ECOSOCC
Economic Social & Cultural Council

The voice of the
African Citizenry

BUILDING CLIMATE RESILIENCE IN AFRICA

Position Paper

An Organ of the
African Union

ecosocc.au.int

Economic Social & Cultural Council 8658 Kudu Road, Kabulonga, Lusaka, Zambia

THEME 1: Building Climate Resilience in Africa

Date: 30 August 2025
Drafted by: Mary Morrison, Dr. Ndudi Bowei, Halimatou Baldeh, Prof. Alex Opoku
Contributors: Mika'il Daya, Dr. Herman

Executive Summary

Africa`s core stance must be that building climate resilience is both a survival necessity and a matter of justice. This involves empowering communities, expanding ecosystem-based adaptation, transforming agriculture, strengthening health systems, and investing in resilient infrastructure as key elements of Agenda 2063, the Paris Agreement, and the Sustainable Development Goals.

Globally, there is an ever-growing need to build resilience in the face of climate change, and Africa faces this urgent need. In the African context, building resilience means strengthening the capacity of communities, ecosystems, economies, and institutions to anticipate, absorb, and transform in response to climate shocks, while protecting lives, livelihoods, and development gains. On a positive note, Africa has an abundance of innovative and scalable solutions despite the vulnerabilities faced. It is therefore essential for Africa to leverage this advantage by placing climate resilience at the heart of climate action, making it a cornerstone for achieving Agenda 2063, Climate and biodiversity strategies, the Sustainable Development Goals, and the Paris Agreement.

This position paper has been prepared under the leadership of the Adaptation Team, AU-ECOSOCC TWG-CC. It highlights Africa's collective priorities and demands in advancing adaptation, and seeks to inform deliberations at COP30 and beyond. The paper draws on knowledge and expertise from across the continent, and it is structured around five interconnected themes which are communities, nature and ecosystems, agriculture, health, and infrastructure, while highlighting cross-cutting issues such as inclusive governance, financing, and data systems. Together, these pillars frame a comprehensive vision for climate resilience rooted in Africa's realities and aspirations.

Key recommendations call for:

- Empowering communities through diversified livelihoods, inclusive governance, and disaster preparedness;
- Scaling up ecosystem-based adaptation (EbA) and nature finance while aligning biodiversity, climate, and land-use policies;
- Transforming agriculture with modern technologies, farmer knowledge systems, food safety infrastructure, and policy reforms;
- Strengthening health systems through climate-sensitive governance frameworks, equitable access, and improved waste management;
- Investing in resilient infrastructure by integrating climate risk assessments, nature-based solutions, and innovative construction standards.

These areas create an integrated resilience framework. This paper calls on leaders, regional institutions, and global partners to mobilize financing, enforce policies, and foster partnerships that will enhance Africa's adaptive potential, as protecting people

and ecosystems today will secure a just, climate-resilient, and sustainable future for the continent.

Introduction

African countries are losing 2%-5% of their GDP due to climate change impact, with adaptation costs ranging from $30-50 billion annually (World Meteorological Organization), while it is projected that 118 million Africans (World Meteorological Organization) will be exposed to climate change impacts by 2030. Building climate resilience is therefore crucial for achieving Africa's Agenda 2063, climate and biodiversity strategies, Sustainable Development Goals, and the Paris Agreement, as innovative and scalable solutions exist despite vulnerabilities.

This Adaptation Subcommittee's position paper emphasizes Africa's collective resilience priorities for climate change adaptation, at COP30 and beyond, incorporating community voices, indigenous knowledge systems, and regional frameworks. The paper covers a multifaceted position on building resilience, structured around key themes in communities, nature, agriculture, health, and infrastructures, as well as cross-cutting themes like participatory systems and data. Building climate resilience promotes sustainable development and improved well-being, forming a framework for finance and partnerships to unlock the continent's adaptive potential.

Background and Context

Climate change has significantly impacted Africa`s core system of resilience, such as agriculture, health, natural ecosystems, and infrastructure. They are vital but increasingly under threat. Africa`s heavy dependence on rain-fed agriculture, coupled with weak infrastructure, high poverty rates, and fragile informal economies, renders the continent especially vulnerable to climate shocks. These shocks are felt more in conflict-affected areas, where climate effects worsen instability and food insecurity. African communities face rising sea levels, extreme heat, prolonged droughts, and erratic rainfall patterns- eroding livelihoods and forcing migration. These effects disproportionately impact women, youth, and marginalized groups due to structural barriers, yet bear the greatest burden of climate change. Without building resilience, climate change will widen existing inequalities and threaten Africa`s development gains.

Building resilient communities requires tackling these vulnerabilities and shifting from short-term solutions to long-term resilience, where adaptive, anticipatory, and absorptive capacities are developed, focusing on diversifying livelihoods, improving disaster preparedness, enhancing social protection, and using local knowledge. Community resilience flourishes with inclusive participation, gender inclusion, and innovation, helping people avoid poverty and exclusion.

Parallel to this are nature and ecosystems, which are crucial for communities (annexed figure), by providing essential services like food, clean water, and climate protection. For example, the ocean, covering 71% of the Earth's surface, absorbs over 90% (Lindsey et al.) of excess heat, while forests protect against natural hazards, offer a home to various species, and provide income. When ecosystems are damaged, their ability to support people, especially vulnerable populations, is weakened (Africa Centre for Strategic Studies).

Africa has rich natural resources, including significant biodiversity and 60% (Global Environment Facility) of the world's arable land, making its ecosystems vital for economic value and livelihoods. However, they face threats from deforestation, degradation, and climate change, which harm human well-being and adaptation. Various frameworks stress the importance of resilient ecosystems. For example, Africa loses about 3.9 million hectares of forest annually (FAO, 2020), and wildlife populations have decreased by 75% over fifty years (WWF, 2024).

The AU Biodiversity Strategy and Action Plan 2023-2030 highlights Africa's rich ecosystems, emphasizes policies for protecting biodiversity and enhancing climate resilience, aligning with Agenda 2063 (African Union). The Paris Agreement, through Decision 2/CMA.5 and the UAE Framework for Global Climate Resilience (UNFCCC), calls for the preservation and regeneration of nature as a cornerstone for reducing vulnerability and enhancing resilience. The Convention on Biological Diversity (CBD) promotes ecosystem-based adaptation (EbA) for securing socioeconomic benefits. Strengthening ecosystems also supports the Sustainable Development Goals (SDGs) related to climate and environmental health.

Agriculture and food systems are essential for African economies, providing jobs, livelihoods, and food security. However, these systems are highly affected by climate change, which disrupts soil fertility, rain patterns, crop yields, and overall food production. This leads to lower availability of essential nutrients in food and increases issues like pests and food safety hazards. Such challenges harm human nutrition, worsen global food security, and put vulnerable populations at risk of malnutrition. The COVID-19 pandemic further complicated these issues. Efforts should focus on sustainable food production and distribution, strengthening food systems, and adapting to crises to strengthen agricultural resilience.

Climate change also significantly causes various health risks, such as heat stress and worsening chronic diseases due to extreme temperatures. Flooding and poor water management often lead to the spread of waterborne diseases like cholera, particularly in areas with poor sanitation. Additionally, vector-borne diseases, such as malaria, may proliferate, while food insecurity heightens vulnerabilities, especially among children and disadvantaged groups.

Infrastructure is crucial for transportation, water supply, sewers, electricity, and communication in cities. However, climate change can disrupt these systems, threatening the lives and livelihoods of citizens, especially in developing countries. Increased storms, heat waves, flooding, and rising sea levels increase the risks and highlight the urgent need for effective measures that enable urban infrastructure to adapt to mitigate the impact of climate change (Onuoha et al.). The risks associated with climate change rely on how climate hazards interact with existing vulnerabilities. Infrastructure development must consider the risks posed by external factors, like more paved surfaces contributing to flooding (OECD). To enhance resilience, it's essential to rethink design standards, use climate risk data in planning, and adopt approaches that consider future uncertainties. There needs to be strong institutions, multi-stakeholder involvement, and investments in social and physical infrastructure (OECD).

Together, these areas form a deeply interconnected resilience framework, in that failures in one area can affect others, emphasizing the importance of integrated strategies, such as ecosystem-based adaptation and nature conservation, gender-

inclusive community engagement, climate-informed health planning, and resilient infrastructure design. By focusing on these aspects and fostering collaboration, Africa can strengthen long-term resilience, protect its communities and ecosystems, and promote sustainable development.

Problem Statement

Africa faces acute climate challenges that cut across communities, agriculture, ecosystems, and infrastructure. Rural and urban communities alike experience food insecurity, poverty, weak governance, and fragile institutions that limit resilience. Agriculture, the main livelihood for many, suffers from low productivity, depleted soils, and limited access to climate-smart technologies, while inadequate quality controls and food testing systems restrict global market access. Occupational and environmental health are also weak, with poor governance, outdated laws, and bad waste management, exposing people to diseases and hazards. Gender inequality makes these issues worse, by disproportionately affecting women and marginalized groups.

Ecosystems, which sustain over 62% of Africans (UNEP), are degrading rapidly, with underfunded community-led conservation (Climate Policy Initiative) and weak policy coherence worsening vulnerabilities. Infrastructure remains highly exposed, as most systems were not designed for climate extremes (Onuoha et al.), are governed by outdated codes, and lack investment in resilient technologies (Nachmany et al.). These interlinked challenges are compounded by global inequities as Africa is least responsible for emissions, faces disproportionate adaptation burdens amid inadequate financing, fragmented policies, and gendered inequalities. This traps communities in cycles of poverty and vulnerability. Building climate-resilient, inclusive systems is therefore not only a survival imperative for Africa but also a matter of global climate justice.

Position and Rationale

Position

Building resilience cannot be treated solely as Africa`s responsibility, and actions should involve those responsible for historical pollution. Africa’s efforts on building resilience must be predictably fairly financed and must focus on communities, ecosystems, agriculture, health, and infrastructure. This includes empowering communities by encouraging participation, using gender-sensitive approaches, applying indigenous knowledge, and creating strong local policies. Strengthening nature and ecosystems is critical, and should be achieved through community-led EbA approaches and their inclusion in national strategies and decision-making processes. All these actions should be treated not only as African.

To address food insecurity, Africa needs a modern agricultural system that uses local resources and encourages cooperation. This involves mechanizing agriculture, increasing staple crop production, boosting fisheries, enforcing food safety standards, and supporting the African Continental Free Trade Agreement (AfCFTA). These steps can help protect indigenous livelihoods and create resilient food systems.

Health systems should have enforceable frameworks to tackle climate risks like heat stress and diseases. Additionally, infrastructure planning must incorporate climate risks to foster innovation and economic stability.

These strategies aim to create a resilient and sustainable Africa, aligned with the Paris Agreement, Agenda 2063, and the Sustainable Development Goals (SDGs). They call for strong, inclusive policy enforcement, innovative financing, and regional cooperation to enhance Africa's adaptability.

Rationale/Justification

Communities in Africa are essential for building resilience, and when they are empowered, they achieve better outcomes. Local early warning systems, women-led initiatives, and community-managed resources are more effective than top-down methods. Communities can create diverse jobs and adapt to changes if there is good governance and access to funds.

Ecosystems protect against climate challenges, managing floods and supporting lives. For instance, Kenya's mangroves generate $85 million annually in goods and services (Save our Mangroves Now!), while degraded wetlands impose major economic and ecological costs (Convention on Wetlands, 2025). Promoting EbA helps preserve biodiversity, embeds natural resources in development plans, and aligns with global and continental calls, such as the Global Stocktake (UNFCCC) and the AfCEN 2025 Stocktake (AfCEN), to accelerate ecosystem restoration and biodiversity integration into decision-making.

Agriculture is important for Africa's economy, but food insecurity is still an issue. Increasing rice production can reduce reliance on imports (Africa Rice), and managing fisheries can protect livelihoods and support food sovereignty, as seen in Ghana’s fishing reforms(Malabo Montpellier Panel Report 2025) and Namibia’s community quotas provide successful models (Future Policy Org). Additionally, improving mechanization, food safety regulations, and trade frameworks can enhance productivity, markets, and resilience to economic changes.

Health systems are increasingly at risk from climate change and need protective measures. Rwanda’s integration of health into its national adaptation plan shows how planning can boost preparedness and monitoring (ATACH). It is important to have enforceable health frameworks aligning with international standards to strengthen resilience to diseases caused by climate change.

Investing in climate-resilient infrastructure can also be beneficial. Research shows such investments usually add only three percent to initial costs but can provide significant returns, with a benefits-cost ratio of 4:1, with the potential for four trillion dollars in benefits from one trillion dollars spent in developing countries (New Development Bank & AXA Climate,2024). Projects like climate-adapted roads in Madhya Pradesh demonstrate that smart designs reduce maintenance costs and better handle extreme weather conditions (New Development Bank & AXA Climate,2024).

Africa can create a sustainable climate adaptation strategy by focusing on community-led approaches, restoring ecosystems, improving agriculture, adapting health systems, and building climate-smart infrastructure. This cross-sectional approach aligns with Africa’s Agenda 2063, the SDGs, and the Paris Agreement, ensuring a unified effort to support livelihoods, protect biodiversity, and enhance economies across the continent.

Recommendations

Empower Communities through Inclusive Livelihoods and Governance

Communities need diversified livelihoods beyond farming, supported by social protection, financial inclusion, and access to markets. Resilience can also be achieved by strengthening institutional capacity, integrating resilience into national plans, and promoting participatory governance ensures accountability, equity, and long-term adaptation. Additionally, disaster preparedness, eco-restoration, and blending indigenous knowledge with technology are central to building community resilience.

Scaling Up Ecosystem-Based Adaptation (EbA)

- Strengthen EbA approaches that are community-led, inclusive, and integrate local knowledge, and direct access to finance options.
- Enhance integration of EbA into National and Regional Planning, such as in National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs), and regional development plans under AU Agenda 2063. Also, aligning climate, biodiversity, water, and land-use policies to remove institutional fragmentation.
- Develop standardized metrics for ecosystem service valuation, documenting best practices, lessons, and cost-benefit analyses.
- Leverage global processes to accelerate EbA actions, championing Africa's priorities in UNFCCC and CBD arenas to ensure nature-positive agreements and incentives; and building cross-regional partnerships to enhance coherence with regional and global agendas.

Transform Agriculture for Climate-Resilient Food Systems

- The use of modern technologies like mechanized farming, irrigation, digital tools, and cheap new ideas. Public-private partnerships and regional hubs can help with this.
- To enhance scientific agricultural knowledge that promotes sustainable practices, such as sustainable regeneration methods.
- Set up accredited food testing labs that meet international standards for global markets. These labs will improve food safety and lower the number of exports that are turned down. Modern food processing infrastructure that cuts down on manual labor, adds value, and cuts down on post-harvest losses is also important.
- Technical barriers to trade (TBT) should be dealt with by making regional food safety standards more consistent and making institutions better able to meet global standards.
- Policy and regulatory changes that are based on science, inclusive, are sensitive to gender, and are supported by strong, accountable systems.

Strengthen Health Systems for Climate Resilience

- Workplace training, raising awareness, and sensitization are crucial in improving climate resilience and occupational health in Africa. This needs robust legal and policy frameworks that take into account contemporary issues and the effects of climate change.

- There is also a need to enhance gender-sensitive strategies that ensure women and marginalized groups have equitable access to occupational health services, climate-related health support, and meaningful decision-making roles.
- In addition to making investments in food processing, plastic recycling, waste treatment, and sustainable public-private partnerships, nations must also develop national and regional policies on recycling, safe disposal, and circular economy practices to improve their waste management systems.

Invest in Climate-Resilient Infrastructure

Building resilience, in this context, should

- Promote long-term investment in climate-resilient infrastructure, and strengthen knowledge and capacity building, by supporting research and development of innovative, climate-smart construction materials and techniques.
- Encourage proactive regulatory frameworks such as disaster risk reduction and climate adaptation laws, while advocating for integrating resilience planning into urban plans.
- Enhance multi-stakeholder collaboration, which includes strengthening public-private sector coordination.
- Integrate climate risk assessments in planning, which includes mainstreaming the use of scientific data and indigenous knowledge to anticipate vulnerabilities and inform resilient designs.
- Leverage nature-based and hybrid solutions, such as combining engineered infrastructure with ecosystem-based approaches.

Conclusion

Africa's battle against climate change requires immediate action to protect ecosystems, economies, and lives. Building resilience is now a survival necessity, as climate extremes are already costly to the continent and adaptation needs are estimated to be $30–50 billion annually. This position paper emphasizes the need for an integrated and comprehensive resilience agenda that empowers communities, rebuilds ecosystems, reimagines agriculture, fortifies health systems, and supports climate-smart infrastructure.

Having a focus on these areas, coupled with inclusive governance, collaborative approaches, and strategic investments, Africa can strengthen resilience across systems, protect its people and ecosystems, and chart a path toward sustainable and equitable development. In addition, enhancing resilience through integrated approaches advances both the continental and global agendas. In conclusion, building resilience in Africa requires collaborative, scaled-up strategic approaches as well as urgent, predictable, and justice-driven finance that empowers vulnerable communities and transforms ecosystems, agriculture, health, and infrastructure. Without this, resilience remains rhetoric.

Works Cited

AfCEN. *Stocktake of Progress since the Nairobi Declaration 2023*. June 2025. *AFCEN*, Africa Climate and Energy Nexus, https://africacen.org/wp-content/uploads/2025/07/Inaugural-ACS-Stocktake_vFinal_30th-June-2025.pdf.

Africa Centre for Strategic Studies. *African Biodiversity Loss Raises Risk to Human Security*. 7 December 2022, https://africacenter.org/spotlight/african-biodiversity-loss-risk-human-security/.

African Union. *AU Biodiversity Strategy and Action Plan (ABSAP) 2023-2030*. 2024. *AU Publications/Books*, https://au.int/sites/default/files/documents/44075-doc-AU_Biodiversity_Summary_09_05_2024.pdf. Accessed 15 August 2025.

Africa Rice. *Why Rice Matters to Africa*. *Africa Rice*, https://www.africarice.org/why-rice-matters-for-africa.

ATACH. *Operationalizing Climate-Health Governance: Rwanda's Technical Working Group*. *Alliance for Transformative Action In Health*, Alliance for Transformative Action In Health, https://www.atachcommunity.com/our-impact/case-studies/operationalizing-climate-health-governance-rwandas-technical-working-group-1/. Accessed 18 August 2025.

Climate Policy Initiative. "Global Landscape of Climate Finance 2023 - CPI." *Climate Policy Initiative*, 2 November 2023, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/. Accessed 10 August 2025.

Convention on Wetlands, 2025. *Global Wetland Outlook 2025: Valuing, conserving, restoring and financing wetlands*. 2025. *Convention on Wetlands*, Convention on Wetlands secretariat, https://static1.squarespace.com/static/5b256c78e17ba335ea89fe1f/t/6880f0b61f02906e4f1a72ee/1753280741948/GWO2025_Eng_Rev.1.pdf. Accessed 15 August 2025.

FAO, 2020. "Global Forest Resources Assessment 2020." *Global Forest Resources Assessment 2020*, Food and Agriculture Organization for the United Nations (FAO), 2020, https://openknowledge.fao.org/server/api/core/bitstreams/9f24d451-2e56-4ae2-8a4a-1bc511f5e60e/content. Accessed 15 August 2025.

Future Policy Org. *Namibia Maritime Resources Act*. *Future Policy.org*, https://www.futurepolicy.org/healthy-ecosystems/oceans/namibias-marine-resources-act/#:~:text=The%20Namibian%20government%20introduced%20an,overfishing%2C%20illegal%20discards%20and%20bycatch.&text=Our%20%E2%80%9CBest%20Policies%E2%80%9D%20are%20those,poli.

Global Environment Facility. *GEF in Africa*. 26 February 2024. *Global Environment Facility*, Global Environment Facility (GEF), https://www.thegef.org/newsroom/publications/gef-africa.

Lindsey, Rebecca, et al. "Climate Change: Ocean Heat Content | NOAA Climate.gov." *Climate.Gov*, Climate.Gov, 26 June 2025, https://www.climate.gov/news-features/understanding-climate/climate-change-ocean-heat-content. Accessed 26 August 2025.

Malabo Montpellier Panel Report 2025. *FISH-FRIENDLY: Policy Innovations for Sustainable Fisheries and Aquaculture in Africa*. A Malabo Montpellier Panel Report 2025. A Malabo Montpellier Panel Report 2025, 2025, https://www.mamopanel.org/media/uploads/files/FISH_Friendly_Full_Report.pdf. Accessed 18 August 2025.

Nachmany, Michal, et al. *National laws and policies on climate change adaptation: a global review*. December 2019. *London School of Economics and Political Science*, Grantham Research Institute on Climate Change and the Environment, https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/12/National-laws-and-policies-on-climate-change-adaptation_A-global-review.pdf.

New Development Bank & AXA Climate (2024). *Building Climate Resilience in Infrastructure Projects: A Brief for Investors*. 2024. *New Development Bank*, New Development Bank & AXA Climate (2024), https://www.ndb.int/wp-content/uploads/2024/03/Building-Climate-Resilience-in-Infrastructure-Projects-A-Brief-for-Investors.pdf. Accessed August 2025.

OECD. *Climate-Resilient Infrastructure*. Environmental Policy Paper No.14. ed., 17 December 2018. *OECD Publications*, Organisation for Economic Co-operation and Development (OECD), https://www.oecd.org/en/publications/climate-resilient-infrastructure_4fdf9eaf-en.html#:~:text=This%20Policy%20Paper%20outlines%20a,investment%20for%20climate%2Dresilient%20infrastructure.

Onuoha, D., et al. "The Need for Resilient Infrastructure as an Adaptive Measure for Climate Change." *British Journal of Environmental Sciences*, vol. 10, no. 4, 2022, pp. 17 - 27.

European and American Journals, https://www.eajournals.org/wp-content/uploads/The-Need-for-Resilient-Infrastructure.pdf.

Save our Mangroves Now! *The socioeconomic value of mangroves in the Western Indian Ocean region*. 2021. *Save our Mangroves Now!*, https://www.mangrovealliance.org/wp-content/uploads/2022/10/SOMN-Saving-our-Mangroves_Ken-Tanz-Moz-Mada-Report-1.pdf. Accessed 18 August 2025.

UNEP. "Supporting Sound Ecosystem Management," *UN Environment Programme*, https://www.unep.org/regions/africa/regional-initiatives/supporting-sound-ecosystem-management#:~:text=Tackling%20ecosystem%20restoration%20is%20a,Landscape%20Restoration%20Initiative%20(AFR100). Accessed 15 August 2025.

UNFCCC. *UNFCC: Session and meeting reports*. FCCC/PA/CMA/2023/16/Add.1. 15 March 2024, https://unfccc.int/documents/637073. Accessed 10 August 2025.

World Metrological Organization. "Africa faces a disproportionate burden from climate change and adaptation costs." *World Meteorological Organization WMO*, 2 September 2024, https://wmo.int/news/media-centre/africa-faces-disproportionate-burden-from-climate-change-and-adaptation-costs. Accessed 26 August 2025.

WWF, 2024. *2024 Living Planet Report: A system in Peril*. 2024. *World Wildlife Fund (WWF)*, https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/5gc2qerb1v_2024_living_planet_report_a_system_in_peril.pdf. Accessed 15 August 2025.