POLICY BRIEF

Right Finance, Right People, Right Time: A Framework for Sustainable Dryland Development

2025

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Financing for Sustainable Development

Abstract

Traditional development finance models are insufficient for addressing today's complex, interconnected global development challenges. Emerging finance modalities and actors – both public and private – are creating new opportunities to address increasingly frequent and severe climate and non-climate shock events, demanding a more dynamic and adaptive global development finance architecture. Such reform is especially crucial in drylands – regions with the world's highest concentrations of poverty; severe deficits in the achievement of the Sustainable Development Goals (SDGs) and human development indicators; and an annual financing gap of $278 billion to 2030.

This policy brief presents an innovative finance framework for drylands, counting down to the achievement of sustainable development and recovery from shock events across three interconnected phases: Phase 1: Sustainable Productivity and Resilient Development; Phase 2: Bracing for Shock; and Phase 3: Transitioning Back Better (where required). The framework integrates intermittent shock events into long-term development and resiliency strategies, centering climate and non-climate disruptions as key planning considerations. While shock events are inevitable, resilience can be proactively built: preventing impacts where possible, managing disruptions effectively, and ensuring recovery transitions back to sustainable development pathways.

The framework supports the identification of both traditional and innovative forms of public, private and alternative finance for scaling up support for resilient, sustainable dryland development. In doing so, the framework aims to get the "right finance to the right people at the right time".

The framework aims to support initiatives such as the G20 Global Land Initiative and Land Degradation Neutrality targets, including the leveraging of successful local and national initiatives, including country examples (such as Kenya's National Drought Management Authority), to inform regional interventions such as Africa's Great Green Wall, Middle East Green Initiative, and others.

The policy brief builds upon a T20 Brasil policy brief on sustainable financing for drylands; outputs from the December 2024 16th UNCCD Conference of Parties; and recent G20 calls to accelerate progress on the SDGs and socially just, environmentally sustainable, and economically sound measures to overcome inequality. The finance framework aims to develop resilient, inclusive dryland development models, reflecting the South African Presidency's themes of solidarity, equality, and sustainability, and its stated priority for disaster risk reduction.

Diagnosis

Drylands constitute over 40% of global land area[1] and are home to more than 2 billion people.[2] Over one-third of drylands are degraded[3] and this figure is increasing. Desertification, land degradation and drought threaten local livelihoods, food and water security, and ecosystem services. They increase health, conflict, and migration risks and are exacerbated by climate change. Their total global annual costs are USD 878 billion.[4]

International frameworks promote sustainable dryland management (SDM) and restoration, including the SDGs, UN Decade on Restoration (2020-2030), Paris Agreement, Global Biodiversity Framework, G20 Global Land Initiative (GLI), Land Degradation Neutrality (LDN), and G20 DRR Working Group. However, despite increasing national and local level actions, global land degradation trends are not being halted or reversed. Rather, they are concentrated in marginal areas, and create spillovers of cascading risks and impacts that reverberate across national and global economies.

Access to, and mobilisation of finance remains challenging in many marginalised drylands. The UNCCD estimates an annual shortfall of USD 278 billion to 2030 to tackle land degradation, desertification and drought.[5]

Financing models remain a limiting factor, and current approaches tend to be reactive and piecemeal. There is a need to ensure that the "right finance reaches

[1] United Nations, Millennium Ecosystem Assessment (MEA), 2005, Chapter on Dryland systems: https://www.millenniumassessment.org/documents/document.291.aspx.pdf, accessed 6th April 2025.
[2] United Nations Convention to Combat Desertification (UNCCD), 2024, World Drought Atlas, https://www.unccd.int/resources/publications/world-drought-atlas, accessed 6th April 2025.
[3] UNCCD, 2025, Sustainable Development Goals (SDGs) Indicator 15.3.1 https://data.unccd.int/land-degradation, accessed 5th April 2025.
[4] UNCCD, 2024, Financial Needs Assessment, https://www.unccd.int/resources/publications/investing-lands-future-financial-needs-assessment-unccd.
[5] UNCCD, Financial Needs Assessment, https://www.unccd.int/resources/publications/investing-lands-future-financial-needs-assessment-unccd, 2024.

the right people at the right time" to proactively support dryland ecosystems and dependent communities.

This policy brief presents a recently launched Innovative Finance Framework for Sustainable Dryland Development[6] to identify where traditional and innovative forms of public, private and alternative finance can be scaled up to bridge gaps and support step-change SDM.

The Framework is structured around climate and non-climate related shock events in drylands, recognising that while such events cannot be eliminated, resilience can be built ex-ante, impacts managed, and recovery can transition back towards sustainable development and resiliency-building pathways. The Framework defines three distinct but interconnected and overlapping development phases (see Figure 1):

Phase 1: Sustainable Productivity and Resilient Development;

Phase 2: Bracing for Shock; and

Phase 3: Transitioning Back Better.

[6] Hiller, B.T., December 2024, An Innovative Finance Framework for Sustainable Dryland Development, https://www.isdb.org/sites/default/files/media/documents/2024-12/IsDB%20-%20An%20Innovative%20Finance%20Framework%20for%20Sustainable%20Drylands%20Development%20-%2001-12-2024%20-%20Final%20%282%29.pdf, Islamic Development Bank, Jeddah, Kingdom of Saudi Arabia.

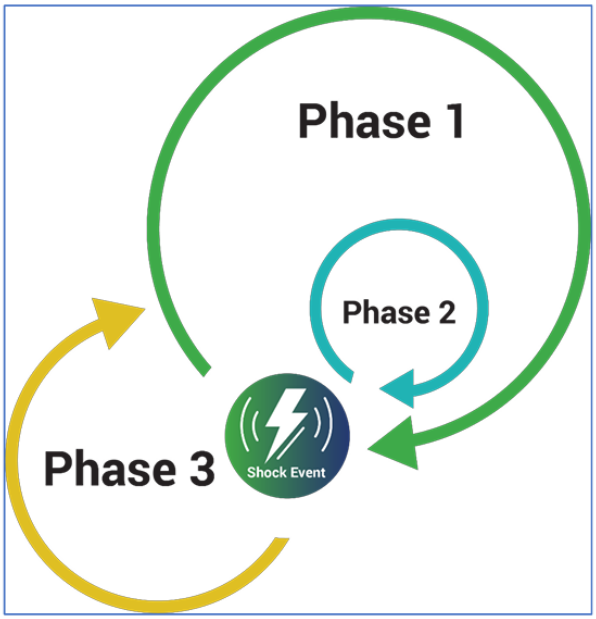

Figure 1 – Innovative Finance Framework for Sustainable Dryland Development – Phases 1, 2 & 3

Phase 1 represents the ambition for SDM. It aims to attract public and private investment – both scaling existing financing mechanisms and introducing new modalities – potentially leading to self-reinforcing development. Major public finance sources include national budgets and international development finance to support innovative approaches such as public-private partnerships, integrated commodity value chain programmes, and private sector investment via vehicles such as thematic bonds and equity vehicles. Households, often overlooked, are pivotal stakeholders, serving as both sources and recipients of finance. Ultimately, Phase 1 may embed sufficient resiliency to avoid Phase 3.

Uncertainty and volatility characterise many drylands and Phase 2 emphasises proactive actions to avoid, mitigate or reduce adverse shock impacts, thereby reducing potential losses and the need for recovery, rehabilitation, and reconstruction. Phase 2 disaster preparedness and risk reduction measures should be integrated into Phase 1 (to reduce the probability of descent into Phase 3). The dependency of Phase 2 on information to support forecasting and early-warning utilises a narrower range of financing modalities, such as government-

funded public works programmes, (parametric) insurance, and thematic debt instruments (eg, resilience bonds).

Phase 3 focuses on coping, relief, recovery, and rebuilding post-shock and aims to shift from reactive relief financing to transition strategies (ultimately back to Phase 1). It typically involves significant costs, often covered by public and private finance, especially at household and community levels. Common forms of public finance include grants and humanitarian aid, and concessional lending often includes structured debt clauses and deferred payments for disasters. Emerging instruments include debt swaps, catastrophe bonds, and diaspora bonds and remittance flows may support time-critical local-level actions.

Examples of public and private finance modalities supporting green and resilient COVID-19 recovery[7] and emerging programmatic approaches with potential to influence macroeconomic conditions (such as Africa's Great Green Wall (GGW) and the Middle East Green Initiative (MGI)) illustrate potential for the 3-phase finance framework to enhance resilience building and SDM.

Recommendations

The framework reorients SDM by acknowledging increasing extreme event cycles and ensuring that "the right finance reaches the right people at the right time". Encouragingly, the framework principles are being embedded into development pathways, with positive preliminary results.

[7] For example, see International Monetary Fund (IMF) Climate Change – Green Recovery (https://www.imf.org/en/Topics/climate-change/green-recovery) and United Nations Development Program (UNDP) How five countries are greening COVID-19 recovery (https://climatepromise.undp.org/news-and-stories/how-five-countries-are-greening-covid-19-recovery, August 2024).

Kenya, for example, is "transitioning back better" following recurrent climate-related disasters between 1990-2020, affecting >28 million people[8]. Current policy and institutional settings draw upon past recoveries and needs assessments;[9] prioritise "life on land" and "leaving no-one behind" (eg, Voluntary National SDG Review,[10] LDN Target Setting[11]); and support national preparedness and response systems.[12] Kenya has also reduced national degraded land area from 19.4% (2019) to 11.4% (2022).[13]

Kenya's transition is coordinated by the National Drought Management Authority (NDMA), responsible for overall drought risk management and establishing mechanisms to end drought emergencies. The NDMA integrates framework elements from Phase 3 (recovery, response, mitigation) and Phase 1/2 (forecasting, early-warning, contingency planning, resilience, information/knowledge/capacity building). The National Drought Emergency Fund (NDEF), with annual capitalisation of >USD15 million, includes resilience building (50% allocation) and response (40% allocation).[14] Such national government signaling has encouraged private investment in green rangeland

[8] Kevins, O.J., September 2024, Exploring the potential of Green Bonds in Kenya's Climate Finance landscape, Scholar Media Africa, https://scholarmedia.africa/climate-change/exploring-the-potential-of-green-bonds-in-kenyas-climate-finance-landscape/, accessed 4th April 2025.
[9] Republic of Kenya, 2012, Kenya Post-Disaster Needs Assessment (PDNA) 2008-2011 Drought, Technical support from European Union, United Nations & World Bank, https://www.gfdrr.org/sites/default/files/publication/pda-2011-kenya.pdf, accessed 4th April 2025.
[10] Republic of Kenya, Third Voluntary National Review on the Implementation of the Sustainable Development Goals, The National Treasury and Economic Planning State Department for Economic Planning, https://sdgkenyaforum.org/content/vnr/2024/Submitted_to_New_York_Final_-_VNR_Report_2024190624.pdf, accessed 5th April 2025.
[11] Republic of Kenya, Land Degradation Neutrality Target Setting Final Report, https://www.unccd.int/sites/default/files/ldn_targets/2020-09/Kenya%20LDN%20TSP%20Final%20Report%20%28English%29.pdf, 2020.
[12] Republic of Kenya, National Drought Management Authority (NDMA), Knowledge Web – The Knowledge Platform for Drought Risk Management, https://knowledgeweb.ndma.go.ke/Public/Resources/Default.aspx?ID=7, accessed 4th April, 2025.
[13] Republic of Kenya, Third Voluntary National Review on the Implementation of the Sustainable Development Goals, The National Treasury and Economic Planning State Department for Economic Planning, https://sdgkenyaforum.org/content/vnr/2024/Submitted_to_New_York_Final_-_VNR_Report_2024190624.pdf, accessed 5th April 2025.
[14] The remaining allocation is for coordination and administrative expenses.

production in drought affected areas[15] and devolution of budgeting, financial management, and conflict resolution. Transitioning towards Phase 1, Kenya promotes value chains rewarding sustainable productivity;[16] revegetating water towers and public/private lands for SDM and carbon sequestration; and expanding green bond market development.[17]

Other countries, including in the Horn of Africa and Sahel, are beginning to integrate explicit acknowledgement of the intensification of hydro-meteorological stability-shock cycles into SDM strategies.[18]

Regional programmes, such as the GGW and MGI, integrate proactive resilience-building measures and blended finance mobilisation. MGI proposes early-warning systems; dust-storm monitoring/minimisation; up to USD $2.5 billion in grant finance to leverage co-financing; and emphasises sustainable multi-sector productivity.[19] Recent initiatives such as the Riyadh Global Drought Resilience Partnership (RGDRP) (targeting the 80 most drought-vulnerable countries); the Groundwater Access Facility (promoting resource resilience in the Horn of Africa/Sahel regions); and the Global Takaful Alliance (promoting insurance to 100 million vulnerable smallholder farmers by 2030) all aim to build financial and community resilience to shock events.

[15] King-Okumu, C., 2015, Inclusive Green Growth in Kenya: Opportunities in the Dryland Water and Rangeland Sectors, London: IIED, https://www.iied.org/sites/default/files/pdfs/migrate/10137IIED.pdf.
[16] See reports on the NDMA website relating to the Twende Project https://ndma.go.ke/.
[17] Kevins, O.J., September 2024, Exploring the potential of Green Bonds in Kenya's Climate Finance landscape, Scholar Media Africa, https://scholarmedia.africa/climate-change/exploring-the-potential-of-green-bonds-in-kenyas-climate-finance-landscape/, accessed 4th April 2025.
[18] King-Okumu, C., 2021, A Rapid Review of Drought Risk Mitigation Measures, https://openknowledge.fao.org/items/cfae757b-ea60-4e71-ab6e-76a8bcef62f4.
[19] Kingdom of Saudi Arabia, MGI: Powering regional climate action, https://www.sgi.gov.sa/about-mgi/, accessed 3rd April 2025.

G20 support for the framework principles could increase access to, and amplify finance flows to support step-change dryland development by:

- Including dryland finance and stability-shock cycle finance discussions in G20 Sustainable Finance Working Group, focusing on areas economically marginalised, fragile and susceptible to interconnected risks;
- Supporting G20 GLI and LDN targets and the RGDRP in the lead-up to UNCCD COP17;
- Promoting G20 financial support for regional programmes (e.g. GGW, MGI);
- Broadening the Just Transition concept towards Just Land Transition (introduced under Brazilian T20 Presidency[20]);
- Supporting dryland economies understand potential benefits of stability-shock cycle finance modalities and establishment of authorities (such as Kenya's NDMA) to drive just (dry)land transition pathways. This could include return-on-investment studies in National Drought Management Plans and updating UNCCD Finance Needs Assessment.
- Integrating the framework into G20 Working Group on DRR (South African Presidency[21]

[20] Hiller, B., Jobran, F., Meza Murillo, A., Busha, W.A. & Ndiaye, D., 2024, Rethinking Sustainable Finance for Drylands, https://www.t20brasil.org/media/documentos/arquivos/TF02_ST_03_Rethinking_Sustaina66e87bc666ed5.pdf.

[21] G20, G20 Working Group on Disaster Risk Reduction, https://g20drrwg.preventionweb.net/, accessed 6th April 2025.

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