



Rangelands on their own terms

Key messages from GLF Africa 2026 on pastoralism, mobility and resilient drylands



Highlights

- Pastoral societies are not a threat to rangelands; they are key and indispensable stewards of the biodiversity, heterogeneity and ecological functionality that define these landscapes.
- Rangelands are not failed forests or residual lands; they are open, variable, productive and knowledge-rich social-ecological systems.
- Rangelands remain a policy blind spot because science, monitoring and finance systems are often imbalanced, inaccessible, inequitable and uncoordinated.
- The challenge is data adequacy, not only data and knowledge scarcity: available data and local knowledge must be actionable, ground-verified, linked to policy and action, and fit for rangeland and pastoralists' realities.
- Mobility is not disorder; it is a governance, livelihood, climate adaptation and ecological strategy for managing variability and uncertainty.
- Tenure, access and customary institutions are part of the social-ecological infrastructure of rangelands, not secondary social concerns.
- Rangeland finance must move from repeated crisis response to long-term stewardship, investing in mobile services, local value chains and community-led institutions.

Abstract

Africa's rangelands are too often described as unproductive, yet they are major functional landscapes that sustain pastoral livelihoods, nutrient-dense food systems, biodiversity, cultural identity and climate adaptation. Much of the biodiversity and ecological functionality found in these landscapes exists because it has been shaped and sustained by pastoral societies, not in spite of them. Drawing on the GLF Africa 2026 conference synthesis, partner-led session notes and wider scientific literature, this commentary argues that the problem is not that pastoralism is outdated but that policy, science, monitoring and finance still too often use lenses designed for settled, forested or static landscapes. This misreading has consequences. It can turn mobility into a policy problem, treat communal tenure as a side issue, recast pastoral biodiversity stewardship as a conservation threat rather than an asset, mistake tree cover or greenness for restoration, and finance repeated crisis response rather than long-term stewardship. A different approach is needed. Rangelands should be assessed on their own ecological and social terms, with indicators that capture shared ecosystems, mobility, negotiated access and benefit flows, local knowledge, drought response and below-ground function. The paper identifies seven linked arguments: rangelands remain a policy blind spot; pastoral societies are the guardians of rangeland biodiversity and ecological functionality; the challenge is data and knowledge adequacy, not only data scarcity; mobility, tenure and governance are ecological infrastructure; pastoral systems are anticipatory, food, health and livelihood systems; finance must shift from crisis response to stewardship; and policy reforms must stop correcting pastoralism and start correcting the systems around it.

Keywords: *Rangelands; pastoralism; biodiversity stewardship; mobility; drylands; restoration; anticipatory action; tenure; local knowledge; stewardship finance; GLF Africa 2026*

Source basis and purpose

This commentary draws on three sources of evidence. First, it uses the GLF Africa 2026 conference synthesis prepared from partner-led sessions around the conference theory of change, namely *aligning pastoralist leadership, Indigenous knowledge, science-based monitoring, enabling policies and fit-for-purpose finance to transform rangelands into productive, resilient and investable bioculturally diverse landscapes*. Second, it uses partner-led session notes on mobility and transhumance, commons governance, local power, anticipatory action, One Health, camel and livestock value chains, resilient food systems, dryland investment and livable landscape investment. Third, it draws selectively on the manuscript *Rangelands: The neglected half of the global land system* and wider scientific references to strengthen the conceptual and evidence base.

The paper is written as a concise, policy-facing commentary rather than as a conference report. It speaks with and on behalf of the pastoralist women, men and youth whose knowledge, testimony and leadership shaped the GLF Africa 2026 sessions on which it draws; unless stated otherwise, references to “pastoralists” in the text that follows are intended to capture this diversity of voices and roles. Its purpose is to distill a strong storyline from GLF Africa 2026 and place it in conversation with the scientific literature on open ecosystems, rangeland monitoring, restoration, pastoral mobility, governance and stewardship finance. It is designed to be publishable as a short commentary, while also serving as the front-end synthesis for a longer white paper or background report, in which the underlying knowledge products, session materials and technical references cited here will be compiled and hyperlinked in a supporting annex for readers who wish to trace individual claims to their primary sources.

1. Rangelands remain a policy blind spot

Rangelands are central to climate resilience, biodiversity, livelihoods and sustainable land use, but they remain under-recognized in science, misread in policy and underfunded in practice (Hanan et al., 2021; UNCCD, 2024; WWF et al., 2024). They cover large areas of the planet, sustain pastoral, agro-pastoral and ranching livelihoods and provide food, fiber, cultural identity, habitat, soil carbon storage and hydrological functions. Rangelands cover an estimated 80 million square kilometers, or 54 percent of the Earth's terrestrial surface, and are home to up to 500 million pastoralists and other rangeland-dependent people, with a further 2 billion people relying on them indirectly (ILRI et al., 2021; UNCCD, 2024). Yet the dominant story around many rangelands is still one of degradation, conflict, scarcity and vulnerability.

Rangelands remain a policy blind spot, not only because they receive too little attention but because the science, monitoring and finance systems that make landscapes visible, governable and investable remain deeply imbalanced. Forests benefit from stronger inventories, denser time series and more established monitoring systems, while rangelands often enter policy and investment debates with thinner datasets, weaker models and less institutional support (Retallack et al., 2023; Soto et al., 2024). The wider financing imbalance also matters: global finance still flows far more strongly toward nature-negative activities than toward nature-based solutions, reinforcing the gap between ecological importance and actual investment (UNEP, 2026). Within nature-based finance itself, resources often flow disproportionately toward large corporate actors and flagship projects, while the pastoralist communities who rangelands day to day receive only a fraction of the finance that reaches them – a gap recent global assessments have

Box 1. The wrong story is driving the wrong investments

Africa's rangelands are often described through crisis language of risk and unproductivity. GLF Africa 2026 challenged this framing. Rangelands are not empty or failed landscapes. They are productive, biodiverse, knowledge-rich and economically significant socially and ecologically functional systems. The problem is not that pastoralism is outdated. The problem is that many policies, metrics and investments are still designed for settled, forested and static landscapes, while rangelands are mobile, open, variable and governed through relationships (Preiser, 2018).

Table 1. Setting the record straight: dominant narratives and evidence-based realities

The dominant narrative/misconception	The evidence countering narrative
Rangelands are empty, unproductive wastelands.	Rangelands are open, biodiverse, productive social-ecological systems that sustain up to 500 million pastoralists directly and around 2 billion people indirectly (ILRI et al., 2021; UNCCD, 2024).
Pastoral mobility is disorder, and communal tenure is backward or insecure.	Mobility is a sophisticated governance, livelihood and ecological strategy; communal tenure enables the flexible, negotiated access that rangeland ecology requires (Lind and Flintan, 2025; Louhaichi et al., 2026).
Pastoralism threatens biodiversity and must be excluded from conservation areas.	Pastoral grazing and mobility create and sustain the landscape heterogeneity that much rangeland biodiversity depends on; removing pastoralists from their territories can reduce, not enhance, ecological function (Briske et al., 2026).
Rangelands are best restored by planting trees.	Tree planting on open ecosystems can reduce biodiversity and grazing value; rangeland restoration should prioritize herbaceous condition, fire, grazing and soil function (Veldman et al., 2015; Parr et al., 2024).
Rangelands are mainly a relief and emergency response problem.	Rangelands are also anticipatory, food, health and economic systems that require long-term stewardship investment, not just crisis response (Sections 5–7 of this paper).

increasingly identified as a barrier to effective biodiversity and climate outcomes (IPBES, 2024a).

That story is incomplete and often harmful. It turns complex social-ecological systems into crisis landscapes. It treats pastoralism as a problem to be managed rather than as a sophisticated adaptive system. It makes mobility appear as disorder, communal tenure as backwardness, low tree cover as deficiency and local governance as informal residue rather than institutional capacity. The consequence is a policy and investment system that too often tries to settle, fence, “formalize” tenure systems and green, replace or externally manage rangelands instead of understanding how they function. Formalization is often assumed to increase tenure security, yet in many pastoral contexts, individualized land titling and documentation can instead fragment communal grazing systems and increase the vulnerability of communal tenure rather than protect it (Lind and Flintan, 2025).

GLF Africa 2026 brought this tension to the center. Participants emphasized that rangelands should not be treated as wastelands, nor should pastoralist communities be framed only as vulnerable beneficiaries. They are land stewards, knowledge holders, food producers, market

actors, first responders, ecological managers and primary investors in rangeland systems. A publication-ready interpretation of the conference must therefore start by correcting the story. The key question is not how to make rangelands look more like forests or croplands but how to support rangelands on their own ecological, economic and governance terms.

2. Pastoral societies are the guardians of rangeland biodiversity and ecological functionality

Much of the biodiversity and ecological functionality visible in Africa's rangelands today is not incidental to pastoralism. It exists because pastoral societies have nurtured, disturbed and cared for these landscapes across centuries and, in many places, across millennia. Grazing, fire management, seasonal mobility and negotiated access have co-evolved with rangeland ecology to the point where the two are no longer separable. Pastoral social-ecological systems are as much a product of this long relationship as the plant and animal communities within them (UNCCD, 2024). Recognizing this co-evolution matters because a great deal of contemporary policy and conservation practice still treats pastoralism and nature conservation as competing land uses, an assumption with a specific history rather than a natural or self-evident starting point.

Box 2. Pastoralism is not a threat to nature; it is one of its stewards

Biodiversity and ecological functionality in many of the world's rangelands persist because of pastoral management, not despite it. The continued removal of pastoral communities from land destined for protected areas, a practice with deep colonial roots, disconnects rangelands from the pastoral systems that shaped their ecological character. Doing so removes rangelands' primary ecosystem engineers: the herders and herds whose grazing and mobility generate the landscape heterogeneity that wild plant and animal communities have adapted to over centuries. New instruments now exist to recognize this contribution formally, including OECM designation for community-managed rangelands, agroecological approaches to pastoral production and restoration models built around pastoral stewardship. Wildlife tourism, which underpins several national economies, can succeed on pastoral territory that remains productive for the communities who manage it. A rangeland without its pastoral communities is not more natural; it is a landscape that has lost the relationship that made it what it is.

That assumption has a lineage. Many of the protected areas that anchor Africa's conservation estate today were established in colonial times by removing or restricting the pastoral communities who had shaped those landscapes for generations, a pattern that continued after independence in some places (Dominguez and Luoma, 2020). The resulting narrative – that pastoral livestock keeping degrades nature and that conservation requires separating people from wildlife – has proven durable even where the ecological evidence points the other way. This is a sensitive history, and reasonable people continue to debate how protected areas should be governed. What is less contested is the ecological record. Rather than being incidental bystanders, pastoral societies have long been the primary managers of the disturbance regimes, mainly grazing and fire, that create and sustain the landscape heterogeneity many rangeland species depend on (Briske et al., 2026).

Recent synthesis work makes this case directly. Sustainable pastoralism is now recognized as a primary strategy for meeting global biodiversity targets: 67 percent of the world's biodiversity hotspots and 38 percent of key biodiversity areas overlap with rangelands, yet only around 12 percent of rangelands carry formal protection status, meaning most rangeland biodiversity already depends on pastoral stewardship rather than on parks (Briske et al., 2026). The same synthesis identifies four concrete synergies between pastoralism and biodiversity conservation: working lands conservation that extends protection beyond formal park boundaries; the continuation of grazing and fire disturbance regimes that many rangeland species have adapted to; the maintenance of transhumance corridors that provide ecological connectivity across large landscapes; and community-led governance systems that have managed these commons for generations (Briske et al., 2026). In East African savannas, pastoral herd movement has been shown to create and maintain the patchwork of pasture ages and conditions that wildlife populations track and depend on, so that livestock and wild herbivores end up sharing rather than competing for the same productive landscape.

A policy opening now exists to formalize this recognition. Other effective area-based conservation measures (OECMs) allow governments to count community-managed rangelands toward global conservation targets without requiring the exclusion-based model of a formal protected area, and managed rangelands are explicitly among the land types that can qualify (Jonas et al., 2024). Parallel efforts applying agroecological principles to pastoral production systems, and rangeland restoration programs built around community management, increasingly start from the same premise: pastoral communities are stewards of the land, not a threat to it, and restoration succeeds when it strengthens rather than substitutes for pastoral management. Wildlife tourism offers a practical test of this logic. In Kenya's community conservancy model, tourism revenue and livestock production coexist on the same land, with grazing and wildlife movement managed jointly rather than separated by fences (Bashir and Wanyonyi, 2024). Where this coexistence works, it works because pastoral communities remain present and active – not because they have been removed.

None of these insights denies that trade-offs exist, or that some rangelands are degraded by overstocking, blocked mobility or conflict. The point is narrower and more consequential for policy: the default assumption should shift from treating pastoral presence as a conservation risk to be managed toward treating pastoral stewardship as conservation infrastructure to be supported and rewarded. That shift in default assumption, more than any single instrument, is what the rest of this paper's argument hinges on.

3. The problem is data and knowledge adequacy, not only data scarcity

One reason rangelands remain policy blind spots is that they are often measured through tools and assumptions developed for forests and croplands. In many land monitoring systems, tree cover is treated as a default sign of improvement, while treeless or sparsely wooded landscapes are treated as low priority or degraded. This assumption fails in grasslands, savannas and pastoral drylands, where open

Box 3. Beware of green false positives

A greener landscape is not necessarily one that has been restored. In rangelands, increases in remotely sensed greenness may reflect woody encroachment, bush thickening or vegetation shifts that reduce grazing value and alter ecosystem function. Restoration metrics must move beyond simple tree cover or greenness indicators and capture herbaceous condition, shrub–grass balance, grazing dynamics, fire regimes, soil function, mobility and local management realities.

structures, herbaceous vegetation, below-ground carbon, fire, grazing, rainfall variability and mobility are defining features of the system (Parr et al., 2014; Veldman et al., 2015; Bardgett et al., 2021).

This matters because the wrong metric can produce the wrong intervention. If restoration is equated with tree planting, ancient grassy biomes may be misclassified as degraded lands waiting for trees. If increasing woody cover is treated as ecological recovery, bush encroachment and shrub thickening may be overlooked, even when they reduce herbaceous productivity, alter biodiversity and lower grazing value (Venter et al., 2020; Parr et al., 2024; Briske et al., 2024). Newer evidence also shows that the conflation of reforestation with restoration remains widespread and that the field evidence base for restoring tropical grassy biomes remains geographically and methodologically uneven (Medeiros et al., 2024; Parr et al., 2024).

The same misfit applies to carbon and soil function narratives. Grasslands and rangelands store a substantial share of their carbon below ground. FAO estimates that around one-fifth of global soil organic carbon occurs under grasslands (Dondini et al., 2023). Yet drylands and pastoral rangelands remain underrepresented in the datasets used to test many soil carbon models, while remote sensing of soil organic carbon has advanced more quickly in croplands than in heterogeneous grazing systems (Garsia et al., 2023; Broeg et al., 2024). This increases the risk that rangeland functions are underestimated, while inappropriate afforestation or woody expansion is misread as ecological improvement.

The challenge is therefore not only data scarcity, but data and knowledge adequacy. Many rangeland indicators that matter for management, including grazing intensity, herbaceous species composition, soil condition, mobility and management history, remain weakly captured or inferred indirectly. This creates a gap between data that are available and data that are actionable, underscoring the need for ground-verified datasets, standardized assessment frameworks and indicators designed for rangeland realities (Retallack et al., 2023; Soto et al., 2024; Louhaichi et al., 2026).

A better science–policy–practice interface for rangelands therefore requires fit-for-purpose indicators. These should include herbaceous

condition, shrub–grass balance, grazing dynamics, fire regimes, drought response, soil function, mobility, negotiated access and management-responsive ecosystem function. The purpose is not to reject remote sensing, digital tools or artificial intelligence. It is to ensure that those tools are grounded, verified and interpreted through the ecology and governance of rangelands, rather than through borrowed assumptions from other land systems.

The same principle applies to digital tools and artificial intelligence. Early warning systems, mobile advisory tools, market information platforms and traceability systems can support pastoralist resilience, but only when they are co-designed with pastoralists and aligned with mobile livelihood systems. Technology should strengthen pastoralist decision making, not replace local knowledge or impose settled-landscape assumptions.

4. Mobility, tenure and governance are ecological infrastructure

The clearest message from the GLF Africa 2026 mobility and transhumance session was that mobility should be recognized as a climate adaptation, livelihood and ecological management strategy. Pastoral mobility allows herders to track variable water and forage, avoid concentrating pressure in one place, sustain livestock production under uncertainty and maintain social relations that enable negotiated access to seasonal resources. It is not a residual practice from the past. It is an adaptive strategy for variable environments.

Yet mobility continues to be constrained by sedentarization biases, land fragmentation, privatization, infrastructure expansion, commercial land acquisition, conflict and shrinking corridors. These pressures undermine communal land systems and seasonal resource access. They also weaken the ecological logic of pastoralist systems. When herders cannot move, grazing pressure becomes less flexible, recovery periods shorten, livestock and people become more exposed to drought, and degradation risks increase (Lind and Flintan, 2025; Louhaichi et al., 2026).

In rangelands, governance and tenure are not secondary social issues. They are part of the ecological infrastructure. This mirrors a wider shift now

Box 4. Mobility is not disorder; it is adaptation

Pastoral mobility is often treated as a problem to be controlled, but GLF Africa 2026 showed the opposite. Mobility is a climate adaptation strategy, a livelihood strategy and an ecological management strategy. It allows herders to track variable pasture and water, reduce pressure on fixed locations and maintain resilience under drought and climate variability. Protecting mobility corridors, communal tenure and negotiated access is therefore not only a social or rights issue, but also central to rangeland function.

Box 5. Governance is ecological infrastructure

In rangelands, governance and tenure shape whether people and livestock can move, grazing pressure is distributed, seasonal resources remain accessible and recovery periods are respected. When communal lands are fragmented, corridors blocked or customary institutions weakened, ecological resilience is weakened, too. Good rangeland governance is therefore part of the social and ecological infrastructure of drylands.

underway in global biodiversity science. Recent assessments argue that reversing biodiversity loss requires not only managing land at the margins but shifting the values and governance structures that shape human–nature relationships (IPBES, 2024b). Land, water, forage, migration routes, seasonal reserves and customary institutions determine whether pastoralists can align livestock movement with highly variable resource availability. When communal lands are fragmented, corridors blocked or customary institutions weakened, ecological resilience is also weakened. Governance failure becomes ecological failure.

The scientific literature supports this shift. In variable dryland systems, negotiated access, seasonal flexibility and corridor protection allow ecological use to follow resource variability (UNCCD, 2024; Lind and Flintan, 2025; Louhaichi et al., 2026). Static land use models often miss this. They may see mobility as a lack of planning, when in practice, mobility is planning under uncertainty. They may see communal tenure as insecure because it does not resemble private property, when in practice, communal tenure can be essential for flexible and negotiated access.

This is why the implementation of governance frameworks matters. Regional and national frameworks that recognize mobility, including transhumance protocols, arid and semi-arid land policies and community land laws, will not change outcomes unless they are domesticated, financed, monitored and enforced. Mobility corridors and seasonal grazing areas need to be mapped, demarcated and legally protected. Mobile services in health, education, animal health, markets and climate information need to support mobility rather than become tools of sedentarization. The policy task is not to modernize pastoralism by ending mobility. It is to modernize governance so mobility can function under contemporary pressures.

5. Pastoral systems are anticipatory, food, health and livelihood systems

Drought policy often treats pastoralists as recipients of early warning and emergency response. GLF Africa 2026 offered a different perspective: pastoralism itself is an anticipatory livelihood system. Herders anticipate variability through movement, herd composition, social networks, negotiated access, market decisions, livestock redistribution, local forecasting and flexible use of water and grazing resources. Their livelihood system is built around uncertainty. Recent synthesis work across pastoralist regions confirms that some anticipatory capacity is already embedded in pastoral knowledge systems, and the priority for external actors is to centre and strengthen that knowledge rather than replace it with standardized triggers (Derbyshire et al., 2024; Derbyshire et al., 2026).

This matters because many anticipatory action models are still too event-focused, linear and settlement-based. They depend on fixed triggers and predefined response packages, and they assume that people, assets and services are relatively stable in space. In pastoral systems, people and herds move, risks unfold across large territories, and decisions are relational, seasonal and negotiated. Anticipatory action therefore needs to become more flexible, more collective and more grounded in pastoralist logics of uncertainty. This also requires rethinking how vulnerability itself is defined and measured in humanitarian assistance, moving from deficit-based framings toward an understanding of the adaptive capacity already present in pastoral drylands (Hassan et al., 2026a).

A redesigned anticipatory action agenda would target collective vulnerabilities and institutions, not only individual households. It would strengthen weather and climate information ecosystems through two-way relationships between pastoralists, forecasters and local authorities. Effective institutional and policy networks for disaster management in the region

Box 6. Pastoralism is already anticipatory action

Pastoralists do not wait passively for drought response systems. Their livelihood systems are built around anticipation, flexibility, movement, negotiation, herd management, local knowledge and social support networks. Anticipatory action in drylands should not impose rigid, linear, trigger-based models. It should strengthen the anticipatory systems that pastoralists already use.

Box 7. Participation is not power

Inviting pastoralists to meetings is not enough. Communities must shape agendas, define success, influence funding decisions, participate in monitoring and hold institutions accountable. True localization requires shifting both power and resources to pastoralist communities, local institutions, women, youth and customary governance systems.

already depend on exactly this kind of two-way relationship (Mohamed, 2026b). It would support local informal service provision, including transport, credit, animal health and market information. It would also link early warning to early action in ways that protect mobility, rather than assuming settled populations and fixed assets. To strengthen this agenda further, development approaches can be built from the resilience strategies that pastoralist communities already practice (Hassan et al., 2026b).

One of the sharpest messages from GLF Africa 2026 was that participation is not power. Pastoralist communities are frequently invited to meetings, consultations and project validation workshops, but often without real influence over agendas, priorities, resource allocation, monitoring or accountability. Representation without decision-making authority can become a substitute for localization, rather than a path toward it. This gap is often sharpest for women, who are sometimes present in meetings and consultations yet remain underrepresented in the customary and project-level institutions that actually set agendas and control resources, so formal participation figures can mask a persistent gap in women's voice and decision-making authority within pastoral governance systems.

A stronger model starts earlier and goes deeper. Communities should help define the problem, shape the agenda, identify what success means, co-create indicators, participate in monitoring and hold institutions accountable. Local institutions, customary governance systems, women and youth groups, herders and local organizations should be treated as decision makers and implementers rather than mere beneficiaries. Funding should reach local actors directly where appropriate, supported by transparent accountability systems and safeguards.

Rangelands are often placed in environment or land restoration portfolios, but GLF Africa 2026 showed that they are also health, food and economic systems, precisely the kind of interconnected nexus that recent global science

highlights. Rangelands sit at the intersection of biodiversity, food, water and climate systems, and several of the more than 70 response options identified by the IPBES Nexus Assessment, including integrated landscape management and support for Indigenous and community-led food systems, apply directly to pastoral rangelands (IPBES, 2024a). Healthy rangelands underpin healthy livestock and healthy people. Pastoral systems face climate shocks, degraded rangelands, weak advisory services and fragmented health systems. Yet many One Health strategies still fail to include rangeland health as a foundational dimension.

Models such as One Health units, One Health task forces, community-based observation networks and community rangeland health workers show how environmental, animal and human health services can be integrated at community level. These models are particularly relevant because rangeland recovery is often slower than human or animal health outcomes. If rangeland condition is ignored, short-term service delivery may improve while the ecological foundations of pastoral health continue to erode.

This also requires a governance shift. Rangeland health should be embedded within national One Health strategies, extension systems and implementation cycles, rather than treated as an environmental add-on. Community rangeland health workers, One Health units and local task forces need formal recognition and sustainable financing if integrated service delivery is to move beyond pilot projects.

Food systems are equally important. Pastoralism contributes milk, meat and other nutrient-dense foods while supporting livelihoods, markets and rural economies. Yet value chains do not always generate adequate nutritional or economic benefits for pastoral communities. Produce may move out of pastoral areas with limited local value addition, while women and children remain nutritionally vulnerable during drought and food scarcity. A rangeland-sensitive food systems agenda should therefore strengthen local consumption, market access, cold chains, animal health, local processing and equitable benefit sharing.

Women and youth require particular attention, not as symbolic categories but as central actors in rangeland futures. Women play critical roles in milk production, nutrition, household food security and social networks that support collective action. Young people face economic and social pressures to leave pastoral areas, which can weaken the transmission of ecological knowledge and reduce the future labor and leadership base of pastoral systems. Investments in mobile education, youth enterprise, pastoral value chains, women's leadership and local governance are therefore investments in resilience.

6. Finance must shift from crisis response to stewardship

Rangeland finance remains poorly aligned with rangeland realities. Too much funding arrives after crisis has already occurred, while too little is invested in the institutions, services, knowledge systems and ecological functions that reduce crisis in the first place. This creates a costly cycle: chronic underinvestment in prevention and adaptation produces repeated emergencies, which then absorb resources that could have supported long-term resilience. This mismatch is part of a wider nature–finance imbalance, where ecological importance continues to outstrip actual investment (UNEP, 2026).

A stewardship finance agenda also requires localization of finance. Climate and biodiversity finance should not only recognize pastoralists as contributors to rangeland stewardship; it should channel resources to pastoralist institutions, local organizations and community-led implementation systems. Participatory budgeting, direct community financing and accountability to local actors are therefore not optional safeguards but design requirements for effective rangeland investment.

A stewardship finance logic would look different. It would invest in mobility-compatible services, community institutions, local monitoring systems, early warning, One Health delivery, mobile schools, animal health, water governance, rangeland restoration, local value chains and pastoral enterprises. It would recognize rangelands as productive and investable landscapes, not marginal areas suitable only for relief spending or external extraction. It would also require benefit-sharing rules that prevent large-scale energy, infrastructure, conservation, agriculture or commercial land investments from undermining communal tenure and mobility.

Benefit sharing should therefore be treated as a core condition for rangeland investment. Investments in energy, infrastructure, conservation, agriculture or commercial land should be co-designed with pastoral communities, embedded in legal safeguards for communal land and monitored through community-led accountability systems. Without this, investment could increase economic value while weakening the social and ecological foundations of rangeland stewardship.

The World Bank session on scaling livable landscapes adds an implementation perspective: rangeland stewardship finance should connect ecological restoration and governance to rural jobs, value chains and scalable investment. This requires moving beyond isolated green projects toward investable landscape economies, using public–private co-design, data systems, implementation capacity and knowledge platforms to build bankable pipelines without weakening mobility, communal tenure or local decision making.

This does not mean romanticizing pastoral economies or ignoring real constraints. Camel value chains, for example, face gaps in research, disease surveillance, diagnostics, veterinary infrastructure, breeding, processing, cooling, handling, market policy and finance. Even where camel milk commercialization has advanced, as in northern Kenya, its benefits remain embedded in and constrained by moral economy relationships of trust, kinship and fair exchange that formal market and investment models often overlook (Mohamed and Nori, 2025). The point is that these constraints require coordinated investment platforms and locally grounded commercialization, not fragmented projects. A Camel Centre of Excellence or similar integrated platform can help coordinate research, innovation, private sector engagement and pastoralist participation, provided it remains accountable to pastoral communities and wider rangeland outcomes.

Economic accounting can also help make rangelands visible in national planning. Rangeland monitoring should connect rangeland condition to livestock productivity, household welfare, food systems and wider economic effects, rather than treating rangelands as residual lands with weak economic visibility. The System of Environmental-Economic Accounting provides one pathway for linking ecosystem condition, ecosystem services and economic effects in a consistent framework (Edens et al., 2022; United Nations et al., 2025). Linking rangeland condition to ecosystem services, livestock productivity, feed costs, household welfare and wider economic effects can strengthen the investment case for rangeland restoration and stewardship, provided the underlying ecological data are fit for purpose and grounded in rangeland management realities.

Box 8. Finance must move from crisis response to stewardship

Rangeland finance is still too often organized around emergency response rather than long-term resilience. This keeps pastoral areas in a cycle of underinvestment followed by expensive crisis intervention. A better investment logic would finance mobility-compatible services, local value chains, community institutions, early warning, One Health systems, rangeland monitoring and long-term ecosystem stewardship.

Table 2. Six strategic shifts emerging from GLF Africa 2026

From	To	Why it matters
Rangelands as wastelands	Rangelands as strategic landscapes	Changes the starting point for policy, science and investment by recognizing rangelands as productive, biodiverse and knowledge-rich systems.
Tree cover as default restoration	Ecosystem-appropriate restoration	Prevents the misclassification of open ecosystems and avoids restoration approaches that undermine grassland and savanna functions.
Mobility as disorder	Mobility as adaptation and governance	Protects a core mechanism through which pastoralists manage variability, drought, grazing pressure and seasonal resource access.
Participation	Power, resources and accountability	Moves communities from representation to decision-making authority over agendas, finance, monitoring and implementation.
Emergency response	Long-term stewardship finance	Reduces repeated crisis spending by investing in prevention, mobile services, local institutions, food systems and ecosystem function.
Pastoralism framed as a threat to biodiversity	Pastoral stewardship recognized as biodiversity infrastructure	Recognizes pastoral societies as the primary managers of the grazing and fire regimes that sustain rangeland biodiversity, opening the way for OECM recognition, agroecological support and restoration models built around pastoral management rather than exclusion.

Table 3. From conference messages to implementation priorities

Action area	What should change	Illustrative entry points
Policy and governance	Move from control-oriented and fragmented governance toward tenure-secure, mobility-compatible and locally accountable systems.	Protect corridors, recognize customary institutions, harmonize land, livestock, conservation and climate policies, and finance implementation.
Science and monitoring	Move from borrowed forest and cropland metrics toward rangeland-specific indicators.	Measure herbaceous condition, shrub-grass balance, soil function, fire, grazing, mobility, drought response and local management outcomes.
Restoration	Move from tree-centered restoration toward open ecosystem restoration.	Prioritize ecological function, grazing management, invasive species control, soil health, water infiltration and biodiversity suited to rangeland context.
Drought and anticipatory action	Move from rigid triggers and settled-population assumptions toward flexible systems that build on pastoralist anticipation.	Support local forecasting, collective institutions, mobile services, informal credit, transport, animal health and market decisions.
Finance and implementation	Move from project cycles and relief spending toward long-term stewardship and value creation.	Channel resources to local institutions, mobile schools, One Health systems, livestock value chains, camel innovation, local processing and community monitoring. Build bankable pipelines that connect stewardship with jobs, pastoral enterprises, value chains, data systems and locally grounded knowledge platforms.
Biodiversity and conservation	Move from exclusion-based protected area models toward recognizing pastoral stewardship as a foundation of rangeland biodiversity.	Support OECM recognition of community-managed rangelands, integrate pastoralism into agroecology and restoration programming, and design wildlife tourism and conservation finance so that pastoral communities remain present and productive on their territories.

7. What must change now: a policy reform agenda

The conference messages and wider literature converge around six strategic shifts. These shifts are not a checklist of isolated actions. They are mutually reinforcing changes in how rangelands are described, measured, governed, financed and supported.

The convergence of IYRP 2026, UNCCD COP17 and wider Rio Convention processes creates a rare policy window for rangelands. The challenge is to ensure that this momentum does not end with visibility alone. It should translate into implementation frameworks, financing commitments and accountability mechanisms that carry the rangeland and pastoralist agenda beyond 2026.

These shifts imply a different evidence and implementation agenda. Rangeland monitoring should combine remote sensing, ground verification, Indigenous and local knowledge, community-based observation, animal and human health data, market information and governance indicators. Implementation priorities should then connect policy reform, monitoring, restoration, drought response and finance into a coherent agenda.

The strongest message from GLF Africa 2026 is not simply that rangelands deserve more attention. It is that the dominant systems used to understand and invest in them need correction. Rangelands are not failed forests. Pastoralism is not an outdated livelihood waiting to be replaced, nor a threat to the biodiversity it has helped sustain. Mobility is not the absence of governance. Communal tenure is not a barrier to ecological management. Local knowledge is not a supplement to science. Crisis relief is not a substitute for stewardship.

The real failure is the persistence of policies, metrics and investments that are poorly fitted to open, variable and mobile systems. If rangelands continue to be interpreted through forest-centered restoration, static land use planning, weak tenure recognition, linear drought response and externally designed finance, policy attention may increase but policy failure will remain.

A different pathway is available. It begins with recognizing rangelands as strategic landscapes for biodiversity, livelihoods, food systems, health, climate adaptation and peace. It protects mobility and communal tenure as ecological infrastructure. It recognizes pastoral societies as primary stewards of rangeland biodiversity rather than a threat to be fenced out. It builds science with pastoralists rather than only about them. It shifts local actors from participation to power. It directs finance toward long-term stewardship, local value chains and mobile

services. Above all, it stops asking pastoral systems to fit institutions designed for settled landscapes and starts redesigning institutions to fit the realities of rangelands.

Stop correcting pastoralism and start correcting the system around it.

Acknowledgments and source note

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