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Climate Change Adaptation in Africa

**UNDP Synthesis of
Experiences and
Recommendations**





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Dedicated to Mame, with sincere gratitude.

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FOREWORD

Supporting bold, innovative approaches in Africa for low-carbon climate-resilient development

Africa has achieved impressive economic, political and social growth in recent decades. Yet, there are still high disparities between the rich and poor. Poverty, while reduced, remains a serious issue in many countries. And climate change, droughts, floods, changing rainfall patterns and conflict have the potential to unravel efforts to reduce hunger and achieve the goals outlined in the Paris Agreement and 2030 Agenda for Sustainable Development.

Africa has vast resources and talents that can be activated to reach these goals. Given the real and present threat that climate change poses, the time is now to support bold, innovative approaches to foster low-carbon climate-resilient development across sub-Saharan Africa and the rest of the continent.

Make no doubt about it, climate change is one of the largest risk multipliers for the people, environment and stability of the continent. Temperatures in Africa are projected to rise faster than the global average during the 21st century. By 2050, temperature extremes are expected to breach today's levels by 2 °C. In tropical western Africa and the Sahel, this projection raises to 4 to 6 °C by the end of the 21st century.

Predicted changes to rainfall regimes indicate that southern African will become drier, and eastern and western Africa will become wetter, with more intense rain and increased risk of floods. Some projections indicate that 250 million Africans could face water shortages by 2020 if nothing is done – and done quickly. One need only look to the recent water crisis in South Africa or the food crisis in the Sahel to see that this is a serious threat, not only for the region but also for our global economy as a whole.

The trickle-down impacts of such climatic changes are wide-ranging. At a fundamental level, climate change will interact with baseline stresses that, in many cases, are the primary drivers of vulnerability and poverty. Water resources will be subject to much larger pressures due to popula-

tion growth, urbanization, agricultural growth and land-use change.

Africa's food production systems are currently among the world's most vulnerable. Six out of ten people rely on agriculture for their livelihoods. With international food prices expected to rise due to climate change and somewhere around 9 billion mouths to feed by 2050, the time to transform agriculture in Africa is now.

Understanding the impacts of climate change on development priorities in Africa – and adapting economies, societies, natural resource management practices, energy investments, budgets and policies to its expected and uncertain consequences – is essential in the pursuit of sustainable development and improved climate governance.

In many ways, this work is already underway. With funding from donors such as the Global Environment Facility Least Developed Countries Fund, Adaptation Fund and bilateral sources, African nations have made important strides in piloting climate-resilience initiatives. This work means diversified incomes on the farm, and greater access to irrigation and climate-resilient seeds and planting techniques. It means better climate information and early warning systems that will save lives and protect productive assets, and it means stronger institutions with the training, tools and technology they need to succeed in the monumental task of transforming a continent and rising to the significant risks posed by a changing climate.

As nations across the region take steps to fulfil

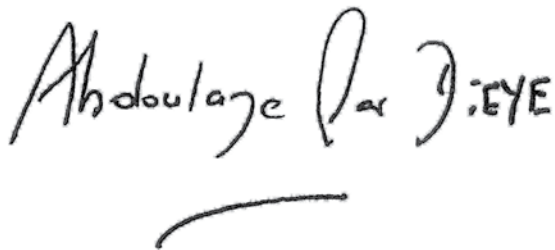
their Nationally Determined Contributions to the Paris Agreement, and reach bold goals for poverty reduction, food security, gender equality and more, it will be essential to mainstream and accelerate these pilot initiatives while at the same time providing the policy support needed to ensure the sustainability of these investments.

The support from the Global Environment Facility Least Developed Countries Fund (GEF-LDCF) has been essential in laying the foundation for countries across the region to successfully incubate climate resilience initiatives and build a long-term vision for climate-resilient economies, societies and ecosystems. Many of these countries are now attracting climate finance from other financial resources, such as the Green Climate Fund (GCF), to allow for the effective scaling up of climate resilience efforts across the continent.

This mainstreaming and acceleration of climate

resilience initiatives works in alignment with UNDP's new strategic plan, notable efforts to foster collaboration across the United Nations Development System, and support to countries throughout sub-Saharan Africa to access new climate finance from GCF. Equally as important, through this support, countries in Africa are also finding new innovative ways to activate the private sector and co-financing agreements. This work will support the scaling-up of climate services in Malawi, resilient agriculture in Zambia, wetlands preservation in Uganda, and the low-carbon transformation of Mauritius's economy.

This report provides an overview of several successful initiatives on climate change adaptation that UNDP supported in sub-Saharan Africa from 2000 to 2015. These signposts lay the groundwork needed to tap Africa's vast resources and human talents to transform the continent and ensure a brighter future for generations to come.



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Photo: UNDP Benin



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At the forefront of resilience to climate change

As a designated financial mechanism of the United Nations Framework Convention on Climate Change, the Global Environment Facility (GEF) continues to be at the forefront of international efforts to strengthen developing countries' resilience to climate change.

Adaptation to the adverse impacts of climate change is urgent and indispensable to safeguard development gains and to address the needs of the poor and the vulnerable. Healthy systems that are resilient to disruptions, shocks, and stressors are critical in achieving not only environmental benefits but also serve as a foundation for economic and human development. Climate resilience is a key component of any healthy system, particularly in vulnerable countries that depend heavily on climate sensitive natural resources and traditional agricultural practices for subsistence and livelihoods.

Least developed countries in Africa are among the most vulnerable to climate change, yet the least able to adapt. In many cases, they lack the technical, financial and institutional capacity to identify the best ways to build resilience. With around US\$1.3 billion of voluntary contributions from donors, the Global Environment Facility Least Developed Countries Fund (GEF-LDCF) holds the largest portfolio of adaptation projects in the Least Developed Countries. With a renewed focus on implementation, the LDCF builds on its track record of leaving no one behind.

But environmental and climate threats are growing on a global scale. There is a significant overlap of countries which are characterized as fragile, or conflict affected, and

those categorized as LDCs. Given this, addressing fragility is especially important to the LDCF, which has provided and will continue to provide financing for the urgent and long-term adaptation needs of these countries. Going forward, the GEF will fulfil the mandate it was given by the Paris Agreement by continuing to demonstrate leadership with emerging issues in adaptation, help developing countries to mainstream climate considerations and resilience into relevant policies, plans and associated processes, and by supporting a reduction of the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change, toward maintaining a safe operating space for humanity.

Africa is home to over 50 nations, with more than 1 billion people, and is rising as a global powerhouse. For over 20 years, the GEF and its partners have implemented projects that have contributed to shifting Africa's future towards more sustainable development. The GEF is therefore delighted to co-publish this important synthesis report together with UNDP, highlighting some of the results of the GEF Adaptation Programme in Africa. I am looking forward to our continued collaboration to support the most vulnerable countries to cope with the impacts of climate change and reach their development priorities in a sustainable, resilient and environmentally sound fashion.



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EXECUTIVE SUMMARY

Africa is at a tipping point. While efforts to achieve the goals outlined in the 2030 Agenda for Sustainable Development and Paris Agreement could drive positive changes following nearly a decade of economic growth across Africa, climate change threatens to derail these gains. Given that temperatures in Africa are rising, and are set to rise faster than the global average during the 21st Century, it is time to mainstream, scale-up and accelerate support for climate change adaptation across the continent. Recent studies indicate it is likely that the true costs of adaptation will be substantially higher than originally projected and will require creative financial mechanisms and substantial engagement with the private sector to meet. While initial climate change adaptation initiatives show good potential for economic viability, livelihood enhancement and vulnerability reduction, long-term sustainability will depend on the prevailing levels of poverty, the wider context of policies and regulations, access to markets and financial services, as well as government capacity to provide continuous technical support to communities. This indicates that baseline development is still required to reach targets for poverty reduction and climate action in Africa. Building on the lessons learned from over a decade pioneering adaptation in Africa, a new generation of climate change adaptation initiatives are coming on board. To be successful, these projects will need to enhance adaptive capacity, improved decision making, access to markets, policy mainstreaming and evidence-based decision making.

The time for action is now

Real steps need to be taken to empower the nations of Africa to build their resilience to the threats that climate change brings. Left unchecked, these threats will erode long-term opportunities for human development, undermining human productivity and capability. They have the potential to create new famines and undermine global efforts to achieve “No Hunger and No Poverty” by 2030. In turn, high levels of poverty and low levels of human development limit the capacity of poor people to manage climate risks, placing further stress on already overstretched coping mechanisms that will perpetuate poverty traps. Taken together, this means the potential for an increase in eco-migrants, disease outbreaks such as the Ebola outbreak in West Africa from 2014 to 2016, and increased instability.

dollars in lost GDP, and syphons off government resources that should be dedicated to education, social programmes, healthcare, business development and employment.

Taken on a human level, while the people of Africa have much to lose from climate impacts, they contributed very little to climate change. The collective agreement to protect our people and our planet signed on by 195 parties in Paris in 2015 provides a global compromise to support the nations of Africa in promoting low-carbon development, while at the same time looking toward continued economic and social development, and a long-term vision for stability, peace and prosperity across the continent.

Reaching the goals for a more peaceful and prosperous Africa will require concerted efforts from the global community, vertical and bilateral funds, the private sector

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