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Climate-Smart Governance: Paving Somalia's Path to Resilient Development.

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Somalia, a nation grappling with the intertwined legacies of protracted conflict and escalating climate change, faces an existential challenge. Its predominantly pastoral and agro-pastoral communities are disproportionately vulnerable to recurrent and increasingly severe climate shocks, including prolonged droughts, devastating floods, and unpredictable rainfall patterns (OCHA, 2024; WFP, 2023). These events not only trigger humanitarian crises, mass displacement, and widespread food insecurity but also systematically erode development gains, diverting precious resources from long-term investments to emergency responses (ResearchGate, 2025). As Somalia continues its journey of state-building and recovery, the integration of climate risk into its development planning is no longer a matter of choice, but a fundamental prerequisite for achieving sustainable and resilient growth. This article delves deeper into the concept of "Climate-Smart Governance" and elaborates on actionable strategies for Somalia to embed climate considerations firmly within its national development frameworks, thereby fostering a future where climate resilience is synonymous with national prosperity and stability.

The Intensifying Climate Crisis and its Ramifications for Somalia

The climate crisis in Somalia is a palpable reality. Mean annual temperatures have increased by approximately 0.1–0.3°C per decade since the 1950s, with the average annual temperature in the 2010s being 1.1°C higher than in the 1950s (Climate Centre, 2024). This warming trend exacerbates water scarcity and drought conditions, leading to increased evapotranspiration and significant livestock mortality (FAO SWALIM, 2025). Concurrently, while droughts intensify,

periods of heavy rainfall are also becoming more erratic and intense, leading to destructive flash floods, particularly along the Jubba and Shabelle rivers (WFP, 2023; ReliefWeb, 2025).

These climatic shifts have profound socio-economic implications. Food security, which is inherently linked to rain-fed agriculture and pastoralism, is severely threatened by reduced crop yields, livestock losses, and degraded rangelands (ResearchGate, 2025). The Inter-Agency Standing Committee (IASC) has consistently highlighted the nexus between climate shocks and humanitarian needs in Somalia, emphasizing the continuous cycle of vulnerability and displacement (IASC, 2023). Economically, studies confirm a significant negative impact of climate change on Somalia's long-term economic growth, particularly affecting sectors like agriculture that employ the vast majority of the population and contribute substantially to GDP (ResearchGate, 2025). The ongoing stress on natural resources also fuels resource-based conflicts, further undermining peacebuilding efforts (UN Women, 2022).

Defining Climate-Smart Governance for the Somali Context

Climate-smart governance is a comprehensive paradigm shift that transcends project-level interventions. It advocates for the systematic mainstreaming of climate change adaptation and mitigation into all facets of governance – from national policy formulation and legislative frameworks to sectoral planning, budgetary allocations, infrastructure development, and local-level implementation. For Somalia, this means transitioning from a predominantly reactive humanitarian response model to a proactive, anticipatory framework that inherently factors in climate risks and builds systemic resilience. This approach recognizes that effective climate action is not an isolated environmental concern but a core component of national security, economic stability, and social well-being.

Elaborated Pillars of Climate-Smart Governance for Somalia

Implementing a robust climate-smart governance framework in Somalia requires strategic interventions across several interconnected pillars:

1. Strengthening Institutional and Policy Frameworks:

Comprehensive National Climate Change Policy and Strategy: Somalia has made commendable progress in developing foundational documents such as its National Climate Change Policy (2020) and Nationally Determined Contributions (2021) under the UNFCCC,

- along with a National Adaptation Plan (NAP) Framework (2022) (FAOLEX, 2023; UNFCCC, 2022). These frameworks need continuous review and legal reinforcement to ensure their longevity and enforceability. Crucially, they must clearly delineate roles and responsibilities across federal and state levels, fostering a coordinated governmental response.
- Deep Integration into National Development Plans (NDPs): Climate change adaptation and resilience objectives must be explicitly embedded as core components of Somalia's National Development Plans. For instance, the National Development Plan (NDP-9) 2020-2024 already recognized climate change as critical for economic transformation, particularly in strengthening the resilience of livestock and crop production (MoECC, 2024b). Future NDPs should expand on this, ensuring that all proposed development initiatives from urban planning to energy infrastructure undergo rigorous climate risk assessments. This means, for example, designing new irrigation systems that account for projected changes in rainfall and water availability, or siting new settlements away from flood-prone areas.
- Robust Cross-Ministerial Coordination: Beyond the Ministry of Environment and Climate Change (MoECC), active engagement is essential from ministries responsible for finance, planning, agriculture, water resources, infrastructure, interior, and humanitarian affairs. Establishing a high-level inter-ministerial climate change committee, perhaps chaired by the Prime Minister's office, can ensure political buy-in, facilitate information sharing, and overcome bureaucratic silos. Such a body would be instrumental in harmonizing climate action across diverse governmental portfolios.

2. Enhancing Climate Information Systems and Early Warning:

- O Advanced Data Collection and Analysis Infrastructure: Investing in modernizing Somalia's meteorological and hydrological services is paramount. This includes establishing a denser network of weather stations, enhancing remote sensing capabilities, and developing robust data processing and analysis systems. The Food and Agriculture Organization's Somalia Water and Land Information Management (FAO SWALIM) unit already provides valuable seasonal climate outlooks (FAO SWALIM, 2025), but this capacity needs to be expanded and decentralized to provide localized, actionable data.
- Multi-Hazard Early Warning Systems (EWS): Effective EWS for droughts, floods, and other extreme weather events are critical for minimizing loss of life and livelihoods. This involves not only technological infrastructure but also strengthening communication channels, particularly last-mile dissemination strategies to reach remote and vulnerable communities. The World Food Programme (WFP) has demonstrated the effectiveness of pre-emptive cash transfers and warning messages in flood-prone districts (WFP, 2023), highlighting the potential

of such integrated approaches. Community participation in co-designing and validating these systems, leveraging traditional knowledge, can significantly enhance their effectiveness and acceptance (weADAPT, 2024).

o Integrated Climate Risk Assessments: Regular, participatory climate risk assessments, conducted at national, state, and local levels, are essential. These assessments should map specific vulnerabilities of communities and economic sectors, identify critical climate hotspots, and inform the prioritization of adaptation interventions and investments. This data-driven approach will ensure that development efforts are strategically targeted where they can yield the greatest resilience benefits.

3. Mobilizing Climate Finance and Investment:

- Strategic Access to International Climate Funds: Somalia has demonstrated a growing capacity to access global climate finance, securing significant funding from the Green Climate Fund (GCF) for projects like the "Climate Resilience in Agriculture (Ugbaad)" initiative (MoECC, 2024a; ReliefWeb, 2025). Continued efforts are needed to strengthen national implementing entities, improve project development capacities, and enhance fiduciary management to attract further direct access to funds like the GCF and Adaptation Fund (GCF, 2024; SPARC-Knowledge, 2023). This also involves demonstrating measurable impacts and transparent reporting.
- Mainstreaming Climate in Public Finance Management: Implementing "climate budget tagging" within the national budget framework is crucial. This mechanism helps track public expenditures related to climate change, ensuring that climate objectives are integrated into national and sub-national budget allocations. It also promotes transparency and accountability in climate finance utilization.
- Catalyzing Private Sector Engagement: The Somali private sector, despite challenges, is dynamic and innovative. Policies should be designed to incentivize private investment in climate-smart solutions, such as renewable energy infrastructure, water-efficient irrigation technologies, climate-resilient housing, and drought-resistant agricultural practices. This can involve blended finance mechanisms, tax incentives, and public-private partnerships that derisk investments for climate-friendly ventures. The GCF's "Hardest-to-Reach" project aims to provide off-grid energy access, demonstrating potential for private sector collaboration (GCF, 2024).

4. Community Engagement and Capacity Building:

 Localization of Climate Action and Traditional Knowledge Integration: True climate resilience is built from the ground up. Empowering local communities, particularly women and youth, to lead and participate in designing and implementing adaptation initiatives is crucial. Somalia has a rich tapestry of traditional ecological knowledge that has historically guided communities in coping with environmental variability (weADAPT, 2024). This indigenous and local knowledge (ILK), encompassing observations of animal behavior, cloud patterns, and vegetation, should be integrated with modern scientific approaches to develop context-specific and culturally appropriate adaptation strategies.

- Comprehensive Capacity Development: Targeted capacity-building programs are required across all levels of governance and society. This includes training government officials on climate risk assessment and integration, equipping technical staff with skills in climate-smart technologies, and empowering local communities with knowledge on sustainable land management, water harvesting, and disaster preparedness. Academic institutions and civil society organizations have a vital role to play in this effort.
- Gender-Responsive Climate Action: Women in Somalia are disproportionately affected by climate change due to their roles in household resource management and reliance on climate-sensitive livelihoods, compounded by pre-existing social inequalities (UN Women, 2022; Scientific Research Publishing, 2025). Climate-smart governance must explicitly integrate gender considerations, ensuring women's meaningful participation in climate decision-making processes, equitable access to climate finance and resources, and the development of adaptation interventions that address their specific vulnerabilities and leverage their unique knowledge (Scientific Research Publishing, 2025).

Pathways to Sustainable Implementation

Achieving comprehensive climate-smart governance in Somalia will be an iterative process, requiring sustained commitment and adaptive learning. Key pathways include:

- Strategic Pilot Programs: Initiating focused pilot programs in highly vulnerable regions or specific economic sectors can serve as learning laboratories. These pilots can demonstrate the practical benefits of climate-smart approaches, build local capacity, and generate evidence for scaling up successful interventions nationwide.
- Inclusive National Dialogue: Fostering a continuous and inclusive national dialogue on climate change is vital. This dialogue should bring together government entities, civil society organizations, traditional leaders, the private sector, academia, and most importantly, affected communities, to build shared understanding, ownership, and collective action on climate issues.

- Strengthened Partnerships: Somalia should continue to strengthen its partnerships with international organizations, bilateral donors, and regional bodies like IGAD (Intergovernmental Authority on Development). These collaborations can provide critical technical assistance, knowledge transfer, and financial support, as exemplified by projects like the IOM-led DARIS WACAN initiative which aims to strengthen climate resilience and water management in border communities (IOM Somalia, 2025).
- Continuous Learning and Adaptive Management: Given the dynamic nature of climate change and the evolving context of Somalia, the climate-smart governance framework must be flexible. This necessitates continuous monitoring and evaluation, allowing for adaptive management and adjustments based on new climate data, socio-economic trends, and the effectiveness of implemented strategies.

Conclusion

Somalia stands at a pivotal moment. The convergence of its nation-building efforts with the undeniable impacts of climate change presents both immense challenges and a unique opportunity. By resolutely embracing climate-smart governance, Somalia can fundamentally reorient its development trajectory. This proactive integration of climate risk into every layer of planning and decision-making will not only mitigate the devastating consequences of climate shocks but also unlock new pathways for sustainable economic growth, enhance social cohesion, and build a more resilient, peaceful, and prosperous future for all its citizens. The journey demands unwavering political will, strong institutional capacity, adequate financing, and, most importantly, the active participation and empowerment of its vulnerable communities.

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