Repositioning Drylands in Africa:

From Vulnerability to Strategic Investment and Resilience (2026–2030)

3rd Dryland Agriculture and Food Systems in the Face of Climate Change

Dialogue Paper

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AGRA Sustainably Growing Africa's Food Systems

The Food and Land Use Coalition

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TISA

PELUM KENYA

Tana & Athi Rivers Development Authority

PACJA Panafrican Climate Justice Alliance

World Vision Kenya

Welt Hunger Hilfe

ZEP-RE (PTA Reinsurance Company)

CGIAR Multifunctional Landscapes

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Abstract

Drylands in Africa are central to food systems, climate resilience, and regional stability, yet continue to be underfinanced and structurally marginalized. While often framed primarily through a humanitarian lens, drylands represent significant economic and ecological opportunities that remain underleveraged.

This position paper advances a shift from a vulnerability-based framing to a strategic investment approach. It proposes targeted interventions in de-risking agricultural and pastoral systems, strengthening cross-border governance, and catalyzing inclusive enterprise development.

The paper calls for coordinated regional action, blended financing mechanisms, and policy alignment to unlock the economic and ecological potential of drylands between 2026 and 2030, while informing global processes and upcoming regional platforms.

This repositioning aligns with continental frameworks including the African Union Agenda 2063 and the Comprehensive Africa Agriculture Development Programme, which emphasize resilient agricultural systems, inclusive growth, and climate adaptation.

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The Dialogue also benefited from the participation and technical contributions of the Ministry of Agriculture and Livestock Development, led by Eng. Laban Kiplagat, together with representatives from research and academic institutions, national and county governments, development and humanitarian organizations, financial and private sector institutions, civil society, and technical agencies. Their diverse expertise and perspectives helped shape the paper's focus on dryland agriculture, climate resilience, food systems, financing mechanisms, landscape restoration, regional coordination, and inclusive enterprise development.

We further recognize the contributions of practitioners, experts, and stakeholders who participated in the Dialogue and shared their experience, evidence, and recommendations. Their engagement helped identify key priorities around water reliability, climate-smart agriculture and livestock systems, enterprise and value chain development, nutrition-sensitive food systems, landscape restoration, blended finance and de-risking, youth and women's economic participation, data and innovation, and localized implementation.

We also acknowledge the broader Planning Committee and partner institutions whose contributions to the Dialogue process and continued engagement remain instrumental in advancing the drylands agenda. The full range of participating institutions and stakeholders is reflected in the Diplomatic, Institutional and Stakeholder Participation section of this paper.

This paper reflects a shared commitment to reposition Africa's drylands as strategic investment frontiers and to advance coordinated, long-term action for resilient food systems, sustainable livelihoods, and inclusive economic transformation.

1.0 Introduction

Dryland ecosystems across Africa support millions of pastoralists, smallholder farmers, and emerging agribusiness enterprises. Despite their significance, these regions face persistent challenges including climate variability, land degradation, and cyclical humanitarian crises.

This Dialogue provides a timely opportunity, particularly within the 2026 International Year of Rangelands & Pastoralists, to reposition drylands as engines of resilience, innovation, and investment frontiers that can drive inclusive growth, resilience, and stability across the continent.

2.0 Background and Context

Amidst challenges across the continent, drylands present transformative opportunities as follows:

1. Livestock sector value: A multi-billion-dollar continental asset with strong potential for intra-African trade and export markets. The livestock sector contributes up to 40% of agricultural GDP in many African countries and is a primary asset base for pastoral communities.
2. Climate & drought trends: Increasing frequency and intensity of droughts are undermining resilience while reinforcing the urgency for adaptive investment. The Horn of Africa has experienced five consecutive failed rainy seasons (2020–2023), one of the worst droughts in 40 years. Climate change in ASALs has led to increased severity of droughts and floods, emergence of pests and diseases, land degradation, and variability in rainfall and temperature.
3. Youth unemployment in Kenya (15–34 age group) stands at over 67%, with the highest incidence in rural and ASAL areas. Over 1 million youth enter the labour market annually without adequate skills, presenting both a challenge and an opportunity.
4. Financing fragmentation: Disjointed and short-term funding approaches persist despite strong potential for scalability and long-term impact.
5. Women remain structurally excluded from economic opportunities. Recent data from the Food and Agriculture Organization indicates that 76 percent of working women in sub-Saharan Africa are employed in agrifood systems, the highest share globally. Despite this, women face persistent constraints including limited access to land, finance, and social protection, with less than 15 percent owning agricultural land and only a small proportion accessing formal financial systems. Closing these gender gaps presents a major economic opportunity. Evidence shows that addressing productivity and wage disparities could unlock up to USD 53 billion in gains and significantly reduce food insecurity across the region.

Further, drylands in Africa are home to more than 50% of the population and contribute significantly to livestock production, rangelands, GDP, and livelihoods. Systemic constraints persist including:

- Limited de-risking systems
- Fragmented governance and financing
- Weak cross-border coordination
- Limited enterprise systems
- Low insurance and data penetration
- Gendered barriers
- Limited integration of indigenous knowledge

These gaps necessitate a paradigm shift toward resilience-based investment models.

2.1 Policy, Legal and Institutional Frameworks Alignment

The paper is anchored on key national and county policy, legal, and regulatory frameworks that intersect across dryland agriculture, food systems, climate change, water, and natural resource management. These include:

- Agricultural Sector Transformation and Growth Strategy – Guides sector-wide transformation priorities, including productivity, value chains, and food security.
- National Agriculture Policy – Provides an overarching framework for sustainable and competitive agricultural development.
- Climate Change Act and National Climate Change Action Plan – Establish governance and actions for climate mitigation and adaptation across sectors.

- National Adaptation Plan – Outlines long-term climate resilience strategies.
- Water Act – Governs water resource management critical for dryland agriculture.
- ASAL Policy – Focuses on sustainable development in arid and semi-arid lands.
- National Food and Nutrition Security Policy – Ensures access to adequate and nutritious food.
- National Irrigation Policy – Promotes irrigation to reduce reliance on rain-fed systems.
- Environmental Management and Coordination Act – Provides environmental protection and sustainability framework.
- County Integrated Development Plans (CIDPs) – Anchor localized planning and implementation.
- National Soil Health Action Plan – Strengthens regenerative agriculture and long-term productivity.
- National Agroecology and Food Systems Strategy – Promotes sustainable and resilient food systems.

The paper also aligns with regional and global frameworks including:

- Comprehensive Africa Agriculture Development Programme
- Malabo Declaration (2014)
- Sustainable Development Goals
- Paris Agreement (2016)
- EACC 2025 call to action

The paper emphasizes strengthening coherence, coordination, and implementation across these frameworks.

Uplifting rural communities from poverty

3.0 Problem Statement

Despite their economic, ecological, and social significance, drylands remain underinvested, fragmented in governance, and predominantly approached through short-term humanitarian responses. This has limited their ability to contribute fully to food systems, economic growth, and climate resilience.

3.1 Position Statement

Given more than 43% and 80% of drylands in Africa and Kenya respectively, these regions must be repositioned as priority investment frontiers through coordinated regional action, innovative financing, and inclusive enterprise development frameworks.

A coordinated, investment-driven approach anchored in de-risking, regional integration, and enterprise ecosystems is essential. Drylands represent one of the largest undercapitalized investment frontiers in Africa with potential for strong economic returns and reduced long-term humanitarian costs. In Kenya, the drylands support millions of livelihoods and are vital for future food security under climate change. Despite producing most of the nation's livestock, these areas remain underfunded, even as droughts intensify and traditional farming zones become less reliable. Investing in dryland systems through climate-smart practices, infrastructure, and resilience measures can significantly boost productivity and reduce losses. Kenya calls for greater financing and policy focus to transform drylands into key pillars of resilient, secure food systems.

4.0 Strategic Questions for Africa

4.1 Where are the most significant underfunded opportunities across Africa's drylands?

4.2 Which interventions remain too fragmented to deliver continental impact?

4.3 What cross-border and regional challenges require joint African investment and coordination?

4.4 How can drylands be repositioned from humanitarian response zones to structured investment ecosystems?

4.5 What financing and governance models are required to unlock scale across fragmented systems?

5.0 Strategic Arguments Supporting the Position

5.1 De-Risking Dryland Economies Unlocks Investment Potential

Dryland economies, especially those centered on agriculture and pastoralism are often labeled "high-risk" due to climate variability, market volatility, and limited infrastructure. However, this perception reflects structural gaps rather than inherent unviability. The opportunity is not only to reduce risk, but to repackage and structure it in ways that enable investment. Less than 5% of climate finance reaches smallholders. Strategic risk-sharing mechanisms are therefore critical.

Guiding Questions:
- How can Development Finance Institutions (DFIs) and private sector actors collaborate effectively to scale blended finance across Africa?
- What risk-sharing instruments are most suitable for dryland economies?

Implication: Strategic risk-sharing mechanisms are critical to unlocking scalable investment. Strategic investments in climate-smart agriculture, livestock systems, and natural resource management can generate significant economic and resilience gains

5.1.1. Scaling Blended Finance through DFI–Private Sector Collaboration

By aligning roles across the investment lifecycle:
- Development Finance Institutions (DFIs) absorb early-stage risk through first-loss capital, guarantees, and technical assistance
- Private investors enter at later stages once risks are mitigated and returns are clearer

A key constraint across Africa is not just capital, but the lack of bankable projects. This requires:
- Investment in project preparation facilities and feasibility studies
- Aggregation of smallholder farmers and pastoralists into investable units
- Development of structured value chains (livestock, drought-resilient crops, processing)
- Use of digital platforms, satellite data, and financial technologies to reduce uncertainty

5.1.2. Risk-Sharing Instruments for Dryland Economies

- First-loss (catalytic) capital to crowd in private investment
- Partial credit and risk guarantee to expand rural lending
- Index-based livestock and crop insurance
- Blended debt structures combining concessional and commercial finance
- Results-based financing linked to resilience and productivity outcomes
- Equity co-investment platforms in agri-enterprises
- Currency risk hedging mechanisms

What Unlocks Scale:
- Risk layering
- Aggregation
- Data transparency
- Standardization

Without these, capital will continue to trickle rather than flow.

5.2 Addressing Governance and Financing Fragmentation

While significant investments in dryland development exist, they remain fragmented, short-term, and poorly coordinated across sectors and borders, limiting their impact. In addition, weak integration of community-level evidence into policy and budgeting continues to constrain systemic change.

This fragmentation results in:
- Duplication of efforts
- Inefficient resource allocation
- Weak scalability of successful interventions
- Limited long-term transformation

Guiding Question:
Which existing interventions across Africa are too fragmented to deliver transformative outcomes?

Implication:
Coordinated, multi-sectoral, and multi-level investment frameworks are required to align resources, reduce duplication, and achieve sustained impact.

5.3 Regional and Cross-Border Coordination

Dryland systems are inherently transboundary, requiring harmonized approaches.
Pastoral mobility corridors, shared water resources, and cross-border livestock trade require coordinated regional frameworks to prevent conflict and enhance economic efficiency.

Cross-border dynamics remain highly sensitive, as demonstrated by recent movement restrictions in pastoral corridors, which disrupted livelihoods and required emergency regional dialogue to stabilize affected communities.

This highlights the critical importance of:
- Regional governance mechanisms
- Early warning systems
- Cross-border coordination platforms
- Shared resource management frameworks

Guiding Question:
What cross-border challenges require joint continental investment and policy alignment?

Implication:
Fragmented national approaches undermine efficiency; regional coordination is indispensable for stability, resilience, and trade.

5.4 Catalyzing Enterprise Development

Enterprise development unlocks youth and women participation and drives inclusive growth.
Drylands present untapped opportunities for youth and women-led enterprises. Despite their central role in production, women and young people remain concentrated in lower-value segments of value chains, with limited access to land, capital and formal markets. Unlocking women's participation across higher-value segments of dryland value chains represents one of the most immediate opportunities for economic transformation. As highlighted by the Food and Agriculture Organization, closing gender gaps in agrifood systems could generate up to USD 53 billion in economic gains across Africa.

Drylands present significant untapped opportunities for youth and women-led enterprises.
Despite their central role in production systems:
- Women remain concentrated in lower-value segments
- Youth face structural barriers to entry
- Access to land, finance, and markets remains limited

Agri-SMEs contribute up to 90% of jobs in some African economies, yet face persistent constraints in scaling.
This results in underutilized human capital in one of Africa's most resource-rich ecosystems.

Guiding Question:
Which catalytic initiatives are needed to unlock youth and women-led enterprises at scale?

Implication:
Investing in enterprise ecosystems transforms drylands into hubs of innovation, productivity, and inclusive growth.

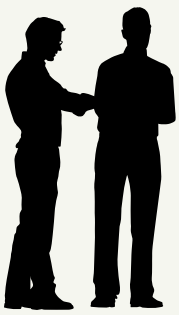
6.0 Counterarguments and Rebuttal

Counter-Argument 1: Africa's Drylands are too risky for large-scale investment
Rebuttal:
Dryland economies are not inherently high-risk they are under-structured and underinvested. Evidence shows that with appropriate de-risking instruments such as blended finance, insurance, and climate data systems, these markets become investable. The issue is not risk itself, but how it is managed, distributed, and priced.

Counter-Argument 2: Existing investments are sufficient but underperforming
Rebuttal:
Existing investments are fragmented, short-term, and often disconnected from systemic transformation. Many operate in silos without integration across value chains, geographies, or financing mechanisms. Improved coordination, long-term programmatic approaches, and investment alignment are required to unlock scale and impact.

Counter-Argument 3: National policies are sufficient for dryland management
Rebuttal:
While policy frameworks exist, implementation remains weak due to financing gaps, limited institutional coordination, and insufficient capacity at county level. Additionally, dryland systems are transboundary, requiring regional cooperation beyond national policy frameworks.

Counter-Argument 4a: Investments in youth and enterprise are long-term and uncertain
Rebuttal:
Investments in youth and enterprise generate immediate and long-term economic returns through job creation, productivity gains, and value chain development. Given Africa's demographic trends, failure to invest presents a significantly higher economic risk.



Counter-Argument 4b: Humanitarian assistance should remain the priority
Rebuttal:
Humanitarian assistance is necessary but insufficient. Without parallel investment in resilience and economic systems, it perpetuates cycles of dependency. Evidence shows that resilience investments significantly reduce long-term humanitarian costs.

7.0 Policy Recommendations and Strategic Actions

7.1 De-Risking Agriculture and Pastoral Investment

A shift toward de-risked, investable dryland economies requires integrated financial, institutional, and technological interventions.

- Scale blended finance instruments including guarantees, concessional loans, and insurance mechanisms
- Expand index-based livestock and crop insurance schemes tailored to climate variability in drylands
- Promote risk-layering approaches combining insurance, savings, and social protection systems
- Strengthen land tenure systems and investment security to enable long-term capital inflows
- Invest in climate data systems, digital platforms, and early warning infrastructure for improved risk management
- Leverage digital financial inclusion tools to expand access to credit, insurance, and markets
- Support agroecology and regenerative agriculture systems to enhance ecological resilience and productivity

7.2 Addressing Fragmentation and Unlocking Opportunities

Fragmentation across financing, governance, and implementation systems continues to limit scale and impact.

- Establish coordinated multi-partner continental dryland investment platforms
- Align donor, government, and private sector financing frameworks for long-term systems transformation
- Develop pipelines of bankable dryland investment projects across agriculture, livestock, and natural resources
- Strengthen investment tracking, data systems, and accountability mechanisms
- Promote integrated landscape approaches linking agriculture, water systems, ecosystems, and rangelands
- Enhance coordination between national and county-level planning structures to improve implementation efficiency

7.3 Strengthening Regional and Cross-Border Co-ordination

Given the transboundary nature of dryland ecosystems, regional integration is essential for stability, trade, and resilience.

- Strengthen regional bodies (IGAD, African Union) coordination mechanisms for dryland governance
- Operationalize cross-border peacebuilding and resource-sharing frameworks
- Support cross-border livestock mobility and trade facilitation frameworks
- Harmonize natural resource management policies across member states
- Strengthen regional early warning systems for drought, climate shocks, and conflict
- Develop regional trade corridors and infrastructure for livestock and dryland commodities

7.4 Catalyzing Enterprise and Inclusive Growth

Drylands must transition from subsistence-based systems to structured, inclusive, and investment-ready enterprise ecosystems.

- Promote aggregation models such as cooperatives and producer organizations to improve scale, efficiency, and bankability
- Design financial instruments tailored for youth and women-led enterprises in dryland economies
- Strengthen gender-responsive land policies and improve women's land tenure security
- Strengthen linkages between TVET systems and dryland value chains to address skills mismatches and workforce readiness
- Promote commercialization of pastoralism and livestock systems as viable and structured business models
- Invest in cold storage, logistics, and food distribution systems to address seasonal food imbalances and reduce losses
- Support localized processing (e.g., milk, livestock, grains, and legumes) to retain value within dryland economies
- Invest in water harvesting, storage, and irrigation systems to enable year-round production and reduce dependence on rainfall
- Integrate indigenous knowledge systems into enterprise development and climate adaptation strategies

8.0 Expected Outcomes (2026–2030)

- Clear identification of Africa's priority dryland investment opportunities
- Strengthened alignment of partners around 3–5 catalytic initiatives
- Increased investment in infrastructure, enterprise, and value chains
- Improved policy coherence across national, regional, and global frameworks
- Stronger inclusion of youth and women in economic systems
- Reduced reliance on humanitarian interventions through resilience-building
- A pipeline of bankable, scalable dryland investment projects
- Strengthened uptake of the Youth & Women Innovation Challenge as an entry point for enterprise development

Demonstrating scalable success models such as camel milk value chains in Isiolo, dairy systems in Baringo, and green grams production in Makueni will be critical in repositioning ASALs as productive, investable regions. These examples highlight the potential of aggregation, localized processing, and market linkages in unlocking economic value.

9.0 Conclusion

Drylands in Africa represent one of the most critical yet underleveraged frontiers for sustainable development. Moving beyond a narrative of vulnerability toward one of opportunity requires deliberate investment, policy coherence, and regional collaboration.

This Dialogue provides a strategic platform to align partners, mobilize resources, and shape a transformative agenda that positions drylands at the center of resilience, economic growth, and ecological sustainability.

It further builds on broader ecosystem initiatives, including youth and women-focused innovation platforms and regional convenings, which together support identification, incubation, and scaling of solutions emerging from dryland communities.

Repositioning drylands is not only a development imperative — it is a strategic investment opportunity for Africa's future.

ANNEX 1: TECHNICAL AND INVESTMENT DETAIL

A. De-Risking and Blended Finance Architecture

Dryland economies are often mispriced rather than inherently risky. With appropriate structuring, they can transition into investment-ready markets.

1. DFI–Private Sector Collaboration

- DFIs absorb early-stage risk
- Private sector enters at scale stage
- Focus on pipeline development, aggregation, and digital tools

2. Risk-Sharing Instruments

- First-loss capital
- Guarantees
- Index-based insurance
- Blended finance
- Results-based financing
- Equity co-investment
- Currency hedging

3. What Unlocks Scale

- Risk layering
- Aggregation
- Data transparency
- Standardization

B. Stakeholder Insights from Pre-Dialogue

- Livestock is a multi-billion sector but remains fragmented
- Continued food imports despite ASAL potential
- Need for aggregation and cluster-based investment
- Water harvesting and irrigation critical
- Weak food distribution and storage systems
- Cross-border conflict and mobility challenges
- Cultural dynamics in pastoralism must be considered
- Need to commercialize pastoralism
- Importance of indigenous knowledge
- Role of counties in last-mile delivery
- Skills mismatch and need for extension services

C. Illustrative Opportunities & Success Cases

- Camel milk value chains (Isiolo)
- Dairy systems (Baringo)
- Green grams (Makueni)
- Aggregation models improving market access

D. Strategic Gaps Identified

- Policy implementation gaps
- Weak coordination
- Low insurance uptake
- Poor market systems
- Limited infrastructure (cold storage, logistics)

Diplomatic, Institutional and Stakeholder Participation

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