The Payne Institute for Public Policy
COLORADO SCHOOL OF MINES

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Strategy and Planning to Redouble Climate Adaptation in Africa

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1. Context[1]

Mounting evidence continues to show that Africa is the most vulnerable continent to the adverse impacts of climate change. According to the ND-GAIN vulnerability ratings Index, an internationally recognized index of vulnerability to climate change, out of the world's top 10 most vulnerable countries worldwide, eight are in Africa[1].

Increased temperatures have already contributed to an estimated 34 percent reduction in agricultural productivity in Africa since 1961—more than any other region in the world[2]. According to the World Meteorological Organization, Africa has been losing between US$7 billion and US$15 billion every year since 2020 due to the devastating effects of climate change—projected to rise to about US$50 billion per year by 2030[3]. Extreme weather conditions are exacerbating existing inequalities in health, income, employment, and gender—affecting millions of people.

Ramping up climate finance flows for adaptation is critical to addressing the irreversible impacts of climate change, but financing alone will not be enough to protect the continent. Having a clear set of priorities, with institutions that have the capacity to plan properly and take adaptation actions at scale, is equally important.

This viewpoint reviews the readiness of African countries to identify and implement priority adaptation investments. It assesses the adaptation components of national strategic adaptation documents prepared by African governments. The national strategic adaptation documents analysed in this viewpoint are Nationally Determined Contributions (NDCs), the key documents that emerged from the Paris Climate Agreement; National Adaptation Plans (NAPs), a UNFCCC-led instrument to drive and coordinate national adaptation actions; and long-term strategies (LTSs), that help countries articulate a national vision for a climate-resilient society.

[1] This viewpoint is based on the Global Center on Adaptation's (GCA) report: Strategy and Planning to Redouble Adaptation in Africa – A Review (Rotterdam, 2023). https://gca.org/reports/strategy-and-planning-to-redouble-adaptation-in-africa-a-review/

This viewpoint examines the depth and coverage of these strategic adaptation plans, and the degree to which these documents demonstrate a supportive environment (including policies, institutions, and programs) to implement the most critical adaptation programs at scale for each country.

2. Why does Climate Adaptation Action Requires Strong Planning and Institutions?

Planning is crucial for governments when making strategic choices climate adaptation policies and programs. Climate change is a complex challenge affecting all of society. Developing effective adaptation strategies requires careful consideration of these interconnections and potential trade-offs. Adaptation action likewise involves multiple levels of government and stakeholder engagement. Planning provides a structured approach to ensure that policies are consistent and complementary, avoiding the duplication of efforts and ensuring coordination among actors.

By identifying priority areas and allocating resources based on the most pressing adaptation needs, governments can maximize the impact of their efforts and ensure the allocation of resources is efficient. This is particularly important when resources are limited.

Planning allows countries to define and implement the preferred climate-adapted economic growth trajectory to help reduce the negative economic effects of climate-related shocks with informed trade-offs. Planning helps identify vulnerable areas, populations, and sectors which in turn helps develop targeted policies and programs to reduce risks and enhance resilience.

Strategic adaptation documents are a key planning tool used by governments to address the impacts of climate change. Africa has made significant progress in developing strategic adaptation documents, but challenges remain in attracting investment and translating these plans into action.

3. How Prepared is Africa When it Comes to Adaptation Planning?

Africa has made good progress in developing national strategies for adaptation embedded in the NDCs and NAPs. All but one country have completed their NDCs, and close to one-third have submitted their NAPs. Nevertheless, the breadth and depth of these strategic documents and the quality of the enabling environment to support adaptation investments varies.

To analyse this variation and identify good practices, we used five adaptation-relevant areas of analysis: institutional arrangements; development of sectoral plans; finance needs estimates; links between adaptation with disaster risk reduction efforts; and monitoring and evaluation for adaptation goals. These are priority areas of governance and planning in forming an effective enabling environment for investment (See Figure 1).

The analysis shows that about half of African nations have a good or better environment for adaptation investments. Furthermore, seven of the 53 African countries included in the study can be classified as having best practices in the continent including: clear institutional mandates; priority sectors identified; adaptation costs estimated; timelines indicated; and specific adaptation goals stated (See Figure 2). These countries are ready to absorb financing and implement adaptation programs at scale.

Figure 1: Five Priority areas of Governance and Planning

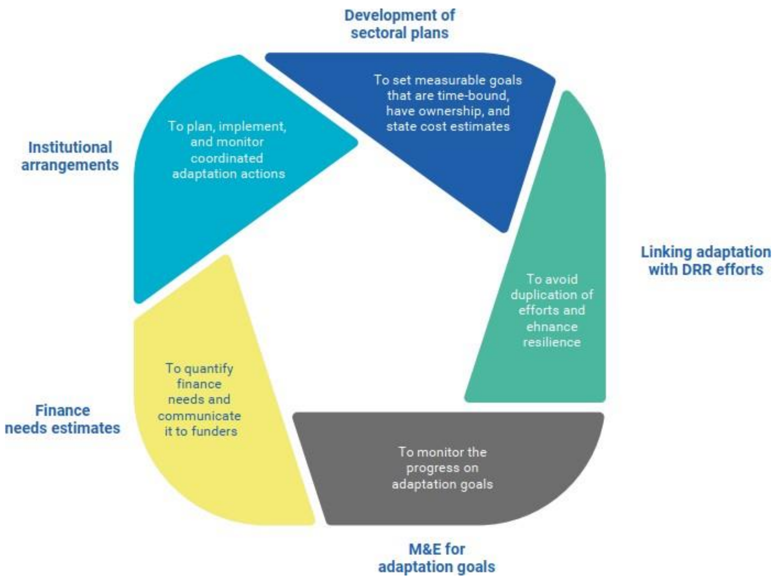
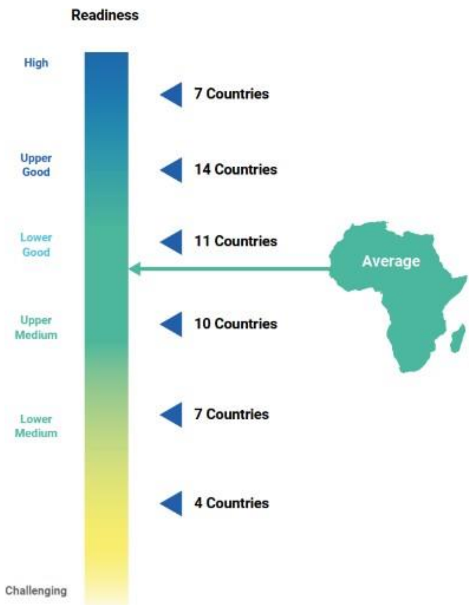


Figure 2: Countries' Level of Enabling Environment for Investment Readiness



The study reveals a notable overall trend where higher vulnerability and lower income often correspond with a favourable enabling environment for attracting adaptation investments. Five of the seven countries with the highest adaptation-enabling environment were low-income countries. Additionally, out of the 14 countries with an upper good adaptation enabling environment, 10 were low-income countries. Conversely, three out of the four countries facing challenging environments for adaptation were upper-middle-income countries (See Table 1).

This sheds light on one critical aspect; countries with high vulnerability and low-income levels, where adaptation investments are most urgently required, also exhibit the highest potential for successful adaptation investments. These countries generally have higher-quality adaptation strategy documents; many of them have done the homework needed to attract global and regional public and private investors in adaptation.

Table 1: Income Level Groups by Investment Readiness Analysis Categories

Investment Readiness Level	Income Level Groups			
	High	Upper Middle	Lower Middle	Low
High		1	1	5
Upper Good			5	10
Lower Good		1	6	4
Upper Medium	1	1	5	3
Lower Medium			5	2
Challenging		3	1	

4. Upacking the Environment for Adaptation in Strategic Documents: Showcasing best Practices

Close to one-third of African countries have a relatively mature institutional framework for climate adaptation action, that involves other ministries and branches of government. Another 11 countries have taken the initial step to designate a clear ministry or agency responsible for leading their climate-related initiatives.

For example, in Tanzania, the Vice President's Office holds the responsibility for monitoring and evaluation of environmental aspects relating to NDC implementation. Additionally, the National Climate Change Steering Committee and the Zanzibar Climate Change Steering Committee play a pivotal role in guiding the coordination and execution of the NDC. Their functions encompass providing policy guidance, ensuring action coordination, and facilitating cross-sectoral participation. Another good practice is provided by Cameroon, which has incorporated religious and tribal chiefs into its climate institutional framework. This not only ensures the reach of adaptation readiness at the community level but also provides a more effective means of doing so.

Among the 50 countries with identified priority sectors in their strategic adaptation documents, 18 provide measurable goals to be achieved within their respective sectors. For example, Madagascar and Kenya have well-defined priority sectors and goals that are time-bound, demonstrate ownership, and include financial requirements. Senegal has adopted an interesting approach with flexible and adaptable goals based on a short-term warming horizon of 2°C and a long-term, more challenging 4°C temperature rise. With comprehensive plans for both scenarios, Senegal has mainstreamed these into short-, middle-, and long-term plans for adaptation and development.

A critical finding is that the full power of adaptation goals and measures requires a well-functioning monitoring and evaluation system, but only 17 countries in Africa have a basic one. Kenya has successfully developed an integrated Measuring, Reporting, and Verification (MRV) system along with integrated MRV tools for adaptation actions, and a good alignment with the institutions and actors involved in adaptation efforts. Importantly, the report generated for the MRV system is a collaborative effort, involving both state and non-state actors.

5. Insufficient Financial Needs Assessment in Strategic Adaptation Documents

Our analysis found that 22 African countries excelled in providing detailed information regarding the financial resources needed to implement their specific adaptation goals. For example, Angola provides cost estimates for adaptation action by sector and type of commitment (conditional and unconditional) and, further, has outlined specific strategies for mobilizing the necessary resources, including domestic funding mechanisms and potential avenues for international cooperation.

There is, however, much work ahead to analyse the adaptation needs of economic sectors and calculate financing needs. A total of 31 African countries have not undertaken this calculation. Including financial needs in NDCs and NAPs allows countries to strategically plan and prioritize their adaptation actions. This information is crucial for attracting support and mobilizing resources from international donors, development agencies, and financial institutions.

6. Linking Adaptation with Disaster Risk Reduction

Climate and disaster risks are growing faster than our collective efforts to build resilience. The consequences of not anticipating, reducing, and managing disaster risks before they manifest as shocks can be dire for societies, livelihoods, and the ecosystems on which we depend. Disaster risk reduction (DRR) cannot occur without the use of climate data; equally, successful climate change adaptation depends on risk reduction. The integration of DRR into adaptation planning documents is thus crucial.

Despite these linkages, less than 40 percent of African countries in the study had tangible links between their DRR initiatives and their adaptation strategies. The institutional arrangements and priority investments are rarely integrated.

Nine countries identified adaptation measures or goals that are synergetic with DRR within their priority sectors. Some of these measures were geared toward creating Early Warning Systems and strengthening the capacity of monitoring, forecasting, and analysis to minimize damages within sectors. Other measures focused on post-disaster impacts by delineating the importance of setting up social protection tools (e.g., a national solidarity fund to support those impacted). Some measures focused on public education and awareness raising concerning security and resilience to natural disasters and humanitarian crises. On the other hand, there seemed to be few mentions of developing climate-resilient infrastructure services to adapt sectors to the impacts of disasters.

Twenty-one countries communicated DRR as a separate priory sector within their adaptation contributions. Of these, 18 countries expressed qualitative actions and goals, with various levels of details, for example, "Promoting integrated disaster risk management" (Tanzania), "Enhanced coordination and information-sharing between relevant ministries and stakeholders" (Somalia), and "Improved early warning dissemination system at local level" (Mozambique). Some qualitative goals are provided with indicators, thus are measurable, though without a target.

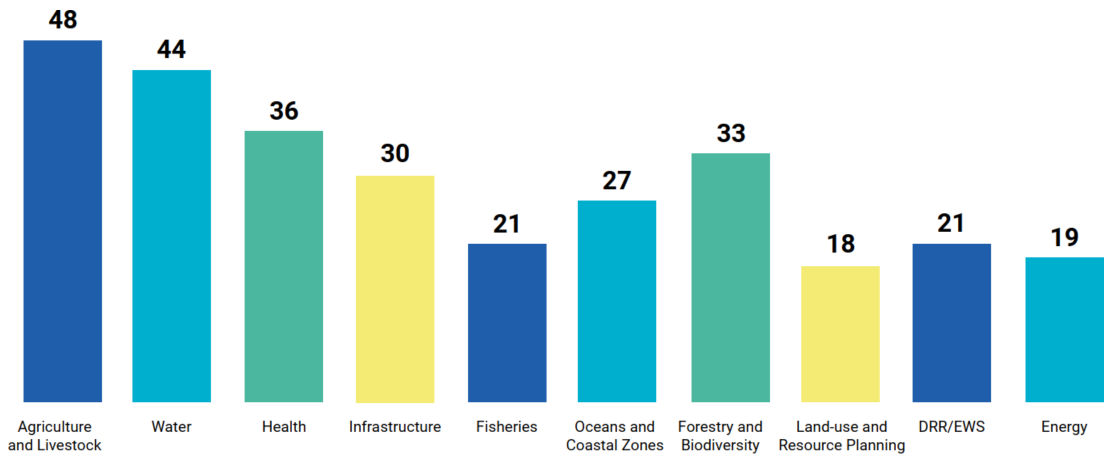
Only three countries included measurable goals with a quantified target within their DRR priority sector. Ethiopia, for example, aims to increase the number of modern weather monitoring stations from 325 (baseline 2018) to 806 by 2030. Uganda aims to increase automation of their weather and climate network from 62 percent (baseline) to 82 percent by 2025, to help build more effective warning systems. South Sudan outlines a strategy focusing on strengthening early warning systems, with a goal to rehabilitate five national disaster risk management centers in the medium term, and outlined a strong institutional framework for DRR across its strategic adaptation documents.

Our study highlights a continent-wide need for a concerted effort by countries to improve CCA and DRR alignment to develop a comprehensive risk management approach. Using joint analysis and integrated planning can help streamline actions and avoid duplication of efforts.

7. Priority Sectors and Themes

Across NDCs and NAPs, the three most frequently identified prioritized sectors, areas, or pillars for adaptation were Agriculture and Livestock (48), Water (44), and Health (36) (See Figure 3).

Figure 3. Key Adaptation Priority Sectors Mentioned Across NDCs and NAPs for Africa



However, some important economic sectors that are vulnerable to climate change have not yet received sufficient attention and prioritization. One-third of African coastal nations have not prioritized adaptation actions in their blue economies. Only 15 countries in the region identify tourism as a priority sector in adaptation actions. There is a need for greater incorporation of human settlements and infrastructure into adaptation planning.

Of the 37 African coastal countries, 11 did not communicate blue economy or coastal erosion actions in their NDCs and NAPs**.** Coastal erosion is among the fastest in North and West Afric[4]. Blue economy sectors, like tourism and fisheries, rely on rich coastal ecosystems and the services they provide, such as protection from floods and erosion, fish nurseries, and recreation. Their healthy functioning not only provides great economic opportunity but is also intrinsically tied to the wellbeing and livelihoods of local communities.

There are, however, good practice examples such as Mauritius, which has a mature institutional approach to the blue economy. Seychelles has a comprehensive coastal management plan with an integrated blue economy approach, with Resilience to Blue Carbon Ecosystems as a priority sector in the NDC.

Tourism is one of the primary industries driving growth and job creation in many of the world's emerging economies[5]. According to the United Nations World Tourism Organization (UNWTO), before the Covid 19 pandemic, the sector contributed 10.4 percent to the global GDP and about 7 percent of Africa's GDP[6]. Tourism is highly vulnerable to climate change.[7]. However, only 15 African countries identified tourism as a key sector for adaptation. Of the countries with a prioritized tourism sector plan, some only offered broad goals and general statements, while a few took a step further and presented concrete ideas for adapting their tourism sector.

Examples of good practices include The Congo, who expressed interest in preserving and fostering the handicraft sector by ensuring a steady supply of sustainable raw materials and organizing competitions to encourage local artisans. Malawi is actively working on the development of a comprehensive tourism crisis management strategy and plan.

Our study found that only 17 countries mention human settlements as priority sectors for adaptation. African nations' climate risk is increasingly being concentrated in cities, where rapidly growing populations, assets, and economic activity are becoming exposed to climate hazards. Despite this, there remains a unique opportunity to get things right, as much of Sub-Saharan Africa (approximately 40 percent) is still in the early stages of urbanization.

Key cross-sectoral themes also require prioritization, such as youth, jobs, and inclusion. The study found that NDCs and NAPs generally included consultation processes with local communities for the formulation of documents but lacked clarity regarding participation in the planning and implementation phases of adaptation measures. Adaptation measures have shown to be more successful and sustainable if there is a sense of ownership among local communities and vulnerable populations. Thus, youth, jobs, and locally led adaptation are themes that need more attention in Africa's adaptation strategies.

8. New Tools to Help Policymakers

The World Bank and the IMF have developed new instruments that can support policymakers to strengthen institutions and policies on climate change.

The World Bank has developed a new core analytical tool called the Country Climate and Development Report (CCDR) that analyses the macroeconomic and sectoral impacts of climate change on countries and provides specific recommendations on programs, policy reforms, and institutional strengthening measures to deal with climate change.

Thirteen African countries are currently covered by CCDRs, and 10 are forthcoming. The macroeconomic and sectoral assessments in CCDRs show that the direct impacts of climate-related shocks on African economies are context-specific but tend to be large and increasing over time. The first set of CCDRs provides country-specific recommendations for adaptation that are economy-wide or relate to the agriculture, water, health, and environment sectors. In terms of interventions and investments, the CCDRs focus on climate-smart agriculture, climate finance, governance, and urban planning as key policy issues for adaptation.

The IMF has developed the Resilience and Sustainability Trust to support policy reforms that reduce macro-critical risks associated with climate change and pandemic preparedness, and to augment the policy space and offer financial buffers to mitigate the risks arising from such longer-term structural challenges. For example, in December 2022, the IMF Executive Board approved an arrangement for the Government of Rwanda to access US$319 million through the Resilience and Sustainability Facility (RSF), the first for an African country. The reform areas for Rwanda include: strengthening and institutionalizing monitoring and reporting of climate-related spending; integrating climate risks into fiscal planning; improving the sensitivity of public investment management to climate-related issues; strengthening climate-related risk management for financial institutions; and strengthening the disaster risk reduction and management strategy and operations.

9. Recommendations

The findings of this report show that for each dimension of analysis, there are some, and in many cases several, good examples in Africa of adaptation planning. This means that African countries can learn from each other to continuously improve their planning processes and institutions to design and implement adaptation programs at scale.

Four main recommendations are offered:

- **First, ministries of finance and planning need to play a central role in the strategic directions and priorities for adaptation action at scale.** While sectoral ministries and agencies have a critical policy and implementation role in adaptation, and the Ministry of Environment and/or Climate Change plays a principal role, it is essential to ensure that adaptation is a core theme in the deliberations and choices of the ministries of finance and planning.
- **Second, adaptation is not only the government's responsibility—choices and priorities for adaptation action require the involvement of all stakeholders in African societies**, including households, communities, the private sector, civil society, as well as vulnerable populations. A truly participatory process during planning and policy formulation will ensure ownership of changes by all stakeholders.
- **Third, adaptation plans need to be more specific, with clear goals, timelines, financing plans, and monitoring systems.** The NDCs, NAPs, and LTSs provide helpful directions and priorities, however, there is still a gap between these strategic documents and specific sectoral investment programs, well-defined adaptation policies, and bankable adaptation investments.
- **Fourth, adaptation plans need to be continuously improved by considering all key vulnerable economic sectors and by strengthening the linkages with disaster risk reduction.** This report offers specific areas for consideration by African governments in this continuous improvement process.

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