

A photograph showing two women in a tea plantation. The woman in the foreground is wearing a dark blue headscarf and a black shirt with a patterned collar, smiling as she picks tea leaves. The woman in the background is wearing a blue headscarf and a red shirt, also working in the field. A large woven basket is visible between them. The tea bushes are lush green.

# The Africa Adaptation Acceleration Program (AAAP)

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## KEY MESSAGES

- The Africa Adaptation Acceleration Program (AAAP) is Africa's response to the impacts of the climate crisis. It is an Africa-owned and Africa-led response to the continent's expressed needs and priorities to reduce its vulnerabilities as well as harness opportunities.
- More than 30 African heads of state and other global leaders have rallied behind the AAAP, endorsing it as a key vehicle to operationalize the Africa Adaptation Initiative's mandate. No other adaptation initiative has achieved this level of consensus in the African continent.
- Through AAAP, the African Development Bank (AfDB) and the Global Center on Adaptation (GCA) are mobilizing US\$25 billion by 2025 to accelerate adaptation action in Africa through interventions in four priority areas/pillars: food security, resilient infrastructure, youth innovation and job creation, and innovative climate finance.
- Since its launch in April 2021, the AAAP Upstream Financing Facility, managed by GCA, has enabled the mainstreaming of adaptation into investments worth over US\$3 billion. GCA's interventions with the AfDB, World Bank, and other development



partners are delivering high-yielding adaptation dividends and accelerating adaptation impacts through large-scale investments, innovations, knowledge, and technical assistance initiatives.

- Drawing from the AAAP practical experience, GCA and AfDB are exploring with partners the possibility of scaling up the model of AAAP to other regions in the world, including South Asia and Small Island and Developing States.

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**Through the AAAP, we're making progress in addressing the climate emergency. The Ghana Roadmap for Climate Resilient Infrastructure, which was launched earlier this year, provides an investment blueprint for adaptation in Ghana, highlighting in stark terms the cost of inaction. By 2050, climate impacts could lead to some US\$4 billion in damages to the transport sector.”**

**H.E. Nana Akufo-Addo**

President of Ghana and Chair of the Climate Vulnerable Forum

## INTRODUCTION

The Africa Adaptation Acceleration Program (AAP) is Africa's response to the impacts of the climate crisis. This flagship program for Africa has been endorsed at the largest-ever gathering of the African Heads of State and Government focused on adaptation, and welcomed by President Ali Bongo Ondimba of Gabon for actualizing the vision of the Africa Adaptation Initiative (AAI). The AAP delivers on the ground to support African countries for a faster, stronger post-COVID-19 economic recovery based on climate-resilient development pathways. Through AAP, the African Development Bank (AfDB) and the Global Center on Adaptation (GCA) are mobilizing US\$25 billion by 2025 to accelerate adaptation action in Africa through interventions in four priority areas/pillars: food security, resilient infrastructure, youth entrepreneurship and job creation, and innovative climate adaptation finance.

Since its launch in April 2021, the AAP Upstream Financing Facility, managed by GCA, has enabled the mainstreaming of adaptation into investments worth over US\$3 billion. GCA's interventions with the AfDB, World Bank, and other development partners are delivering high-yielding adaptation dividends and accelerating adaptation impacts through large-scale investments, innovations, knowledge, and technical assistance initiatives. The AAP Upstream Financing Facility is aligned with the effective regional implementation of the new International Monetary Fund (IMF) Resilience and Sustainability

Trust, the replenishment of the African Development Fund, and the leveraging of innovation and multi-stakeholder partnerships.

This chapter discusses the progress of the AAP, covering the history of its conception and high-level African support. This is followed by a description of the four AAP pillars and the approved projects in each business line, including the GCA's and AAP's value-add, projected impacts and early results. Achievements in knowledge generation and management for adaptation and resilience investments are also discussed. The last section presents an outline of future plans for AAP.

## OVERVIEW OF THE AAP

### Description of the AAP Conception and High-Level African Support

The AAP is an Africa-owned and Africa-led response to the continent's expressed needs and priorities to reduce its vulnerabilities to climate change as well as harness the opportunities that result from climate change. African leaders have asked for this program and endorsed its design, which has benefited from extensive consultations with African governments, development partners, and knowledge institutions, including through an Annual Partnership Program. The AAP was first presented at the Climate Adaptation Summit in January 2021 and received a strong support from global and African leaders. The Summit was the largest gathering ever of global leaders on



Photo: Global Center on Adaptation

**Table 1. Summary of Business Lines under Each AAAP Pillar**

AAAP Pillar	Business lines
Agriculture and Food Security	<ul style="list-style-type: none"> <li>• Climate-smart digital technologies in agriculture</li> </ul>
African Infrastructure Resilience Accelerator	<ul style="list-style-type: none"> <li>• Public-Private Infrastructure Resilience Accelerator</li> <li>• National Infrastructure Risk and Resilience Programs</li> <li>• NBS Investment Innovation Program</li> <li>• Capacity Building through the Climate-Resilient Infrastructure Masterclass</li> <li>• Climate-Resilient Water Services</li> <li>• The City Adaptation Accelerator</li> </ul>
Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience	<ul style="list-style-type: none"> <li>• Youth Adaptation Solutions Challenge</li> <li>• Mainstreaming Adaptation Jobs</li> </ul>
Innovative Financial Initiatives for Africa	<ul style="list-style-type: none"> <li>• Technical Assistance Program to Access and Leverage Climate Adaptation Finance (TAP)</li> <li>• Financial Tools Instruments and Mechanisms (TIM)</li> <li>• Resilient Financial Systems</li> </ul>

adaptation. The AAAP was officially launched on April 6, 2021, at the Leaders’ Dialogue on COVID-19 and climate emergency. More than 30 African heads of state and other global leaders rallied behind the AAAP, endorsing it as a key vehicle to operationalize the AAI mandate. The program’s objective is to mobilize US\$25 billion to accelerate climate change adaptation actions across Africa. Following this event, a communiqué was issued by African leaders. This communiqué underlined the importance of climate resilience being a key element of Africa’s economic recovery plans by countries integrating measures to address the twin threats of climate and COVID-19.

The 19th Chair of the African Union, H.E. Félix Tshisekedi of the Democratic Republic of the Congo (DRC), endorsed the program as addressing Africa’s adaptation needs and priorities, while the United States Secretary of the Treasury Janet Yellen, speaking on behalf of US President Joseph R. Biden, congratulated the GCA and the AfDB for establishing the AAAP and pledged his support to the program. No other adaptation initiative has achieved this level of consensus in the African continent.

The AAAP is the translation of the AAI into actual projects and programs on the ground. The AAAP builds on the priority areas identified by the countries in their Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs) and accelerates momentum through large-scale proof-of-concept investments, innovations, and knowledge and technical assistance initiatives. Following multiple stakeholder engagements, and based upon additional voiced demands and priorities of the African Heads of State and Government, African countries identified key areas where action was most needed and investments in adaptation and resilience building could yield high dividends. These include agriculture and forestry, water resources, disaster risk reduction, biodiversity and ecosystems, and human settlements. The program is continuously evolving as the priorities and financial needs of African countries are further refined. Implementation on the ground is ensured by GCA’s role as Lead Coordinating Partner of the AAI.



## AAAP's Four Pillars

The AAP focuses on four main pillars and, within them, specific business lines derived from the NDCs, NAPs, and other national and regional climate change strategies, where action is most needed, and where investments in adaptation and resilience building can yield high dividends to achieve the Sustainable Development Goals (SDGs). The four key pillars and their business lines are:

- **Agriculture and Food Security:** with a goal to scale up access to climate-smart digital technologies, and associated data-driven agricultural and financial services, for at least 30 million farmers in Africa. The program also has the aim of supporting food security in 26 African countries and reducing malnutrition for at least 10 million people.
- **African Infrastructure Resilience Accelerator (AIRA):** with a goal to scale up investment for climate-resilient urban and rural infrastructure in key sectors such as water, transport, energy, and waste management to help the continent close the infrastructure gap and achieve sustainable development in the face of climate change. The program aims to integrate climate resilience into about US\$7 billion worth of infrastructure investments.
- **Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience:** with a goal to support one million youth with entrepreneurship skills and job creation, and to ensure that millions of new jobs being created will support adaptation. The program supports developing skills and knowledge on adaptation, promoting equality and equal opportunities, building the entrepreneurial capacity of African youth, and facilitating access to funding and mentorship to youth-led businesses, half of which will be women-led, in the adaptation space.
- **Innovative Financial Initiatives for Africa:** with a goal to build the capacity of African countries to drive adaptation at a much greater scale by planning differently and accessing the key sources of adaptation finance. In addition, this AAP pillar aims to support the design of

### Box 1. Recent Activities in each AAP Pillar Dealing with Food Security

Recent global developments have imposed a considerable new burden on the existing challenges to food security in Africa. Millions face hunger as a result of rising food prices as a result of the war in Ukraine, which has affected the imports of key staples such as maize and wheat. Price spikes in essential agricultural inputs such as seeds and fertilizers has also made agriculture and food security in Africa more precarious. This only strengthens the need for adaptation and building resilience in agriculture in Africa, to create a greater self-sufficiency as a buffer against global shocks and their knock-on effects. Presented here is an example of recent activities in each AAP pillar showing how each have been dealing with the crucial question of food security. Of the US\$3 billion leveraged in MDB-approved investments, US\$870 million is directly related to agriculture, livestock, and food security.

- **Pillar 1:** Climate-Smart Digital Technologies for Agriculture and Food Security activities in 26 countries.
- **Pillar 2:** Infrastructure:
  - Ghana: identifying climate risks for the most critical links in the national infrastructure network supporting farm-to-market connectivity.
  - Adaptation action in seaports of Banjul, The Gambia, and Cotonou, Benin, to help reduce amplifying effects on food availability and prices in West Africa when the port's operations are impacted by climate shocks.
- **Pillar 3:** Youth and employment:
  - In Sudan and Nigeria, mainstream adaptation in skills building and small and medium-sized enterprise (SME) financing for agribusiness.
- **Pillar 4:** Innovative finance:
  - Strengthening the US\$235 million Staple Crops Processing Zone (SCPZ) Program in Ethiopia, Togo, Guinea, and Senegal to help resubmit its proposal to the Green Climate Fund (GCF).

innovative public and private financial instruments, ranging from resilience bonds and debt-for-resilience swaps to aggregation mechanisms for adaptation investment assets and monetization of adaptation benefits.

The four pillars are closely interlinked and will get Africa on the right track toward sustainable and resilient development. Examples of interconnections across pillars include: adaptation jobs for youth in infrastructure, resilient infrastructure for food security, and innovative financing for nature-based solutions. These areas all respond to important investment opportunities. Investing in climate-resilient business models is good economics.

## **AAAP PILLARS AND HIGH-LEVEL RESULTS ACHIEVED AS OF THE END OF JUNE 2022**

### **Climate-Smart Digital Technologies for Agriculture and Food Security**

The Climate-Smart Digital Technologies for Agriculture and Food Security (CSDAT) pillar aims at harnessing the powers of digital technological innovation and digitalization to improve agricultural productivity and strengthen climate resilience. The goal of the pillar is to achieve sustained uptake of digital adaptation solutions for at least 30 million farmers in Africa and to improve food security in 26 countries. Specific business lines of CSDAT include: thought leadership on climate-smart digital technologies in agriculture; supporting the design, mainstreaming and adoption of climate-smart digital technologies into agriculture projects and programs; enhancing the capacity of relevant persons and institutions to implement projects with climate-smart digital technologies; and monitoring, evaluation and learning on the implementation of climate-smart digital solutions.

The CSDAT pillar builds resilience into food security and rural wellbeing investment projects funded by different multilateral development banks (MDBs), beginning with AfDB and the World Bank. Current projects under CSDAT include regional and national projects on livestock, national adaptation, and food security resilience projects in different parts of Africa. As of June 2022, the CSDAT pillar had influenced and leveraged MDB projects that will benefit 4.7 million direct beneficiaries. In addition, the CSDAT pillar is

working on other investment projects estimated at US\$1 billion.

### **African Infrastructure Resilience Accelerator**

The AIRA covers Infrastructure and Nature-Based Solutions (NBS), climate adaptation in the water sector, and urban resilience. Specific focus areas delivered through AIRA include: Public–Private Infrastructure Resilience Accelerator; National Infrastructure Risk and Resilience Programs; NBS Investment Innovation Program; capacity building through the Climate-Resilient Infrastructure Masterclass; Climate-Resilient Water Services; and the City Adaptation Accelerator.

The AIRA pillar builds resilience into infrastructure investments by delivering upstream analysis and support to develop information and metrics on climate hazards, exposure, and vulnerabilities to assets, services, and people. The technical assistance addresses key barriers to integrating adaptation and innovative NBS to build resilience. Focused support for national and local governments helps develop climate-resilient infrastructure investment packages that will be financed through innovative financing instruments.

Currently, completed and ongoing projects under AIRA are spread across 18 countries: Senegal, Kenya, Uganda, The Gambia, Benin, Ghana, Tanzania, Liberia, Gabon, Guinea, Madagascar, Chad, Burundi, Burkina Faso, Mali, Mauritania, Niger, and Ethiopia. These projects, at a national and asset-level scale, cover multiple infrastructure sectors such as energy (renewable energy, transmission and distribution, mini-grids, etc.), transport (highways, railways, ports, etc.) and water (dams, water treatment plants, etc.).

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

The Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience pillar aims to unlock the untapped potential of youth in Africa to drive resilience and green enterprise. The vision is to promote sustainable job creation at scale by 2025 through youth entrepreneurship and innovation for action in climate adaptation. Activities of this pillar are built across the following business lines: strengthening environments that support youth-led climate adaptation entrepreneurship and

youth participation in adaptation policies; scaling up youth innovations for climate action; building youth capacity for employability and unlocking access to finance, and mainstreaming “adaptation jobs” into MDBs operations and projects.

With a sustained joint vision to unlock a further US\$3 billion in credit for adaptation action for innovative youth-owned enterprises, with a gender mainstreaming target of 50%, the Youth pillar has so far funded entrepreneurs across the continent to scale their adaptation businesses as part of the African Youth Adaptation Solutions Challenge (YouthADAPT Challenge). The sponsored adaptation solutions cut across the agriculture and waste management sectors and across enterprises that are addressing on-ground climate challenges faced by vulnerable communities in their regions on the African continent. Further, the Youth pillar of the AAP has successfully partnered with the Climate Investment Funds (CIFs) at the World Bank in this endeavor to directly strengthen the productivity and growth of 10,000 youth-led enterprises to increase climate resilience and develop the skills of one million African youth to prepare them for climate-resilient jobs and green entrepreneurial opportunities. A successful outcome of this YouthADAPT Challenge has been increased capacity building and a 60% growth in jobs, thus contributing to the pillar’s overall job creation target.

The Youth pillar has also supported three key projects at the AfDB to ensure that 30% of the total jobs to be created are adaptation jobs. This includes providing funding for the development of adaptation capacity building and education curricula. Future endeavors include working with African governments to support legal, policy, and regulatory reforms and remove structural barriers to create an environment conducive to resilient enterprise development.

### **Innovative Financial Initiatives for Africa**

The AAP’s IFI pillar is developing and implementing financial instruments and mechanisms to support the implementation of adaptation actions by raising finance from various public and private financiers. This pillar answers a pressing need to address a steep deficit in funding for adaptation today in Africa today. As the Finance chapter of this report reveals, only US\$11.4 billion was tracked in adaptation finance in Africa annually in 2019 and 2020, when

the estimated amount required for the continent is over US\$50 billion annually through to 2030. There is a lack of reliable and sustainable sources of finance for the adaptation programs and projects currently under development. Compared to the various types of financing instruments and grants that are available for climate change mitigation, there are few places where private and public sector project developers can get the necessary resources for adaptation. The availability of finance from bilateral donors is the most critical component of addressing Africa’s climate finance needs. It is also important to expand other multilateral pools of finance, such as the MDBs and the climate funds, as well as leverage the private finance that will be needed to address the continent’s adaptation and resilience needs.

Further, most of the funds currently available for adaptation come from the public sector. For example, one of the most sustainable sources of finance for climate change is the GCF, which has the aim of helping developing countries adapt to the impacts of climate change. However, the GCF rarely provides grants to the private sector. Consequently, the private sector is not incentivized to participate in developing programs and projects for adaptation. To support the development of resilient green growth in Africa, there needs to be a step change by developing a deeper understanding of the needs and capabilities of the private sector. This can be done by establishing effective communication channels and using market-focused strategies and a wide array of financial instruments. In addition to addressing the barriers that prevent companies from entering the market, development cooperation providers should also be able to help them develop effective strategies and implement policies.

### **PROJECTED IMPACTS AND EARLY RESULTS OF THE AAP-SUPPORTED PROJECTS**

This section describes approved projects in each of the four AAP pillars. It presents the GCA’s and AAP’s value-add in the approved projects. The projected impacts and early results for each AAP focus area are also discussed.

#### **Pillar 1: Climate-Smart Digital Technologies for Agriculture and Food Security**

Mapping needs and creating access to climate-smart digital technologies among farmers and pastoralists, with a focus on gender equity, is a key element of



Photo: BleagLee Waste Management

the larger project of adaptation envisioned by the AAAP and the GCA. This section describes GCA's contributions to and expected outcomes for several resilience and capacity-building programs under way in Africa today.

**Program to Build Resilience for Food and Nutritional Security in the Horn of Africa (BREFONS):**

The Horn of Africa region is characterized by increasing temperatures and high variability in rainfall as well as an intensification of floods with serious socioeconomic consequences such as a drop in crop yields, climate-related disasters, ecosystem degradation, and climate-sensitive diseases. More than 40 percent of the population in the region is undernourished due to food insecurity and inadequate livelihoods. While some 25 million people are already at risk of food shortages in the region, the unusual desert locust upsurge in the last two years is an additional threat to food security and livelihoods, especially for the most vulnerable communities. Their access to food is at risk of being further exacerbated by the COVID-19 pandemic, resulting in rising food prices.

GCA has worked with the AfDB project team and Alliance of Bioversity-CIAT to provide upstream technical assistance to ensure climate-smart digital technologies for adaptation are integrated into the design of this project benefiting six countries (Kenya, Ethiopia, Sudan, South Sudan, Djibouti, and Somalia). The Digital Adaptation Profiles for Kenya and Ethiopia have been prepared, and the technical report on the support on agricultural insurance under the Horn of Africa Initiative is completed. A playbook has been prepared to identify and implement digital agricultural adaptations in Africa.

GCA has also provided upstream technical assistance to ensure climate-smart digital technologies for adaptation are integrated into the project. Specifically, GCA carried out the following activities:

- Identifying key agriculture adaptation constraints that can be addressed by digital technologies and developing solutions
- Assessing the conditions and opportunities for digital applications for drought index insurance
- Identifying opportunities for digital agricultural adaptation solutions through the preparing of climate risk and digital agriculture profiles
- Supporting stakeholders to identify and implement opportunities through the preparation of a digital agricultural adaptation toolkit
- Building the capacity of policymakers and enabling policy interventions to ensure uptake of digital solutions using the toolkit.



The following are the expected results and impacts of the project:

- 30 percent increase in agricultural (crops and livestock) productivity
- 30 percent increase in annual income per capita
- 1.3 million farmers and pastoralists using climate services, e.g. drought index insurance with a gender focus
- 30 percent increased uptake of climate risk financing and insurance solutions
- 55,000 additional jobs created for youth and women
- 750,000 farmers and pastoralists benefiting from extension on using digital advisory services
- 10 climate products and services for agriculture and livestock developed

GCA is presently engaging with AfDB and beneficiary countries to support the feasibility study and technical design of national digital advisory services in three of the six countries; to support project mechanical and electrical services on Digital Climate Information and Advisory Services (DCAS) during project implementation requested by the Intergovernmental Authority on Development trade bloc (IGAD) Program Implementation Unit; to contribute to experience capitalization (the process through which an experience is identified, validated, and documented, leading to learning and identification of good practices which can then be adapted, improved, adopted by others, and up-scaled, leading to a greater impact) on the implementation of DCAS in project countries; and to co-organize knowledge sharing and capacity building events on DCAS to support the program.

**Program for Integrated Development and Adaptation to Climate Change in the Zambezi Basin (PIDACC-Zambezi):** PIDACC-Zambezi was developed as a direct response to addressing identified challenges in the river basin and ensuring that its communities and ecosystems are resilient to contribute to regional development. The challenges include persistent poverty due to a large rural population relying on rainfed agriculture, competing water uses, an infrastructure deficit, environmental degradation, and increased risk of disasters caused by extreme weather events linked to a changing climate.

The PIDACC-Zambezi program aims to address these transboundary problems through three main components: building communities' resilience, strengthening integrated landscape management, and supporting adaptive capacity. The project covers eight countries: Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe.

Under AAP, GCA is providing technical assistance to increase, on a sustainable and resilient basis, productivity, incomes and capacity of agro-silvo-pastoral households in the river basin to better adapt to climate change risks. Working in partnership with AfDB and International Water Management Institute (IWMI) representatives, GCA seeks to facilitate the mainstreaming of climate adaptation in the design of the PIDACC-Zambezi project. The project is expected to result in the following outcomes and impacts:

- 400,000 farmers adopt climate-smart agriculture (CSA)
- 30 percent increase in adoption of DCAS



Photo: Clayton Smith/WorldFish

- 25 training/policy facilitation events on DCAS
- 3,000 individuals participate in policy facilitation events on CSA and digital climate adaptations
- 5,000 individuals trained on digital tools to scale up CSA (at least 60% female and youth)

GCA has been invited by the AfDB to provide inputs on the project indicators, to join in the Project Appraisal Mission of the project, and to continue further to the implementation of the project after it is formally approved by the Board by the end of the year.

**Ethiopia Food Security Resilience Project (FRS):** As a result of climate change, smallholder farmers in Ethiopia suffer from greater variability and extreme weather events, increased temperature, and declining rainfall in a country where 85 percent of farmers depend on rainfed agriculture. Ethiopia is currently in the middle of one of the worst droughts for 50 years, which follows 12 to 18 months of erratic and failed rains, which has dried up many water sources. The war in Ukraine and subsequent rising wheat,

fuel and fertilizer costs are also worsening the country's food crisis. The project was developed to increase the resilience of food systems and Ethiopia's preparedness for food insecurity in project areas.

GCA is contributing to the adaptation of smallholders and accelerating food security resilience in Ethiopia through the project by executing the following activities: 1) mapping of 14 priority value chains identified by the World Bank and Ethiopia to assess climate risks for smallholders in crop/livestock sub-sectors; and 2) assessment of opportunities and constraints to deploy digital adaptation tools to address issues identified in the 14 value chains using the playbook developed by GCA, "Identifying and Selecting Digital Climate-Smart Adaptation Solutions in Africa."

GCA will carry out technical studies on climatic risk to the food systems and the potential for digital tools to address the challenges. It will mainstream these into the design and implementation of the project and conduct capacity building of stakeholders and institutions in the country to implement digital tools for improved resilience to food insecurity.

Key expected results and impacts of the project include:

- 2.4 million farmers adopt resilience-enhancing technologies and practices (30% female)
- 15 percent reduction in food-insecure people in program targeted areas
- 20 percent increase in yields of targeted crops in targeted households
- 25 percent increase in volume of agricultural products sold

GCA will continue to carry out the appropriate studies as agreed with the World Bank and the beneficiary country.

**Zambia Growth Opportunities Project (ZAMGRO):**

Zambia has a mono modal rainfall regime, and as a result weather patterns have a great influence on agricultural activities in the country and in turn on food security, nutrition, and income of rural households. However, investment in climate resilience, including in DCAS in particular, has not been forthcoming from both the public and private sectors of the economy. Working in partnership with the World Bank and Indaba Agricultural Policy Research Institute (IAPRI), GCA is contributing to



promoting agricultural diversification, sustainability and resilience of the agri-food sector in the country.

GCA provides the following support to the project:

- Assessing climate risks of major value chains (maize, groundnuts, sorghum, rice) and identifying appropriate digital adaptation solutions to reduce their impacts
- Organizing training and capacity-building sessions on DCAS for farmer leaders, extension agents and youths
- Facilitating multi-stakeholder policy engagement sessions to promote private sector investments in scaling up digital adaptation solutions
- Identifying potential opportunities for adaptation jobs through the project

### Pillar 2: African Infrastructure Resilience Accelerator

Building climate-resilient infrastructure, and accurately modeling future climate risks, is critical

for securing infrastructure projects and their beneficiaries from climate change hazards in key sectors like transport, water and energy. In many parts of Africa, GCA is contributing to making infrastructure resilience a priority in policymaking and planning. These projects include:

#### National Infrastructure Risk and Resilience Program – Ghana:

GCA has worked with the Government of Ghana and its partners (United Nations Office for Project Services, University of Oxford, and the United Nations Environment Programme) to implement a national infrastructure risk and resilience assessment in Ghana to model the systemic risk of climate change on infrastructure assets and services. This analysis quantifies adaptation needs and helps to prioritize a pipeline of adaptation investment options. In Ghana, the national assessment is already influencing investments on the ground. Finally, the data and recommendations are currently also being integrated into the Ghana NAP.

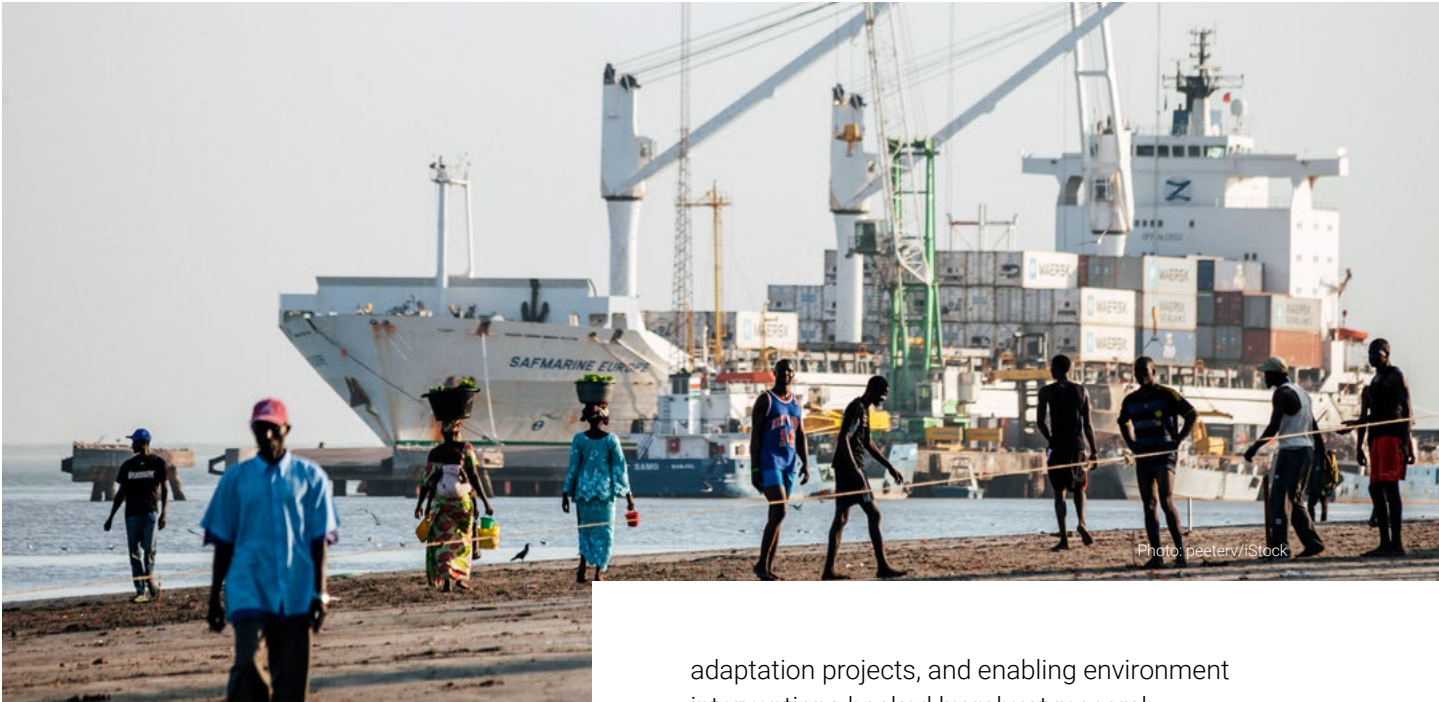
### Box 2. The Desert to Power G5 Sahel Financing Facility



Photo: Lidia Daskalova/Shutterstock

The US\$380 million Desert to Power G5 Sahel Financing Facility will finance renewable energy investments in Burkina Faso, Chad, Mali, Mauritania, and Niger. Renewable energy can significantly contribute to climate change adaptation and create opportunities for innovative practices to address climate change. Renewables-based adaptation solutions promote mitigation and reinforce adaptation

efforts synchronously across many sectors. GCA will bring cutting-edge climate analytics to strengthen adaptation and resilience measures in designing the solar assets, operations, and transmission systems for the program. GCA's support will ensure more than 500 MW of solar generation capacity financed by the AfDB is climate resilient, facilitating electricity access to some 695,000 households.



The analysis revealed the pronounced impact of flood, drought and landslide hazards on infrastructure assets and the services they provide to people:

- In a high-flood scenario by 2050, damages to transport assets can reach US\$3.9 billion, triple the estimated US\$1.3 billion Ghana invested in this sector in 2019. Furthermore, 13–14 million people, of which 80% are women, risk losing access to healthcare due to disruptions in the transport sector in the eastern, central and western regions.
- 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 electricity generation and transmission due to exposure to drought and flooding.
- 54 percent of dams assessed are exposed to floods and 23 percent to drought under a high hazard by 2050. The Weija dam, supplying 80 percent of the drinkable water for Accra's metropolitan area, was found to be particularly exposed to flood risk.
- The key output of this initiative was the Resilient Infrastructure Roadmap. This document proposes 35 adaptation options for funders and investors to invest in Ghana's future, prioritized by government stakeholders, offering impactful, evidence-based

adaptation projects, and enabling environment interventions backed by robust research and analysis.

GCA is building on the learning of this national program to implement a similar approach in Bangladesh and in other African countries, such as Kenya and Senegal, through local institutions.

#### **Public–Private Infrastructure Resilience Accelerator – Banjul Port 4th Expansion Project:**

The port of Banjul, in The Gambia, serves as a logistics hub and is a key link to neighboring Senegal. AfDB and European Investment Bank (EIB) are considering financing the proposed expansion of the port. However, the impact of climate risks needs to be addressed in the project. Under AAAP, GCA is providing technical assistance to conduct a high-resolution climate risk assessment and to develop a climate adaptation investment plan for the project.

In this project, GCA leverages expertise in stress-testing port assets and services against data-driven climate hazard scenarios, including NBS, into the port design and in quantifying the role and value of existing natural assets. Furthermore, GCA convened multi-stakeholder climate risk dialogues that brought together over 40 representatives from the Government, Gambia Ports Authority, AfDB, EIB, and other institutions in the country to validate the analysis and prioritize adaptation investment options for the project.

Vulnerability stress tests and climate hazards identification were completed, while 20 adaptation

options were proposed across physical, social and institutional measures. Prioritized adaptation investment estimated at US\$10.3 million will mitigate economic damage estimated at US\$27 million. The adaptation options and investment estimation can be further scaled up to support other infrastructure projects under AAAP, not limited to the port sector.

**Scaling Up GCA's Climate-Resilient Infrastructure Masterclass across Africa:** GCA launched the Knowledge Module on Public–Private Partnerships (PPPs) for Climate-Resilient Infrastructure in collaboration with the World Bank, AfDB, EIB, and the European Bank for Reconstruction and Development, among other MDBs and technical partners. The objective of the Masterclass is to build the capacity of PPP practitioners to mainstream adaptation and resilience into infrastructure PPP projects. It includes: 1) a Climate-Resilient Infrastructure Officer (CRIO) Handbook with tools and knowledge to integrate adaptation across the PPP project cycle; 2) a self-paced online course available on GCA's website; 3) a Certification Exam accredited by APMG International; and 4) the Masterclass on Climate-Resilient PPPs. The Masterclass is a key component in supporting the implementation of projects under AAAP and building the capacity of local practitioners.

The first global Masterclass held in September 2021 brought together 46 practitioners (one-third of which were women) from 25 countries. The Knowledge Module webpage has been accessed over 3,700 times. The CRIO Handbook was accessed almost 1,500 times and downloaded 700 times. Over 450 practitioners have started to take the CRIO Online Course. GCA will tailor the content of the Masterclass to the African context and develop case studies on infrastructure PPP projects. The Masterclasses will be scaled up across Africa (and in Bangladesh) through partnerships with local institutions to build the capacity of investment officers from MDBs, government officials and private sector representatives.

**N'Djamena Urban Resilience Project:** The World Bank has initiated a flood modeling study for the flood-prone city of N'Djamena, the capital of Chad, as part of the preparation of an urban resilience project worth US\$150 million funded by a grant from the International Development Association (IDA). The objective is to reduce the impact of flood risk and reinforce climate-resilient urban services and

planning in N'Djamena. GCA is providing the following support on this project:

- **Conducting Gender Vulnerability Assessment:** This will identify and quantify gender gaps that are related to 1) direct impacts of the increasingly frequent pluvial and fluvial floods and periods of water stress in N'Djamena; and 2) indirect impacts of floods and water stress (including inadequate water supply and sanitation, solid waste management, green spaces, early warning systems, and jobs). A clear, logical chain from a gender gap, to gender action, to gender indicators will be developed as well.
- **Conducting a Prioritization Study of Green Infrastructure Options for Flood Risk Reduction:** Two or three of the most likely future growth scenarios for N'Djamena will be developed. Future flood-risk-reducing infrastructural investments (both green and grey) will be stress-tested under the most likely scenarios highlighted in the flood modeling exercise, which also aims to understand flood impacts on services and people, and not just assets. Subsequently, options for flood risk mitigation measures will be identified and prioritized.
- **Developing a Local Community Engagement Strategy:** This will ensure flood risk reduction options (including NBS) respond to the development needs of local community beneficiaries.

The gender vulnerability assessment has already been completed, while the prioritization assessment is being initiated. The assessment will not only strengthen the climate resilience of the project but will also provide valuable lessons on urban resilience building in fragile environments.

**Freetown Water, Sanitation and Hygiene (WASH) and Aquatic Environment Revamping Program:**

This AfDB-financed project works to improve water supply and sanitation services while ensuring the sustainability of the vital aquatic ecosystem in the Western Area/Freetown peninsula of Sierra Leone. More specifically, project activities work to 1) rehabilitate and expand water treatment, transmission, storage and distribution systems; 2) improve solid and liquid waste collection, treatment and disposal services; 3) provide infrastructure and enhance capacity for the effective protection

of the Western Area Protected Forest/Watershed; and 4) promote good sanitation, hygiene and child nutrition practices of the primary beneficiaries while facilitating their participation in the improvement of WASH services. Recently, AfDB has applied for GCF financing to integrate climate resilience considerations within the project design.

GCA is supporting the finalization of the GCF funding proposal by mobilizing integrated water resources management (IWRM), gender and economics expertise to identify and prioritize climate adaptation activities. GCA is uniquely positioned to provide this technical assistance through its ability to offer integrative advisory services at the nexus of environment, gender and economic development.

Through its technical support, GCA has the potential to strategically integrate climate resilience into nearly US\$190 million in project finance. This will directly benefit an estimated 1.4 million people (51 percent of which are women) by providing climate-resilient and safe water service delivery (through new access for 1 million people and restoration of regular daily water service for 400,000 people). The project will further create over 2,700 jobs and restore the Freetown peninsula watershed, thereby reducing the impact of extreme climate events on living conditions.

A GCF funding proposal will be completed, with the potential for GCA to provide follow-on technical support in the implementation of funds (should they be awarded). The focus will be on strengthening the climate resilience outcomes of IWRM and gender aspects of the parent project.

### **Water Supply and Sanitation Program, Phase III (WSSP III):**

This project in Uganda will support the construction of water supply and sanitation schemes for small towns and rural areas across all the regions of the country. The main activities will include the construction of small-town and rural piped water supply systems, provision of water for production through valley tanks and earth dams, and the establishment and support of utility management to sustain the benefits of the project. Sanitation interventions include environmentally friendly institutional and public water borne toilets, implementation of regional fecal sludge management facilities, and general sanitation and hygiene promotion in the project area.

GCA will provide the following support to the project: 1) understanding climate risk and technical assistance to design adaptation measures based on climate risk assessment; 2) understanding climate risks to WSSP service delivery assets and increasing flood resilience of these assets; and 3) sector program support.

**Liberia Urban Resilience Project:** This World Bank-financed project works to increase flood resilience and access to urban infrastructure in selected neighborhoods and to improve urban management in Liberia. Project activities will be implemented in the capital (Monrovia) and three secondary cities: Buchanan, Gbarnga, and Ganta. In particular, the project will finance investments in 1) climate-resilient infrastructure and urban upgrading (e.g. flood risk management infrastructure, community and market upgrading); and 2) strengthening integrated resilient urban development capacity (e.g. development of a climate-informed Greater Monrovia Spatial Development Plan, improved solid waste management).

GCA is uniquely positioned to provide this technical assistance through its ability to deliver integrative advisory services at the nexus of climate adaptation, community engagement, and environmental conservation. GCA has acquired global expertise in engaging on similar topics involving community participation in the implementation of climate adaptation infrastructure, as done in informal settlements in Bangladesh and Kenya. GCA will provide this technical assistance in partnership with Slum Dwellers International (SDI) and YMCA Liberia.

Through its technical support, GCA will strengthen community participation in 1) prioritization of climate resilience investments (e.g. flood risk management infrastructure) as well as 2) preservation of Greater Monrovia's ecologically sensitive wetlands, which provide climate resilience benefits regarding flood risk management. It is expected that 11,000 people will directly benefit from enhanced flood resilience and improved urban living and working conditions.

GCA will begin enumeration of community vulnerabilities and needs in two areas of Monrovia in partnership with the World Bank and the Government of Liberia. In particular, GCA will work to build municipal and national capacity by providing training in a to-be-developed community engagement



Photo: BleagLee Waste Management

strategy to scale up this approach for other climate resilience projects in Liberia.

### **Pillar 3: Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience**

Youth awareness and involvement is crucial to the prospects of adaptation in Africa. The AAP envisages youth participation as a source of ideation, agency and enterprise in devising local and market-based ventures and creating jobs that are aligned with the wider objectives of the program. Some of these initiatives are:

#### **The African Youth Adaptation Solutions Challenge:**

In September 2021, the AAP launched the YouthADAPT Challenge, an annual competition and grant award that targets youth-led businesses to inspire and implement youth-led adaptation solutions. The aim is to harness the entrepreneurial spirit of Africa's young people. More details of the Challenge are presented in Youth and Entrepreneurship of the report.

Some significant outcomes of the Challenge include youth capacity building with 25 hours of training received, job creation with 60 jobs created, investor readiness and scaled-up business solutions, and positioning these enterprises to better access further financing to support their growth. The enterprises

have begun to show early indications of these outcomes. Some have seen their revenues rise by up to 50 percent since joining the accelerator; some have doubled their production capacity; and others are entering new markets.

The AAP is also involved in mainstreaming adaptation jobs for the youth in three AfDB projects.

- 1. Digital and Creative Enterprise Program (i-DICE), Nigeria:** i-DICE is a private sector-driven response to address existing challenges in the technology and creative industries as part of the Nigerian Government's efforts to create decent jobs for youth. Climate change, skills for employability and entrepreneurship, and start-up investment readiness and financing are important sub-components of the program. The AAP supports i-DICE by identifying opportunities to create climate adaptation-aligned jobs within the project. It also aims to identify the required skills that will be included in skill development and capacity-building programs to improve the qualification of youth for adaptation jobs. The AAP aims to generate at least 30 per cent of the total jobs created by i-DICE. This target translates into 165,600 direct jobs and 1,674,000 indirect jobs created over five years.
- 2. The Youth Enterprise Development and Capacity Building Project (YEDCB), South Sudan:** The YEDCB project aims to enhance employability and job creation for young women and men aged 18–35 years in South Sudan. Specifically, the project will address the limited entrepreneurship capacity of South Sudan's young population; unlock access to finance; create market linkages and access to information; and address the capacity challenges of government institutions for enhanced public service delivery, especially to support SME development and youth economic empowerment.

As a part of its support to the project, the AAP is driving the unveiling of entrepreneurship opportunities and jobs in climate adaptation and climate resilience across different sectors such as agriculture, manufacturing, aquaculture, and fishing, among others. Apart from assessing the opportunity to create adaptation jobs within the project, the AAP is supporting the creation of a training curriculum for adaptation-related skills in key areas. The AAP aims to create at least 1,600 of the project's 5,573 jobs target in adaptation

programs. The AAAP aims to train at least 900 youth in adaptation business development and entrepreneurship by the end of the project.

### 3. **Nigeria Special Agro-Industrial Processing Zones (SAPZ) Program:**

The SAPZ program is designed to harness Nigeria's high agricultural potential through targeted support to select agro-production zones in the country. The selected areas include the Federal Capital Territory (FCT) and seven states in Nigeria. The program will support economic and social development programs of the Federal Government of Nigeria and the participating States, contributing to rural infrastructure development, improved access to agricultural markets, increased farm productivity, and the promotion of agricultural technology, agribusiness, and job creation.

The AAAP will support the mainstreaming of adaptation jobs and skills within the various agriculture value chains by guiding the program to identify and measure adaptation jobs and supporting curriculum development and training on adaptation-aligned skills. The goal of the AAAP is to create at least 150,000 direct and indirect jobs, representing 30 per cent of the total job creation target of the program.

## **Pillar 4: Innovative Financial Initiatives for Africa**

To stimulate action on finance for climate adaptation programs, the AAAP IFI program is designing and implementing instruments and mechanisms that will encourage the private and public sectors to participate in developing these activities. It will also help African countries articulate the needs of their NDCs and long-term strategies. The IFI has identified five key areas stimulating private sector investment in developing climate change adaptation programs through its various initiatives. These include establishing pilot instruments and blended finance mechanisms that will encourage the private and public sectors to participate in adaptation investment activities and use non-financial resources such as technical knowledge. Work on these initiatives is currently progressing as follows:

**Technical Assistance Program to Access and Leverage Climate Adaptation Finance (TAP):** This program is helping countries to build capacity for adaptation finance planning and decision-making; to support the accreditation of new and existing African direct access entities (DAEs), and to develop and

submit a paradigm-shifting portfolio of adaptation projects and programs to international climate funds. Currently, TAP is supporting 14 countries with activities that include accreditation and re-accreditation of DAEs to the GCF; development of project concept notes for GCF consideration; enhancing the adaptation climate rationale of funding proposals to the GCF, the adaptation fund, and the CIFs; and climate public expenditure reviews. The TAP program is presented in detail in the chapter "Access to Global Climate Finance – The Technical Assistance Program."

### **Financial Tools Instruments and Mechanisms**

**(TIM):** This program leverages the offering and adoption of financial instruments focused on adaptation and resilience (A&R) to enable the investment of A&R projects and initiatives to mobilize finance from institutional investors in international and domestic markets. TIM offers technical assistance for structuring blended finance and capital markets solutions such as green bonds and private debt and equity funds or adopting adaptation taxonomy for traditional green lines of credit. Currently, GCA is supporting the upcoming Sustainable Sovereign Bond of the Government of Côte d'Ivoire to increase the share of adaptation investments in the use of bond proceeds. GCA supports asset management firms such as Invesco, a US\$1.6 trillion asset-management firm looking for blended finance solutions to mobilize private-sector investors to reduce the adaptation finance gap.

**The Adaptation Benefits Mechanism (ABM):** The ABM is being piloted by the AfDB and is designed to mobilize private sector finance for adaptation activities. The ABM seeks donors or philanthropic investors who are willing to purchase adaptation benefits to help meet the adaptation needs of developing countries. The revenues from the sale of the adaptation benefits are designed to address the financial barriers associated with most adaptation projects, thereby making financially unattractive adaptation projects attractive or affordable to private sector investors, impact investors and the public sector. In 2022 the Bank expects to register the first ABM pilot projects to demonstrate how the instrument will work. The ABM acts as a results-based payment mechanism in which project or activity developers have the flexibility to define the results for which they wish to be paid.



To demonstrate the ABM and to use public sector funds to leverage private sector input, the Bank is proposing to create and capitalize on the African Adaptation Benefit Fund or AABF. The AABF will be a multi-donor trust fund that will sign Adaptation Benefit Purchase Agreements (ABPA) with project developers. In return for their investments, donors to the fund will receive a basket of Certified Adaptation Benefits from registered adaptation benefit projects. In addition, funds will be used to provide technical assistance to early project developers and to support some of the running costs of the ABM Executive Committee. Once established, the ABM is expected to be self-funded through modest payments for registration and issuance. Further information on the ABM is available at [www.ABMEchanism.org](http://www.ABMEchanism.org).

#### **The African Green Financing Facilities Fund or**

**AGFFF:** The AGFFF is designed to help create and capitalize national green banks and national climate change funds in African countries. The green bank model illustrates how a financing facility, such as an existing national development bank or fund, can be capitalized using blended finance principles and can, in turn, leverage financial investment into adaptation and mitigation projects. A number of countries globally are developing green banks; at least two are under development in Africa. The AfDB has identified a pipeline of at least six countries with a clearly stated desire to create a green bank or a national climate change fund to help finance their adaptation needs.

#### **The Africa Disaster Risks Financing (ADRFi)**

**Programme:** ADRFi is a disaster risk insurance program that helps develop disaster risk insurance products and raise funds to support the payments of insurance premiums. Insurance is one of the major risk-management instruments used for managing climate change risk in the developed world, but insurance products are almost completely absent in the developing world. Subsistence farmers, in particular, are often reluctant to invest in improved seeds or fertilizers because their investment is at risk of variable climatic conditions such as poor or late rains, unseasonal temperatures and pest outbreaks. In such events, they risk losing all of their investment and so they tend to act conservatively. Furthermore, farmers typically have no experience with insurance instruments and do not understand how it operates. As a result, uptake of insurance products is often

insufficient to justify the costs of developing a product.

ADRFi seeks to address these barriers by raising awareness and educating clients, designing products and helping raise funds to pay the premiums for a short period until users become familiar with and appreciate the benefits of an insurance product. The IFI will help add ADRFi to establish a financing instrument or access other financial instruments to overcome these barriers and create insurance products to pool the risks of climate change.

#### **The African Financial Alliance on Climate Change:**

In developed countries, perceived risks tend to relate to greenhouse gas (GHG) emissions and the threat of regulations creating stranded assets and disinvestment from fossil-fueled assets, leading to efforts such as the Task Force on Climate-Related Financial Disclosure (TCFD) and the Carbon Disclosure Project. Many African financial ecosystems are more at risk from climate-related impacts and adaptation risks. The African Financial Alliance on Climate Change (AFAC) will work with all sectors of the African financial economy to raise awareness and develop standards and tools to raise the ability of African investors to manage climate risk. Private sector investors are reluctant to invest in activities that they do not understand. Adaptation activities are particularly vulnerable to this problem. AFAC will raise capacity and build awareness among the private sector of the risks associated with various kinds of investments in the face of climate change.

## **PARTNERSHIPS**

### **Partnerships and Consultations Between the AAP and African Leaders**

The AAP Partnership Approach is aligned with GCA's overall approach to partnerships as set out in its Partnerships Policy. The approach supports the three business lines of GCA on advocacy and agenda setting, knowledge acceleration, and programs and action. The AAP Partnership Approach is demand-driven, as an African-owned and African-led program stemming from its endorsement by African leaders, to actualize their vision for adaptation as set out in the AAI in COP21 Paris. These endorsements for and buy-in of the AAP are anchored in the different agenda-setting and advocacy sessions convened prior to and following the launch of the AAP in October 2020. These sessions include the following:

**May 2020, GCA and AAI Policy Dialogue:** GCA and AAI conducted a joint policy dialogue on Integrated Responses to Building Climate and Pandemic Resilience in Africa, which all 54 African leaders endorsed. The outcomes included policy recommendations on incorporating climate resilience into COVID-19 response measures; and a framework was adopted for assessing the triple dividend of health-economic-climate benefits of interventions.

**August 2020, GCA Africa Framework and Approach Engagement with AAI and the AfDB:** A GCA Africa framework and approach engagement conducted with the AAI and AfDB resulted in the following outcomes: political consultation plans were developed and implemented, and systems for sharing information and knowledge were established.

**September 2020, High-Level Launch of GCA Africa Regional Office and Partnership Forum:** The launch of the GCA Africa Regional Office and first Partnership Forum marked a key step in informing the establishment and program design of the AAAP. The Partnership Forum brought together stakeholders from across the continent to discuss how GCA Africa can support their efforts to accelerate climate adaptation, ensuring an alignment across the continent while delivering accelerated action for communities across Africa. The Forum was convened by Dr Akinwumi Adesina, President of the AfDB Group, and the Chairs of the Board of the GCA, 8th Secretary-General of the UN Ban Ki-moon and Mr Feike Sijbesma. Key highlights from the Forum included the following: 1) the presentation of the GCA Africa 2020–2021 Workplan and focus areas of the AAAP: food security, water, NBS and infrastructure, finance, and youth leadership; and 2) the agreement on the next steps following the input from the Forum, which included updating the work plan to be tailored to the most pressing needs and ongoing initiatives on the continent, and seeking additional expert review in bilateral consultation and virtual workshops where necessary.

**January 2021, Launch of the AAAP at the Climate Adaptation Summit:** The Climate Adaptation Summit 2021 featured GCA's first annual ministerial dialogue with over 50 ministers and leaders from international organizations to scale up global

cooperation to accelerate climate adaptation. During the Dialogue, the GCA and the AfDB announced that they were joining forces to use their complementary expertise, resources, and networks to launch a bold new AAAP outlining the four key areas of focus that the program will prioritize including agriculture, infrastructure, youth, and innovative finance. The launch featured key statements from Akinwumi Adesina, President of the AfDB, indicating that the launch marked the start of a bold global effort to ensure that developing countries have the climate financing they need to implement and scale up climate adaptation solutions. Speaking from the perspective of the GCA, the co-chair of the GCA Board, Feike Sijbesma, indicated that the launch of the program came from the need to develop a strategic and integrated approach to adaptation and develop bold innovations and solutions to the global challenge.

**April 2021, Leaders' Dialogue on the Africa COVID-Climate Emergency:** The Leaders' Dialogue on the Africa COVID-Climate Emergency was convened on April 6, 2021, to ramp up the needed support for climate adaptation for Africa in the wake of the COVID-19 pandemic and following the launch of the AAAP. The convening gathered over 30 heads of state and global leaders who displayed solidarity in committing to prioritize actions that help African countries adapt to the impacts of climate change and to "build forward better" through the AAAP. A key outcome of the dialogue was a strong commitment to the AAAP by leaders and partners present, with most African leaders commending the program's alignment with their national priorities.

**September 2021, GCA High-Level Dialogue on The Adaptation Acceleration Imperative for COP26:** The GCA High-Level dialogue was organized on September 6, 2021, in Rotterdam. The Dialogue was co-convened by the Chair of the GCA Board, 8th UN Secretary-General Ban Ki-moon; CEO of the GCA, Prof. Dr. Patrick Verkooijen; Managing Director of the IMF, Kristalina Georgieva; and Co-Chair of the Board, UN High-Level Climate Champion on Private Sector for COP26, Feike Sijbesma. The Dialogue gathered over 50 leaders from the international climate and development community. A key outcome from the Dialogue was an outline of vital steps needed for COP26 to serve as a springboard for an urgently needed large-scale acceleration in adaptation and



resilience building. These steps centered on the following:

- Sustaining ambition and continuing to raise ambition levels annually
- Rebuilding confidence in international climate finance and taking further steps, including leveraging pandemic recovery resources for climate financing
- Seizing opportunities to spur collaboration and partnership building while promoting bold and innovative partnership

#### **October 2021, GCA Africa Partnership Forum**

**2021:** The GCA Africa Adaptation Acceleration Day was held on October 26, 2021, building on the AAAP, to sustain momentum for adaptation across the African continent. The day featured the GCA Africa Partnership Forum 2021 with the theme “Delivering Adaptation Together,” convened as a sequel to the first Partnership Forum to focus on collaboration and partnership opportunities for implementing the AAAP, as Africa’s roadmap for enhancing key resilience-building initiatives. The Forum sought

to validate African resilience-building priorities, shed light on ongoing initiatives, and confirm alignment with these, while receiving reflections that would ensure that momentum for real and ambitious action was sustained in the build-up to COP26. The session was hosted by the Government of Kenya and the University of Nairobi with opening remarks delivered by President Uhuru Kenyatta, President of Kenya. Key outcomes from the Forum included the following:

- The launch of the State and Trends in Africa Adaptation Report 2021
- An inaugural GCA CEO’s annual lecture series on the state of adaptation acceleration with a special focus on Africa

#### **November 2021, GCA Africa Adaptation**

**Acceleration Summit:** The Africa Adaptation Acceleration Summit was held on November 2, 2021, in the margins of COP26. The largest-ever summit on adaptation, it featured over 30 African and global leaders. The Summit was organized to provide a platform for new commitments and action toward building resilience to climate change across Africa

and the AAAP; to present new contributions and innovative financial mechanisms to deliver on the global financing goals agreed as part of the Paris Agreement; and to catalyze the transformative partnerships needed to deliver the SDGs and the African Union’s Agenda 2063. The session was hosted by the President of the Democratic Republic of Congo and African Union Chairperson, His Excellency President Félix Tshisekedi, and moderated by the CEO of the GCA, Prof. Dr. Patrick Verkooijen.

Key outcomes from the Summit included:

- An endorsement by the African Union Chair and President of the DRC, President Félix Tshisekedi, of the AAAP as the preferred channel for funding climate adaptation in Africa.
- Announcement of a £20 million funding toward the AAAP by the UK Government
- Other announcements of a US\$3 billion annual funding by 2024 from the US Government toward climate adaptation for Africa
- Further calls for increased financing for Africa’s adaptation, by other leaders present
- Calls for brokering partnerships to deliver action

### Categories of AAAP Partnerships

To support GCA’s three business lines, the AAAP Partnership Approach focuses on three main

categories of partners, including Development Finance Institutions (DFIs) and MDBs, African institutions that seek access to climate funding and private financial institutions where the AAAP seeks to mainstream climate adaptation knowledge.

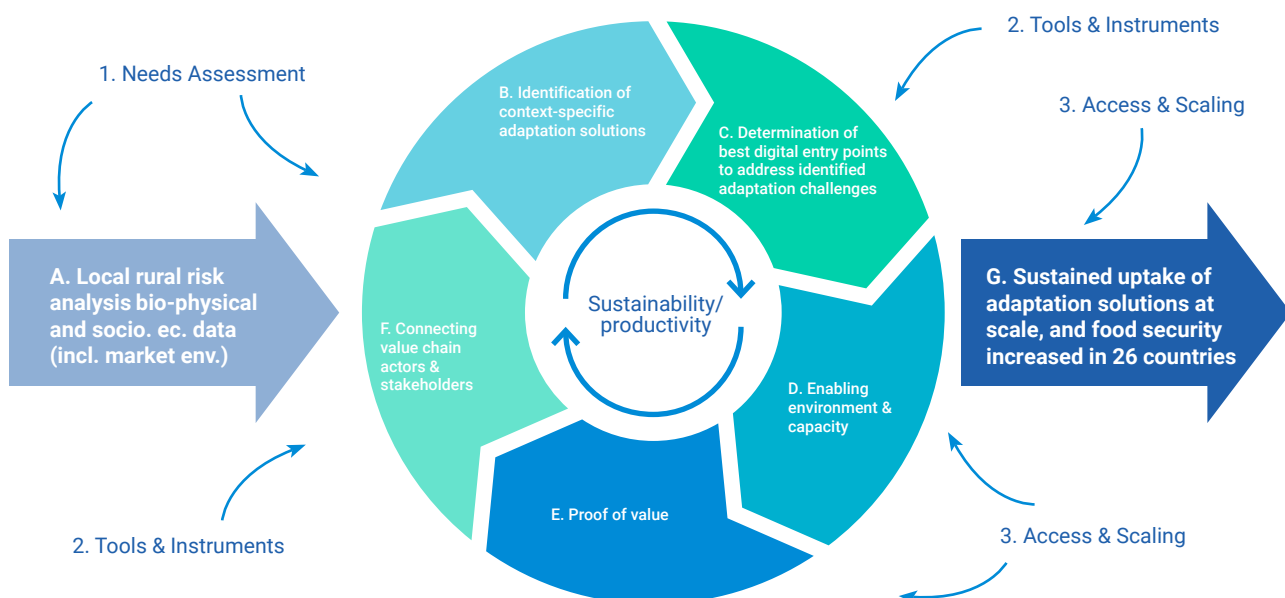
### Development Finance Institutions and Multilateral Development Banks:

The core purpose of these partnerships is to mainstream adaptation in projects, with DFIs/MDBs being the largest financiers of climate change projects in Africa. Having commenced and tested the model with the AfDB and the World Bank, efforts at building partnerships with other institutions are currently being made. Partnership agreements have already been signed with the EIB and the International Fund for Agricultural Development (IFAD), and program implementation plans are now being defined. Efforts are ongoing to sign partnership agreements with the European Bank for Reconstruction and Development (EBRD), where similar models will be tested and adopted.

### African institutions that seek access to climate funding:

This category of partners falls within the AAAP Technical Assistance Program (TAP), which aims to greatly enhance the level of adaptation finance flowing from multilateral climate funds to the African continent. It also works with African countries to carry out public expenditure reviews to

**Figure 1. Smallholder Adaptation Accelerator**



highlight budgets across different sectors that can be counted as adaptation. Institutions that the AAP enters into partnerships with include institutions that have already been accredited to receive climate finance from the GCF but require support in bringing forward proposals for financing. On the other hand, organizations that are yet to be accredited are being supported to finalize this process. These partners are spread across various geographical locations, and current active projects are in Senegal, Ghana, the DRC, and Seychelles.

**Private financial institutions where AAP will mainstream climate adaptation knowledge:** This category of partnerships seeks to leverage the capital of private sector investment and asset management firms to set up adaptation-specific funding and to mainstream climate adaptation knowledge, thereby expanding asset classes in such firms. A key example is the Invesco Ltd. asset-management firm, which is looking for blended finance solutions to scale adaptation finance with private-sector institutional investors in the most vulnerable countries. The AAP provides advisory support and promotes knowledge sharing and best practices in adaptation, including adaptation taxonomies and adaptation impact metrics to support institutional investors.

**Sub-Grantees and Implementing Partners:** In addition to the three categories of partners, the GCA utilizes partners to support the delivery of the upstream activities of the AAP. GCA matches its global expertise as the solutions broker on adaptation and resilience with on-the-ground stakeholders with specific local context knowledge with a strong track record of delivering resilience building and adaptation. To ensure this, a dedicated call for partners has been set up on a rolling basis. These partners are then brought on board in sub-grantee arrangements, following extensive assessments and evaluation of their ability to support the work of one or more pillars of the AAP and due diligence assessment of their institutional credibility. The call targets African not-for-profit organizations with extensive experience in climate adaptation and resilience building, focusing on one or more of the AAP pillars.

**Youth Entrepreneurs focused on adaptation:** GCA also works closely with a key stakeholder grouping to support the creation of good adaptation solutions in Africa by entrepreneurial youth. The AAP rolls



out a YouthADAPT Challenge, run in partnership with climate innovation centers on the continent, which equips youth-led SMEs by providing adaptation solutions to scale up their solutions and maximize embedded job creation opportunities. In addition to funding these ideas to scale, training and capacity-building on adaptation are provided to equip such entrepreneurs with starting tool packs for business delivery. In 2021, 15 businesses across several countries were winners of the Challenge and ongoing activities to hone their business management capacities are being provided.

### THE AAP UPSTREAM FINANCING FACILITY

The technical assistance, policy advice, analytical work, and capacity building work described in this chapter is supported by the AAP Upstream Financing Facility housed in the GCA. This Upstream Financing Facility supports transformational adaptation shifts at the country level, the supporting research and monitoring for rapid extraction and replication of lessons, and the policy support to steer the economic directions at the national and regional level.

The AAP Upstream Financing Facility aims to ensure with high confidence that all AAP investments are as highly effective as possible and underpinned by the best data, science, and global practice on adaptation as managed by GCA teams.



The GCA-administered Upstream Facility has an influencing funding leverage ratio of 1:100, meaning that every dollar invested in the Upstream Facility influences 100 dollars of resilient investments. In only 18 months of operation, the Facility has already helped prepare US\$3 billion of AAAP investments. GCA is mobilizing US\$250 million for this Facility over five years to bring the best global and local adaptation practice to every AAAP investment.

## KNOWLEDGE AND TOOLS

This section discusses the AAAP's achievements in knowledge generation and management for adaptation and resilience investments. Evidence-based knowledge for action continues to guide the implementation and further shaping of the AAAP.

The key knowledge products and tools developed through the AAAP activities include the following: Smallholder Adaptation Accelerator (SAA), Macroeconomic Evaluation of Adaptation, Knowledge Module on PPPs for Climate-Resilient Infrastructure, National Infrastructure Risk and Resilience Program in Ghana, City Adaptation Accelerator, Rapid Climate Risk Assessment (RCRA), Accelerator Training for SMEs, and Adaptation Jobs: A Guide for Maximizing Employment Outcomes of the AAAP. They are presented here organized under the rubric of the

respective AAAP pillars to which they are most closely tied.

## Pillar 1: Climate-Smart Digital Technologies for Agriculture and Food Security

**Smallholder Adaptation Accelerator (SAA):** The SAA was developed as an implementation vehicle for the CSDAT pillar of the AAAP. Interventions under the SAA ensure that digital technologies are designed for and targeted to smallholders and agri-SMEs, including women farmers, devise a commercially viable business model to deliver digital solutions and build the capacity of smallholders and other value-chain actors to use digital technologies in agricultural practices. The SAA describes the upstream (mainstreaming and needs assessment) and the downstream (tools and instruments) activities and the strategy to promote access and scaling required for sustained uptake at scale of climate-smart technologies. Upstream activities for mainstreaming and needs assessment center around knowledge and analytics, such as the local rural-risk analysis and identification of adaptation solutions focusing on geographic entry points for climate-smart digital technologies (A and B in Figure 1). Downstream support involves matching user needs around the supply of information and strengthening the local enabling environment and capacity (C and D). The steps to integrate the two are proof of value activities at the local level and connecting value actors and stakeholders (E and F).

**Macroeconomic Evaluation of Adaptation:** In a show of their strong resolve to act on global climate change and response to the 2015 Paris Agreement, 52 African countries submitted their NDCs by 2021 to the United Nations Framework Convention on Climate Change (UNFCCC). Almost all of these countries included NAPs in their NDCs, while six countries had developed a separate NAP. The NDCs reflect efforts by individual countries to reduce national GHG emissions and adapt to the impacts of climate change. The NAPs are strategic planning documents in which each country lays out its medium- and long-term priorities and interventions for adapting to climate change. GCA, working in partnership with AKADEMIYA2063 and national institutions in two countries (Kenya and Mali), supported the mainstreaming of adaptation into agricultural policies and expenditures by providing technical assistance to inform and facilitate the

effective implementation of NAPs as well as identify adaptation pathways and related policy options. The following tasks are being carried out:

- Defining agriculture adaptation and socioeconomic indicators at the household and community level to characterize adaptation interventions proposed under the NAPs.
- Identifying and quantifying targets and goals for adaptation in agriculture contained in country NAPs.
- Evaluating the feasibility of NAPs based on required investments and related impacts and outcomes as well as any issues regarding consistency, complementarity, and possible tradeoffs between individual adaptation goals and targets.
- Identifying alternative adaptation in agriculture pathways and related policy options to inform and facilitate the effective implementation of country NAPs.

The draft national reports on NAPs for the two countries have been prepared. The results of the Kenya report have been presented for comments and validation by stakeholders during the consultative Meeting on Country Adaptation Support Program (CASP) Kenya. About 30 participants representing the government, private sector and NGOs drawn from the agriculture, environment, energy, and other sectors participated in the meeting. A similar national consultative forum is being planned for Mali.

## **Pillar 2: African Infrastructure Resilience Accelerator**

**Knowledge Module on PPPs for Climate-Resilient Infrastructure:** Governments, including in Africa, are increasingly turning to PPPs to attract private capital for infrastructure projects and bridge the existing investment gap. Yet, while there is a strong body of knowledge on guidance for PPPs and literature on climate risks, resilience, and infrastructure, countries and practitioners lack information on how to bring those two fields together. This requires detailed quantitative data and qualitative information to develop a rigorous analysis of how infrastructure PPP projects have integrated climate adaptation and resilience, to share best practices and lessons learned and build the capacity of practitioners.

The launch of the Knowledge Modules on PPPs for Climate-Resilient Infrastructure helped address this gap by providing a pragmatic step toward helping countries draw the private sector into financing climate-resilient infrastructure. The first Masterclass for Climate-Resilient Infrastructure PPPs ensures that GCA's innovative work can be transferred to drive longer-term change in the systems that currently design and finance infrastructure investments in Africa. It includes the delivery of two knowledge products on NBS and Locally Led Action (LLA), which enable PPP practitioners to build climate resilience and NBS for infrastructure into the design of PPP projects.

### **Results of the National Infrastructure Risk and Resilience Program in Ghana:**

The national assessment was initiated by GCA and developed under the leadership of the Ministry of Environment, Science, Technology and Environment (MESTI) in collaboration with the University of Oxford, the United Nations Office for Project Services (UNOPS), and the United Nations Environment Programme (UNEP). The national assessment focused on the energy, transport and water sectors to assess climate hazards to infrastructure assets and to prioritize adaptation investments to address those risks. It proposed 35 prioritized adaptation options for funders and investors to invest in Ghana's future, offering impactful, evidence-based adaptation projects and enabling environment interventions backed by robust research and analysis.

The insights from this initiative are already influencing investments on the ground. For example, the analysis identified districts needing to shift energy generation from traditional biomass, which is vulnerable to changing climate conditions, to more resilient energy systems. Solar mini-grids were proposed as a solution to help build the resilience of communities, particularly in Volta, Brong Ahafo, and the northern regions of the country. GCA is working with the AfDB on the Scaling Up Renewable Energy Program (SREP) in Ghana to prioritize districts and communities that are most vulnerable while providing technical support to ensure that the physical assets (mini-grids and solar photovoltaic (PV) net-metering systems) are resilient. Finally, the data and recommendations from this national infrastructure assessment are also being integrated into the Ghana NAP.

**City Adaptation Accelerator (CAA):** The CAA creates a shared strategic framework for GCA's engagement in climate adaptation and resilience building in urban areas. The development objective of the CAA is to support cities and countries to strengthen their urban climate adaptation and resilience outcomes through enhanced understanding, planning, investments and governance and capacity building. To build urban resilience, the CAA provides support to cities and countries along the following pathway:

- **Focus cities (and countries) are identified:** City identification will be done through scoping studies, partner consultation, in particular MDBs, as well as water adaptation community (WAC) awareness-raising and experience exchange.
- **All relevant stakeholders agree on the need for adaptation and have process ownership:** Ensuring buy-in among a broad set of stakeholders, including, inter alia, municipal and national governments, local communities, and civil society, requires stakeholder mapping and agreement on the climate adaptation process to be pursued. This will entail community involvement in decision-making, as covered under the LLA toolkit.
- **The target city's situation is well understood:** This involves 1) comprehensive and RCRAs; 2) identifying opportunities and challenges related to policies, institutions, regulations (PIRs) and governance systems at national and local levels; 3) determining the efficiency of public expenditures; and 4) identifying adaptation hotspots, which include cost-benefits analysis and the weighing of tradeoffs between priorities.
- **A comprehensive climate adaptation strategy and prioritization plan are developed:** This entails strategic development surrounding climate adaptation master planning as well as capacity building in climate adaptation planning.
- **'Bankable' projects are designed, prepared and implemented:** CAA will provide technical assistance in delivering discrete, high-impact outputs to strengthen the design, preparation and implementation of climate adaptation projects. This work will be done through programs such as AAAP and AIRA and in close coordination with the GCA Climate Finance and Infrastructure/NbS team to ensure proposed solutions are financeable and of interest to potential financiers.

- **Knowledge is retained and shared with other cities:** This entails peer-to-peer learning, experience exchange and speaker series to fill knowledge gaps through WAC. Examples of good practice and tips of the trade to public sector workers, development professionals and local community leaders working on climate adaptation will be codified in knowledge notes.

Currently, the CAA is providing support to cities in Bangladesh, Chad, Ghana, Tunisia, Liberia, Sierra Leone, Madagascar, Tanzania, Guinea, Gabon, and Senegal.

**Rapid Climate Risk Assessment:** Africa is home to 86 of the 100 fastest-growing cities in the world, with a large number of these cities (79) falling within the "extreme risk" category of the Climate Change Vulnerability Index (CCVI). A total of 15 African capitals, and many of the continent's key commercial hubs, have significant combined risk factors stemming from rapid population, economic growth and climate risk. Understanding climate risk is key to building urban resilience. However, extensive and in-depth climate risk assessments are resource- and time-intensive. Therefore, building on the efforts of other organizations such as C40 and others, GCA has developed and implemented RCRAs.

The RCRAs consist of three sections: **City Scan**, which provides a rapid review of what has been done in the respective city regarding climate hazard and risk assessments, as well as more locally focused assessments of vulnerability and adaptive capacity. It will also provide a clearer picture of the city's water urban adaptation and resilience ambitions, strategies, plans and specific priorities. **RCRA** to provide an overview of the key climate hazards and associated risks that a city faces and to inform the decision whether an in-depth climate risk assessment is required. **City Scoping** to provide insight into past and current initiatives relevant for adaptation and resilience building and identify key stakeholders and relevant initiatives. To date, GCA has carried out RCRAs in Antananarivo (Madagascar), Bizerte (Tunisia), Conakry (Guinea), Dodoma (Tanzania), and Libreville (Gabon). These assessments are feeding into the identification of investment projects by AfDB.



### Pillar 3: Empowering Youth for Entrepreneurship and Job Creation in Climate Adaptation and Resilience

**Accelerator Training for SMEs:** The training for SMEs in climate adaptation was developed as part of the YouthADAPT Challenge accelerator program to provide the specialized adaptation and resilience and business knowledge required by SMEs emerging in the ecosystem. The course was split into core business knowledge and climate adaptation segments, including financial management, investor readiness, marketing, adaptation fundamentals, climate risks, and business and adaptation finance. Winners of the 2021 YouthADAPT Challenge are benefiting from the 12-month business accelerator program to help them scale up their businesses, deepen their impact and create decent jobs. In addition, the winning youth-led enterprises receive training, mentorship, and support to expand partnerships, knowledge sharing, and learning through a network of young entrepreneurs in climate adaptation.

**Adaptation Jobs: A Guide for Maximizing Employment Outcomes of the AAAP:** The AAAP, through the GCA, is collaborating with the International Labor Organization to develop a guide for maximizing employment outcomes. The guide's main objective is to provide policy and practical guidance on how AAAP investments can be designed, structured and monitored to maximize employment outcomes. This guide will support stakeholders, including AAAP program staff as well as officials and policymakers in partner countries involved in the four pillars of the AAAP.

### Pillar 4: Innovative Financial Initiatives for Africa

Under the IFI pillar, three knowledge products have been developed:

**Financial Innovation for Climate Adaptation in Africa:** This report provided an overview of existing adaptation finance flows in Africa. The report also identified opportunities to increase the volume and efficacy of that finance. The report was launched at the Africa Adaptation Acceleration Day and presented in different forums such as Africa Climate Finance Week and COP 26 Africa Pavilion.

### Green Bonds for Climate Resilience and Issuer's

**Guide:** This guide aims to deepen the current understanding of the state of play of green bonds financing climate resilience-related assets, projects, and activities. The report contains an overview of the global state of green bonds with resilience-related proceeds, including highlights from Africa. The barriers to issuing resilience-related green bonds in four case-study countries, and recommendations on overcoming these barriers, were also detailed. An analytical tool, the Green Bonds for Climate Resilience Capacity Assessment Framework, has been developed to inform this analysis. Public and corporate issuers can use it to assess their internal capacity and external enablers to issue Green Bonds for Climate Resilience. A roadmap to scale up this promising tool is presented based on the research and findings.

The report was launched at the High-Level Dialogue on Climate Adaptation with Global Leaders ahead of COP26 and at the Green Bonds Conference 2021, Unlocking Trillions for a Resilient Future. Further, as a result of this report, GCA engaged in 2021 with the Government of Côte d'Ivoire to support them on a potential issuance of Sovereign Green Bonds in 2022, where GCA will support the adaptation components of the bond.

**The Climate Risk Regulation in Africa's Financial Sector and Related Private Sector Initiatives** report provided all stakeholders (both authorities and private sector players) with an understanding of:

- The state of integration of climate-related risks in the financial system on the African continent, focusing on 10 countries
- The financial stability architecture of the selected countries
- Regulations on climate-related risks by regulatory bodies and private sector initiatives.

The report highlights current challenges hindering the integration of climate risk by financial sector authorities, and offers recommendations for potential areas of support. To assess the status of climate risk integration, 25 interviews were completed with 11 financial sector authorities and 14 sizeable private sector players (banks and insurers), covering 19 countries in total. The report was launched at the

High-Level Dialogue on Climate Adaptation with Global Leaders ahead of COP26.

## FUTURE PLANS FOR THE AAAP

This section summarizes the plans of the AAAP, focusing on the evolution of business lines, expanding partners, and global connections with other regions.

**Evolution of business lines:** As GCA and partners gain experience through project implementation on the business lines, the intention is for GCA to evolve toward new challenges once partners mainstream the tools into their institutions and work programs. The AAAP aims to evolve constantly as African countries' priorities and financial needs are further refined.

For example, under the CSDAT pillar, the AAAP will continue to provide technical assistance to identify digital tools to support the mainstreaming of adaptation into investment projects of international financial institutions dealing with agriculture; use the experience gathered so far from ongoing projects to launch new project interventions and partnerships as may be appropriate in the Central and North Africa region; and initiate steps to expand the range of international financial institutions by engaging in discussions on new projects with other international financial institutions and DFIs, such as IFAD and the French Development Agency (AFD).

Under the AIRA pillar, the Infrastructure and NBS program and the Urban and Water programs will continue to provide technical assistance and capacity-building support to integrate climate adaptation and resilience into infrastructure projects across the African continent. Building on GCA's experiences in Ghana and Bangladesh, the national infrastructure risk and resilience assessments will be scaled up to other African countries, starting with Kenya and Senegal. These national programs will support the prioritization of adaptation investment options to be financed by implementation partners such as international financial institutions, development partners, and climate funds.

The City Adaptation Accelerator will continue to expand and, based on these learning opportunities, develop a set of tools and methodologies to

support urban resilience building. Examples of these tools are: the Locally Led Adaptation Toolkit for Urban Informal Settlements, the RCRA, the investment prioritization tool, the climate vulnerability assessment, and so on. A similar strategic framework will be developed for the Water program.

The AAAP will work with MDBs to integrate adaptation and resilience, focusing on NBS, into downstream investment projects. The portfolio will be diversified to further include projects in transport and logistics, urban infrastructure services, infrastructure for agriculture services, renewable energy, and information and communications technology (ICT). This will include the development of innovative solutions in disruptive technologies for infrastructure solutions and in the structuring of NBS investment cases. Further, the Masterclasses on Climate-Resilient PPPs will be scaled up through local institutions to ensure sustainability and reach a wider audience over time while supporting capacity building for AAAP projects.

**Expanding partners:** GCA is gradually expanding its partners, such as the AFD and other financiers, to influence and scale up the mainstreaming of climate adaptation. The AAAP will also have closer interaction with the GCA Research for Innovation team and, through them, with academia to bring the latest science and learning into the AAAP programs. GCA is also calling for partnerships through which the upstream activities of the AAAP will be delivered. This is targeted at African not-for-profit institutions with an excellent track record of working in the field of Africa's climate change adaptation and resilience.

**Global connections with other regions:** The AAAP has been set up to serve as a vehicle to mobilize US\$25 billion of adaptation investments in Africa. Drawing from this practical experience, GCA will work with partners to scale up the model of AAAP to other regions in the world, including South Asia and Small Islands and Developing States. Also, through the Global Hub on Locally Led Adaptation, GCA seeks to work with institutions that have experience in successfully promoting and scaling up Locally Led Adaptation.