

# AFRICA ADAPTATION ACCELERATION PROGRAM (AAAP)

STRATEGIC SUPPORT TO GHANA 



AFRICAN DEVELOPMENT BANK GROUP



GLOBAL  
CENTER ON  
ADAPTATION

## OVERVIEW

Ghana is vulnerable to increasing aridity, droughts and extreme rainfall events and flooding<sup>1</sup>, and faces significant challenges from a changing climate to its ecology, economy, and society. In addition, Ghana has a high degree of risk to natural hazards and disasters. The country is exposed to risks from multiple weather-related hazards, primarily those due to floods and droughts in the Northern Savannah belt. There are also risks related to coastal resources, including storm surges and coastal erosion as well as landslides, earthquakes, pest infestations, and wildfires. Between 1991 and 2011 the country experienced seven major floods. In 2010, floods in the White Volta River Basin affected hundreds of thousands of people and destroyed many of their livelihoods. Urban floods also regularly impact major cities. Current development dynamics and demographic changes in Ghana further compound the risk of disasters. These dynamics are related to rural poverty, rapid urbanization, and environmental degradation. Agriculture and livestock, two sectors most impacted by weather-related hazards, constitute the foundation of Ghana's economy and employ 55% of the economically active population<sup>2</sup>. Climate change and variability are already affecting Ghana's water resources with damage and flood exposure projected to result in \$160 million annually<sup>3</sup>.

## The Bank's Strategic Support to Ghana

Ghana's CSP (2019-2023) integrates climate change considerations as a cross-cutting theme with specific commitment to creating economic opportunities for marginalized groups using green climate industrial practices and increase private sector finance in climate-smart investments by 20 percent. Climate resilient infrastructure development is prioritized under Pillar 2 of the strategy.

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<sup>1</sup> Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanc3.pdf>

<sup>2</sup> GFDRR (2019). Ghana, Country Context. URL: <https://www.gfdr.org/en/ghana>

<sup>3</sup> UNISDR (2018). Disaster Risk Profile – Ghana. URL: <http://africa.cimafoundation.org/documents/869>

# The Africa Adaptation Acceleration Program (AAAP) Strategic Support to Ghana

The AAAP is an Africa-owned Africa-led program, in response to the urgent need for focused evidence-based climate adaptation action at scale. The Global Center on Adaptation (GCA) and the African Development Bank (AfDB) joined forces to create the Africa Adaptation Acceleration Program (AAAP). The AAAP is the largest and most comprehensive initiative to support African countries for a faster and stronger Covid-19 climate-resilient economic recovery that sets the basis for an adapted trajectory in their development pathways. It aims to mobilize \$25 billion, over five years, to accelerate and scale climate adaptation action across the continent. The AAAP is supporting transformative adaptation in Africa through four pillars:

## Africa Adaptation Acceleration Program's Four Pillars

Through the AAAP, AfDB and GCA will leverage an additional \$12.5 billion (\$12.5 billion already committed by AfDB) to accelerate climate change adaptation in Africa through its collaboration with the GCA

**PILLAR ONE**

**Climate Smart Digital Technologies for Agriculture and Food**

That will **scale-up uptake of climate-smart digital technologies**, and associated data-driven agricultural and financial services, for **at least 30 million farmers** in Africa **by 2025**, leading to **increased food security** for at least 10 million people **in 26 Least Developed Countries (LDCs)**. countries through policy reforms.

**PILLAR TWO**

**African Infrastructure Resilience Accelerator**

That will **scale up investment** at national and city level **for climate-resilient infrastructure** in **key sectors** such as **water, transport, energy, and waste management**, to at least \$7 billion and **integrate resilience in up to 50%** (by value) **of new infrastructure projects**

**PILLAR THREE**

**Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience**

**Unlock finance for 10,000 youth-led green enterprises (50% women) and promote sustainable job creation for 1 million youth** directly through capacity development and innovation for action on climate adaptation and resilience in Africa.

**PILLAR FOUR**

**Innovative Financial Initiatives for Africa**

Coordinate with the other three Pillars and **together increase financial flows for adaptation and resilience to Africa** by \$12.5 billion by 2025 to complement the \$12.5 billion commitment of the African Development Bank.

In Ghana, AAAP is supporting the following initiatives:

- **SUPPORT TO GHANA INFRASTRUCTURE INVESTMENT FUND TO BECOME A DIRECT ACCESS ENTITY OF GCF**

In October 2021, The African Development Bank's Board of Directors officially approved a \$75 million commercial loan to the Ghana Infrastructure Investment Fund (GIIF). The Bank's loan will enable the Ghanaian state-owned GIIF to efficiently leverage its paid-in equity capital of \$325 million to secure additional debt resources to finance several critical Ghanaian infrastructure projects and reduce the country's estimated multi-billion-dollar infrastructure finance deficit. GIIF committed over 88% of its equity investment capital towards several infrastructure projects within the transport, climate resilient energy, ICT and affordable housing sectors, while successfully mobilizing over one billion dollars of private capital from both domestic and international sources.

Through its Technical Assistance Program (TAP) to facilitate access and leverage climate finance, the Africa Adaptation Acceleration Program is providing technical support to the Ghana Infrastructure Investment Fund (GIIF) as part of its application to become a Direct Access Entity to the Green Climate Fund (GCF) to enable it to access additional finance to build climate resilience in the infrastructure investments it supports downstream.

- **GHANA: ROADMAP FOR RESILIENT INFRASTRUCTURE IN A CHANGING CLIMATE:**

With infrastructure as a critical priority for the Government of Ghana and also identified as a key pillar in the Bank's CSP for Ghana, the Global Centre on Adaptation in partnership with the Bank, under AAAP, supported a nation-wide assessment of climate risks across critical infrastructure systems including transport networks, energy, water and sanitation to prioritize adaptation interventions. The reported, titled "**Ghana: Roadmap for Resilient Infrastructure in a Changing Climate**" was carried out in collaboration with the United Nations Office for Project Services, the United Nations Environment Program, and the University of Oxford's Environmental Change Institute. A high-level Ministerial launch of the report

was held on 24th March 2022 in Accra in collaboration with the Bank's Ghana Country office and hosted by Ghana's Ministry of Environment, Science, Technology and Environment (MESTI). The study was funded at 500,000 euros.

Key findings from “**Ghana: Roadmap for Resilient Infrastructure in a Changing Climate**” include:

01

**Energy** – Future energy availability for about a quarter of a million people in rural parts of Ghana is threatened by drought given their reliance on wood fuel for household energy generation. Equally, climate risks threaten major components of the electricity generation and transmission due to exposure to drought and flooding.

02

**Water supply infrastructure** – 54% of dams assessed are exposed to floods and 23% to droughts under a high-hazard by 2050; the Weija dam, supplying 80% of the drinkable water for Accra's metropolitan area, was found to be particularly exposed to flooding.

03

**Transport** – in a likely 2050 flooding scenario, analysis revealed the potential of \$3.9 billion in damages to roads and highways - triple the estimated \$1.3 billion Ghana invested in transport infrastructure in 2019.

This study provides insights and a potential pipeline of 35 project ideas to help in defining the core priorities for future investments in infrastructure in Ghana. It is expected to inform the Bank's next CSP for the country whose preparatory process starts in 2022.

- **INTEGRATING ADAPTATION AND RESILIENCE INTO GHANA  
PUBLIC-PRIVATE PARTNERSHIP (PPP) REGULATION**

While infrastructure in Africa is largely financed by national governments, accounting for 37% of total commitments in 2018, the private sector needs to play a critical role in accelerating adaptation at scale. Public-Private Partnerships (PPPs) are increasingly being used to finance, build, and operate infrastructure assets in Africa. However, most infrastructure PPPs do not optimize climate adaptation in technical, financial, and contractual components of projects.

The Africa Adaptation Acceleration Program is providing targeted technical assistance and analytical support to assess and integrate climate resilience into PPP projects. This initiative aims to build the upstream capacity of practitioners to integrate climate resilience into infrastructure PPPs and build a community of Climate-Resilient Infrastructure Officers (CRIOs) to facilitate knowledge sharing.

In 2021, AAAP launched the Climate Resilient Infrastructure PPP Toolkit and Certified Climate-Resilient Infrastructure Officer (CRIO) program to build the capacity of PPP practitioners to build climate resilience and nature-based solutions for infrastructure into the design of PPP projects.

In collaboration with the Ministry of Finance/Public Private Partnership (PPP) Office of Ghana, AAAP envisages to focus on the following areas:

01

Reviewing of draft PPP Regulations, Manuals and Guidelines and subsequent development of actions for climate resilience and adaptation for inclusion into the Framework and Regulations

02

Commencing PPP Masterclass training for the Public Investment and Assets Division, the PPP Office and the Public Investment Units of the various Contracting Authorities

03

Program and Project development support

- **CITY CLIMATE ADAPTATION ACCELERATOR - ACCRA RAPID CLIMATE RISK ASSESSMENT**

AAAP Africa Infrastructure Resilience Accelerator (AIRA) is leveraging on the Urban and Municipal Development Fund (UMDF) and other project preparation funds to quickly roll-out support to African cities through a targeted city program, comprising of climate diagnostics to identify climate vulnerabilities, and to develop strategies and to set priorities to address these through transformative projects. Together with national and local governments, the city adaptor

accelerator identifies and prepares pipelines of priority investments in key sectors such as water, drainage and solid waste, mobility, housing, and ecosystem-based adaptation to originate adaptation investment-ready projects at scale. By 2022, this resilient city flagship will have supported 10 cities with US\$1 billion in resilient investments.

**In Ghana**, the climate risk assessment will support a Risk-Informed Urban Planning process for the Accra Municipal Assembly (AMA) region at different spatial scale levels through to 2050 for the Accra Metropolitan Area and surrounding metros, focusing on the risk of flooding. The assessment is undertaken in close collaboration with the Accra Municipal Assembly (Resilience Unit, the Department of Spatial Planning and the Department of Physical Planning.

The assessment also entail a comprehensive flood risk assessment to formulate recommendations, guidelines and proposals for building regulations for the spatial planning at three scale levels. These recommendations will be developed within a stakeholder engagement process throughout the project.

It is expected that the Risk-Informed Urban Planning process will arrive at a clear assessment of the coastal erosion and flood risks and an implementable framework for spatial planning in Accra, guiding action at the sectoral/local departmental level. The outputs are expected to be accessible to an interdisciplinary audience, with a well-documented methodology and assumptions that can be replicated by AMA and improved over time, as data gaps are filled.

A scoping study is being undertaken in Accra in parallel. The scoping study will identify key stakeholders and initiatives in Accra in the field of water climate adaptation. A round table with key stakeholders is being proposed to present and discuss the key findings of the ongoing climate risk assessments.

- **SUPPORT DEVELOPMENT OF MINI GRID AND SOLAR PV NET METERING IN GHANA**

The Ghana Mini Grid and Solar Photovoltaic Net Metering project involves the development of 35 mini grids, standalone solar photovoltaic

systems in 400 schools, 200 units in healthcare centers and 100 units for community energy services centers in the Volta Lake region. It will also deploy up to 12,000 units of roof-mounted net-metered solar photovoltaic systems for public institutions, small and medium-sized enterprises and selected households.

The project has leveraged co-financing from the Scaling up Renewable Energy Program, a funding window of the Climate Investment Funds, and the Swiss State Secretariat for Economic Affairs, amounting to \$28.49 million and \$13.30 million, respectively. Within the framework of the Africa Adaptation Acceleration Program (AAAP) partnership with the Bank, the Global Center on Adaptation has contributed €250,000 to strengthen adaptation and resilience measures in the investment.

The project is expected to have an annual electricity output of renewable energy estimated at 111,361MWh, corresponding to an installed capacity of 67.5MW. The project will mitigate greenhouse emissions of 0.7795 million tons of CO<sub>2</sub> equivalent per year and create up to 2,865 jobs during construction, of which 30% will target women and youth.

- **AAAP YOUTHADAPT FLAGSHIP PROGRAM – GHANAIAN YOUNG ENTREPRENEUR SUPPORTED**

Youth Adaptation Solutions (YouthAdapt) Challenge is an annual competition jointly organized by the Bank and the Global Center on Adaptation as part of the Africa Adaptation Acceleration Program.

YouthAdapt aims to strengthen inclusive growth, and broaden investment and economic opportunities for youth and women in Africa by awarding winners business grants of up to \$100,000 each and the opportunity to participate in a 12-month business accelerator program to help them scale up their businesses, deepen their impact and create decent jobs. At COP26, 10 winners of the competition were announced, pioneering businesses in Africa that are working to accelerate adaptation action across the continent. The winning businesses provide climate adaptation and resilience solutions in critical social and economic sectors affected by climate change.



## Youth Adaptation Solutions (YouthADAPT) Challenge Awards Ceremony

Global Farms and Trading Company Limited, Ghana leverages conservation agriculture among smallholder farmers to increase food security, alleviate poverty, conserve biodiversity, and safeguard ecosystem services.

Tahiru Jamila  
Global Farms and Trading Company Limited, Ghana



A Ghanaian company, Global Farms and Trading Limited, one of the winners of the 2021 YouthAdapt Solutions Challenge contributes to the modernization of Ghana's agricultural sector through the provision of a wide range of agribusiness services, including mechanization, input access and training on market value chains. The enterprise advocates for the protection of the natural environment for sustainable farming systems through conservatory agricultural practices. Global Farms also produces, trades and markets paddy rice, maize, and soybeans through a network of 500 smallholder farmers with an objective of scaling up our operations. With the **Africa Adaptation Acceleration Program**, YouthAdapt funding support, Global Farms will be able to strengthen the awareness of climate adaptation and resilience among rural farmers, increase production volumes of grains, advance food security in rural Ghana and preserve the ecosystem for sustainable agriculture in Africa.



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