ADDRESSING THE CLIMATE CHALLENGE

Rationale, approach and actions

African Water Facility
Facilité africaine de l'eau
Mobilising Resources for Water in Africa

Every drop counts
Count every drop
AMCOW
African Ministers' Council on Water

GROUPE DE LA BANQUE AFRICAINE
DE DÉVELOPPEMENT
AFRICAN DEVELOPMENT BANK GROUP

NDF
Nordic Development Fund

The most vulnerable continent

Africa is highly vulnerable to the effects of climate change, due to a combination of economic, social, ecological, and political stresses. This vulnerability is exacerbated by the relatively low capacity of many countries to easily adapt to changing climates. While climate change may bring benefits to some areas, overall these are outweighed by negative impacts. Overall, climate change is likely to have serious implications for sustained economic growth, poverty reduction, human wellbeing and security.

Climate change and water

Climate change is anticipated to have a particularly severe impact on the water sector. Africa's inherent natural climatic variability, water scarcity and low levels of water security make it particularly vulnerable. This is compounded by high population growth rates, high dependency on rain fed agriculture, rapid urbanization, a lack of infrastructure, and complex governance regimes including transboundary challenges. Current population trends and patterns of water use (demand) versus water availability (supply) show that an increasing number of African countries will exceed the limits of their economic usable, land-based water resources before 2025.

The population at risk of increased water stress in Africa is projected to be 75-250 million by the 2020s and 350-600 million by 2050. By 2025, water availability in nine countries (mainly in eastern and southern Africa) is projected to be less than 1,000 M^3/capita/year. Twelve countries would be limited to 1,000-1,700 M^3/capita/year.[1] Risks closely associated with changes to the climatic and hydrological regime include heightened threats to food security, degradation of natural resources and agricultural productivity, diminishing biodiversity, increasing land degradation, salinity intrusion, increased desertification and coastal zone changes.

[1] *If the amount of renewable water in a country is below 1,700 M^3 per person per year, that country is said to be experiencing water stress; below 1,000 M^3 it is said to be experiencing water scarcity; and below 500 M^3, absolute water scarcity. Falkenmark, et al 1989).*

The cost of climate change

Analysis by the African Development Bank (AfDB) indicate that the costs associated with both adaptation and putting the continent on a low carbon growth path (including mitigation) are estimated to be between $22 and $31 billion per year by 2015, and about $52 to $68 billion by the year 2030. More recent assessments by UNEP found that $US1-2 billion presently flows into adaptation funding for Africa, but $US7-15 billion per annum is necessary by 2030. Importantly, assessments have shown that the economic costs of climate change in Africa are likely to be significantly higher in relative terms than within other regions of the world

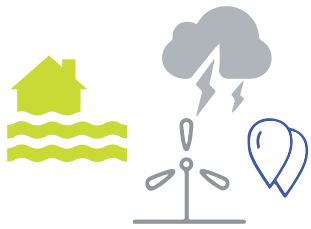
80% of the total financing required to address Africa's climate change challenge should be on adaptation, especially within the water sector. Such costs comprise both financing required to adapt to present climate variability, necessary to spur accelerated development and provide social protection, as well as adaptation to anticipated future climate change by addressing immediate priorities and capacity building that contributes to building resilience. Climate proofing existing facilities will add substantial costs to addressing SDG's in Africa.

Impacts of climate change at a glance

20% more people may be at risk of hunger by 2050 due to the changing climate.

Crop revenues could fall by as much as 90% by 2100, with small scale farmers being the most affected.

Climate variability and extreme weather events including floods, droughts and cyclones could trigger infectious disease epidemics such as malaria, dengue fever and diarrhoea.



Source: AfDB 2011. The Cost of Adapting to Climate Change in Africa

To improve climate resilience, the AWF undertakes initiatives across **5 key areas of intervention,** contributing to both adaptation and mitigation measures.

National Water Resources Management

AWF has long supported a range of IWRM projects, whether ecosystem management in Kenya, the recharge of aquifers in Morocco, or the preparation of national water plans in countries, such as in D.R. Congo or Rwanda, that enable countries to understand local impact of climate change and variability on water resources, and helping them to factor climate change considerations into water management and infrastructure investment decisions.

Water Supply and Sanitation

Building water supply and sanitation systems resilient to climate change impacts requires planning, management and good governance of supply options. AWF projects makes pilot investments that promote adaptation technologies such as renewable energies for water pumping (Ethiopia); the recovery and reuse of methane emissions (Ghana); the adoption of water conservation and efficiency measures (Seychelles); the adoption and scaling up of interventions like water rainwater harvesting (Kenya, South Africa); or fostering job opportunities in sanitation services (Cote D'Ivoire, Togo, Benin).

"The gap between estimated financing requirements and actual allocation of resources highlights the pressing need to mobilize additional resources to address the continent's financial requirements to deal with climate change impacts, reducing vulnerabilities and spurring climate resilient development.

Water Resources Information Management

Data, information and knowledge are necessary for establishing climate change impacts and preparing responses. Providing support to developing information management systems used in preparing national and regional plans or programs, or for generating data for M&E activities, is important for AWF, whether across river basins such as the Congo, Nile, Niger and Volta; aquifer systems such as North-Western Sahara, Iullemeden and Taoudeni; or within national projects such as in Ethiopia, Mali, Togo, Tunisia, and Zambia.

Transboundary Water Resources Management

Most large African river basins cut across national boundaries, therefore designing and implementing programs and strategies to cope with climate change at a transboundary level is critical. Currently, the AWF finances transboundary water resources management interventions in regional transboundary water management projects and regional program preparation projects such as in Congo, Volta, Kayanga-Geba, Lake Chad, Songwe, and Nyimur basins.

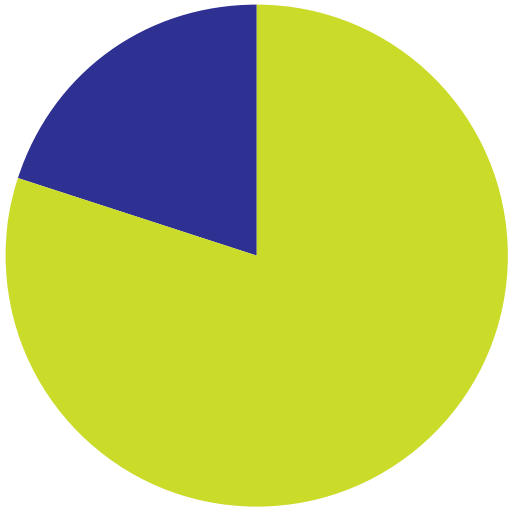
Water for Agriculture

AWF's projects support agricultural and land management practices in order to strengthen productivity and resilience to climate change. On-going projects include improving the control and management of on-farm water resources (Botswana), watershed protection (Kenya) and the piloting of more productive agriculture water technologies, such as the use of rainwater harvesting for multipurpose uses (Djibouti and Rwanda). Many projects are also help small-scale farmers adapt to climate change and ensure sustained agriculture-based livelihoods (Zambia and South Africa).

The AWF approach

The African Water Facility operates under a Strategic Plan (2012-2016) that addresses the principle constraints to progress, namely (1) investments in infrastructure and institutions and (2) knowledge development and uptake. The Strategic Plan focuses on achieving the overarching strategic objective of leveraging investment through preparing projects, enhancing water governance and harnessing knowledge.

Most AWF projects have a significant impact on building climate resilience. Activities include the preparation of climate change projects, development and implementation of integrated water resources management (IWRM) plans as a critical means to build adaptive capacity, and support to key sector stakeholders such as river basin authorities. By embedding climate change directly into water investments, the AWF seeks to leverage financing that enables water and climate change adaptation and mitigation to be pursued in conjunction with other challenges in the water sector.



80% of the total financing required to address Africa's climate change challenge is needed for adaptation efforts, with most investments costs associated with the water sector and coastal protection

AWF supports the introduction of innovative technologies and approaches for water supply, sanitation, drainage, solid waste reuse, and improved agricultural water management to better cope with climate variability. It provides funding in support of cutting edge and innovative climate change initiatives, and facilitates the exchange of technology, know-how and innovative ideas in order to find appropriates solutions to the climate change challenges. It has helped to strengthen the information base on national and transboundary surface and groundwater resources as a basis for more informed decision-making regarding medium to long term management plans and investments.

The way forward

Since its inception, the AWF has mobilized pledged financing of €1.56 billion and committed financing totalling €922.5 million, of which €100 million was mobilized in 2015. Follow-on projects are co-financed by a wide variety of partners including African Governments, the African Development Bank, the World Bank, BADEA, and AFD. Many project preparation initiatives funded by AWF are now well advanced, with leverage $2.5 billion worth of follow-on investments by the end of the present strategic plan (2016). These investments have a considerable positive impact both in terms of addressing climate variability and change needs in Africa.

In 2014, AWF launched a Call for proposal for the "Preparation of Climate-Smart Water Resources Investment Projects and Programmes" (the Call), which aims at catalysing the financing of sustainable water resources development investments that are resilient to climate change, and to strengthen the enabling environment for adaptation and mitigation. There was a significant response to this call, with 32 projects being entered into the pipeline that have the capacity to leverage €1.4 billion or more in follow-on investments, and contribute significantly to building resilience.

Having gained considerable operational experience from implementing projects addressing water and climate issues, AWF will provide a platform for information and knowledge sharing and facilitate the exchange of experiences across sector professionals across the continent. To ensure all lessons are capture, AWF is conducting a comprehensive review of the AWF's portfolio and disseminate findings to key African stakeholders, including RMCs and AMCOW, and developing new strategic approaches. These will contribute directly to AWF continuing its important role in water and climate change activities.

Every Euro of AWF funding devoted to the preparation of investment projects has mobilized €34 for investment.

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