a discussion point in the consultative group (with NDF as well).</p>
<p><i># 6: Denmark to join up with NDF for a discussion with AWF on a joint structure for dialogue on the Strategy 2021 – 2025, the Operational Procedures, and how effective decision-making and monitoring of the implementation of the programme can be ensured.</i></p>	<p>Additional text has been included in section 7 (Institutional and Management Arrangement). The AWF will set up a consultative forum for consulting on the NDF/Denmark programme outside of the annual Governing Council meetings. Such an exchange could take place mid-year, and its participation potentially expanded to include all the donors to the AWF Trust Fund. The discussions should be of technical/operational nature, mainly focusing on reviewing progress on the active AWF portfolio, risk management, implementation of the Strategy 2021-25 and devising strategies for removing operational bottlenecks.</p>
<p>Results Matrix</p>	

# 3: <i>The results matrix to be revisited, the earmarking for Outcome 1 be reconsidered to focus on regional level and target set for 2022 for Outcome 2.</i>	Geographical earmarking for outcome 1 has been revised to cover the Sahel and Horn of African region instead of the five countries and targets for 2022 for outcome 2 have been included.
Risk and Risk Management	
# 10: <i>The risk matrix in the Danish programme document be revised to include risk associated with the AWF projects generally being delayed and the risk associated with the staffing situation. Denmark should keep an open dialogue with AWF on the necessity of a realistic and sufficient risk management matrix and demand improved risk management matrix be included in future annual work plans.</i>	Risk related to delay in project implementation are shown as risk #4 under programmatic risks and has now been expanded in text and risks associated with AWF staff has been added under institutional risks. Progress and risk management of projects have been added to be part of the Mid-year Portfolio Review Meeting between Denmark, NDF and AWF.
Communication	
# 11: <i>Clear agreement should be reached on the responsibility, level of details, and timeline for communicating the results achieved, and Annex 7: communication plan be revisited and concretized.</i>	Communication plan has been revised. Clarification included that the mechanisms are options not compulsory. MFA also added as a responsible partner.

I hereby confirm that the above-mentioned issues have been addressed properly as part of the appraisal and that the appraisal team has provided the recommendations stated above.

Signed in...Copenhagen on the 31 May 2021

Birthe Elisabeth Larsen,

Appraisal Team leader/ELK representative

I hereby confirm that the responsible unit has undertaken the follow-up activities stated above. In cases where recommendations have not been accepted, reasons for this are given either in the table or in the notes enclosed.

Signed in.....Copenhagen.....on the 10 June 2021.....

Adam Sparre Spliid,

Deputy Head of Unit/Embassy